UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended March 31, 2019

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

FOR THE TRANSITION PERIOD FROM _____ TO _____

Commission File Number 1-13449

QUANTUM CORPORATION
(Exact name of Registrant as specified in its Charter)

Delaware	**94-2665054**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
224 Airport Parkway, Suite 550 San Jose, California	**95510**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (408) 944-4000

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock	**QMCO**	**OTC Markets**

Securities registered pursuant to Section 12(g) of the Act: **None**

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. YES ☐ NO ☒

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. YES ☐ NO ☒

Indicate by check mark whether the Registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. YES ☐ NO ☒

Indicate by check mark whether the Registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the Registrant was required to submit such files). YES ☐ NO ☒

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒	Smaller reporting company	☐
Emerging growth company	☐		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new

or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). YES ☐ NO ☒

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the Registrant, based on the closing price of the shares of common stock on the New York Stock Exchange (on which Registrant was listed) on September 28, 2018, the last business day of the Registrant's most recently completed second fiscal quarter was approximately $64,344,842. For purposes of this disclosure, shares of common stock held or controlled by executive officers and directors of the Registrant and by persons who held more than 5% of the outstanding shares of common stock as of September 28, 2018, have been treated as shares held by affiliates. However, such treatment should not be construed as an admission that such person is an "affiliate" of the Registrant.

The number of shares of Registrant's Common Stock outstanding as of September 28, 2018 was 35,551,570

DOCUMENTS INCORPORATED BY REFERENCE

None

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Forward-Looking and Cautionary Statements

This Annual Report on Form 10-K, including "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Item 7, contains forward-looking statements that involve risks, uncertainties and assumptions. If the risks or uncertainties ever materialize or the assumptions prove incorrect, the results of Quantum Corporation and its consolidated subsidiaries ("Quantum") may differ materially from those expressed or implied by such forward-looking statements and assumptions. All statements other than statements of historical fact are statements that could be deemed forward-looking statements, including but not limited to any projections of revenue, margins, expenses, effective tax rates, the impact of the U.S. Tax Cuts and Job Act of 2017, including the effect on deferred tax assets, net earnings, net earnings per share, cash flows, currency exchange rates or other financial items; any projections of the amount, timing or impact of cost savings or restructuring charges; any statements of the plans, strategies and objectives of management for future operations, as well as the execution of transformation and restructuring plans and any resulting cost savings, revenue or profitability improvements; any statements concerning the expected development, performance, market share or competitive performance relating to products or services; any statements regarding current or future macroeconomic trends or events and the impact of those trends and events on Quantum and its financial performance; any statements regarding pending investigations, claims or disputes; the resolution of pending investigations; any statements of expectation or belief; and any statements of assumptions underlying any of the foregoing. Risks, uncertainties and assumptions include the need to address the many challenges facing Quantum's businesses; the competitive pressures faced by Quantum's businesses; risks associated with executing Quantum's strategy; the impact of macroeconomic and geopolitical trends and events; the need to manage third-party suppliers and the distribution of Quantum's products and the delivery of Quantum's services effectively; the protection of Quantum's intellectual property assets, including intellectual property licensed from third parties; risks associated with Quantum's international operations; the development and transition of new products and services and the enhancement of existing products and services to meet customer needs and respond to emerging technological trends; the execution and performance of contracts by Quantum and its suppliers, customers, clients and partners; the hiring and retention of key employees; integration and other risks associated with business combination and investment transactions; and the execution, timing and results of any transformation or restructuring plans, including estimates and assumptions related to the cost (including any possible disruption of Quantum's business) and the anticipated benefits of the transformation and restructuring plans; the outcome of any claims and disputes; and other risks that are described herein, including but not limited to the items discussed in "Risk Factors" in Item 1A of Part I of this report and that are otherwise described or updated from time to time in Quantum's other filings with the Securities and Exchange Commission. Quantum assumes no obligation and does not intend to update these forward-looking statements.

Explanatory Note

This Annual Report on Form 10-K for the fiscal year ended March 31, 2019 includes Quantum Corporation's ("Quantum", the "Company", "us" or "we") audited consolidated financial statements for the fiscal years ended March 31, 2019, 2018 and 2017. The consolidated financial statements for the fiscal year ended March 31, 2017 and selected financial data for the fiscal years ended March 31, 2017, 2016 (unaudited) and 2015 (unaudited) are restated.

Background of Special Committee Investigation and Subsequent Management Review

On January 11, 2018, we received a subpoena from the Securities and Exchange Commission ("SEC") regarding our accounting practices and internal controls related to revenue recognition for transactions commencing April 1, 2016. As a result, we postponed the release of our financial results for the third quarter of fiscal 2018. In February 2018, the Audit Committee ("Audit Committee") of our Board of Directors ("Board"), and subsequently a special committee of the Board (the "Special Committee") consisting of two members of the Audit Committee, conducted an internal investigation, with the assistance of independent accounting and legal advisors, into matters related to our accounting practices and internal control over financial reporting related to revenue recognition for transactions occurring between January 1, 2016 and March 31, 2018.

In September 2018, the Special Committee substantially completed and finalized its principal findings with respect to its investigation. The principal findings included a determination that we engaged in certain business and sales practices that may have undermined our historical accounting treatment for transactions with several key distributors and at least one end customer. The Special Committee found that the identified transactions potentially affected by such practices commenced at least in the fourth quarter of fiscal 2015 and continued at least through the fourth quarter of fiscal 2018. The

Special Committee also found that these business and sales practices may have resulted in the Company recognizing revenue for certain transactions prior to satisfying the criteria for revenue recognition required under U.S. Generally Accepted Accounting Principles ("U.S. GAAP").

Upon the recommendation of the Audit Committee and as a result of the investigation by the Special Committee and after consultation with our management, on September 14, 2018, our Board of Directors concluded that our previously issued consolidated financial statements and other financial data for the fiscal years ended March 31, 2015, 2016 and 2017 contained in our Annual Reports on Form 10-K, and our condensed consolidated financial statements for each of the quarterly and year-to-date periods ended June 30, 2015, September 30, 2015, December 31, 2015, June 30, 2016, September 30, 2016, December 31, 2016, June 30, 2017 and September 30, 2017 (collectively, the "Non-Reliance Periods") should not be relied upon and required restatement. Our Board also determined that our disclosures related to these financial statements and related communications issued by or on behalf of the Company with respect to the Non-Reliance Periods, including management's assessment of internal control over financial reporting and disclosure controls and procedures, should not be relied upon.

In response to the findings of the Special Committee, we conducted a thorough review of our financial records for fiscal years ended March 31, 2015, 2016, 2017 and 2018 to determine whether further restatement adjustments were necessary. We concluded that there were material misstatements in the consolidated financial statements for the fiscal years ending March 31, 2015, 2016 and 2017, as well as in the unaudited condensed consolidated financial statements for the quarterly periods June 30, 2016, September 30, 2016, December 31, 2016, June 30, 2017, and September 30, 2017, in accordance with Accounting Standards Codification ("ASC") 250, *Accounting Changes and Error Corrections.*

We have not amended, and do not intend to amend, our Annual Reports on Form 10-K or Quarterly Reports on Form 10-Q for periods prior to September 30, 2017. The consolidated financial statements and related financial information contained in any of our Annual Reports on Form 10-K and Quarterly Reports on Form 10-Q filed during the period commencing with the fourth quarter of fiscal 2015 and prior to this Annual Report on Form 10-K for the fiscal year ended March 31, 2019 should no longer be relied upon. We have restated our consolidated financial statements for the fiscal year ended March 31, 2017 and included restated financial data and discussion related to the three months ended June 30, 2017 and the three- and six-month periods ended September 30, 2017 that would typically be disclosed in a Quarterly Report on Form 10-Q. Additionally, because we have failed to file Quarterly Reports on Form 10-Q for the fiscal quarter and year to date periods ended December 31, 2017, June 30, 2018, September 30, 2018 and December 31, 2018, we have included the financial data and discussion typically disclosed in a Quarterly Report on Form 10-Q for these periods. The restatement also affects the fiscal years ended March 31, 2015 and 2016 and the impact of the restatement on those fiscal years is included in *Item 6 Selected Financial Data included in this Annual Report on Form 10-K.*

Note 2: *Restatement* and Note 13: *Quarterly Financial Data (unaudited)* to our consolidated financial statements in this Annual Report on Form 10-K disclose the nature of the restatement matters and adjustments and shows the impact of the restatement matters on revenues, expenses, income, assets, liabilities, equity, and cash flows from operating activities, investing activities, and financing activities, and the cumulative effects of these adjustments.

Internal Control over Financial Reporting

As part of our review of our financial records for the Non-Reliance Periods, management, including our Chief Executive Officer and our Chief Financial Officer, assessed our internal control over financial reporting as of March 31, 2019. Based upon this assessment, we identified material weaknesses in our internal control over financial reporting and concluded that our internal control over financial reporting was not effective as of March 31, 2019. In addition, our Chief Executive Officer and Chief Financial Officer have evaluated the findings and conclusions of the Special Committee's investigation, as well as the review of our financial records, and based on this evaluation, taken together with the identified material weaknesses, have concluded that our disclosure controls and procedures were not effective at March 31, 2019. We have identified and implemented actions to improve the effectiveness of our internal control over financial reporting and disclosure controls and procedures. We intend to continue these remediation activities, including ongoing efforts to enhance our resources and train our employees on financial reporting and disclosure responsibilities, and the periodic review of such actions with the Audit Committee. For more information about management's determinations related to our internal control over financial reporting, including the identified material weaknesses, and our disclosure controls and procedures, as well as our remediation activities, please see *Item 9A Controls and Procedures* of this Annual Report on Form 10-K.

Our independent auditors, Armanino LLP, have audited management's assessment of internal control over financial reporting as of March 31, 2019 and in their opinion concluded that we did not maintain, in all material respects, effective internal control over financial reporting as of March 31, 2019, based on criteria established in *Internal Control—Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") because of the identified material weaknesses in our internal control over financial reporting existed as of March 31, 2019.

PART I

ITEM 1. BUSINESS

Business Description

Quantum, founded in 1980 and reincorporated in Delaware in 1987, is a leader in storing and managing video and video-like data. We deliver top streaming performance for video and rich media applications, along with low cost, high density massive-scale data protection and archive systems. We help customers capture, create and share digital data and preserve and protect it for decades. Our software-defined storage solutions span from non-volatile memory express ("NVMe"), to solid state drives ("SSD"), hard disk drives ("HDD"), tape and the cloud and are tied together leveraging a single view of the entire data environment. Our software-defined approach to storage management that combines storage, compute, and virtualization in one physical unit is broadly known in our industry as an example of "hyperconverged storage." We work closely with a broad network of distributors, value-added resellers ("VARs"), direct marketing resellers ("DMRs"), original equipment manufacturers ("OEMs") and other suppliers to meet customers' evolving needs. The world's leading entertainment companies, sports franchises, researchers, government agencies, enterprises, and cloud providers make the world happier, safer, and smarter on our systems.

Our high-performance shared storage systems enable accelerated and collaborative access to critical data. Powered by our StorNext software, our systems provide high performance and availability to enable movie and TV production, analysis of patient records, analysis of video and image data for government and military applications, and more. We sell our StorNext software with hyperconverged storage infrastructures that are built using a combination of NVMe, SSD, HDD, tape, and cloud storage technologies. We have recently refreshed this entire product line, and introduced the Quantum F-Series, an ultra-fast, highly available NVMe storage array for editing, rendering, and processing of video content and other large unstructured data sets.

Our tape storage provides low cost, long-term data storage for archiving and retention, as well as offline storage to protect against ransomware. Tape storage is a critical technology for long-term off-line storage of data, both in the cloud and on-premise, and is a critical component of enterprise data protection strategies. We continue to be a market leader in tape storage utilizing industry-leading performance, reliability, scalability, and manageability.

We also recently released the Quantum VS-Series and Quantum R-Series. The Quantum VS-Series is a hyperconverged platform designed for surveillance and industrial applications for the Internet of Things, ("IoT"), and enables security and facilities departments to efficiently record and store surveillance footage and run an entire security infrastructure on a single, software-defined platform. Our Quantum R-Series is removable storage

designed to capture data in vehicles where the storage device must be more rugged. We describe the Quantum R-Series as "ruggedized" to emphasize the additional physical protection we build into the product so that it operates as intended in the air, on the road, on rails, and in battlefield environments. The Quantum R-Series addresses use cases such as the development of advanced driver-assistance systems, ("ADAS"), and mobile military and surveillance applications. This product can capture data in real world environments, and then makes this data quickly available for processing and use.

We are a member of the consortium that develops, patents, and licenses Linear Tape-Open, (or "LTO® tape") technology to media manufacturing companies. We receive royalty payments for LTO media technology sold under licensing agreements. We have also entered into various licensing agreements with respect to our technology, patents and similar intellectual property which provide licensing revenues in certain cases and may expand the market for products and solutions using these technologies.

We are focused on driving profitable revenue growth and long-term shareholder value by capitalizing on the growth in video and high-resolution image data across industries and verticals.

Industry Background

For the markets and customers that we serve, storing and managing large amounts of video, image and sensor data has become a key challenge. Video and other imaging data is becoming increasingly prevalent in every industry. Some examples of this ever-growing trend include:

- The media and entertainment industry producing more high-resolution content for movies and TV shows;
- Large corporations producing video content for marketing and advertising, and for internal training and communication purposes;
- Surveillance cameras for city surveillance, critical infrastructure, higher education, retail, restaurants, and more;
- Military and defense applications that manage images and video from drones and satellites;
- High-resolution MRI images and genome sequencing data generated by medical research institutions;
- Video, image, and sensor data captured on the manufacturing floor;
- Video, image, and sensor data produced by cars as part of ADAS and autonomous vehicle development.

This video and imaging data is growing exponentially, and in the next few years, this video data will represent the vast majority of the data on the planet. This class of data presents a unique set of challenges for our customers. These datasets are exponentially larger than the average corporate database, they are costly and technically difficult to store and process in the cloud, and many of the data services designed for databases and other corporate applications do not work with this data. Video and image data is very difficult to search, and yet it is the data that has the most value to the business lines of many of our customers. This presents both a challenge and an opportunity. Lastly, these datasets typically have a lifecycle that initially requires very high performance for creation, intake, cataloging, analysis and collaboration, and then needs to be archived and protected for decades at a low cost. Our products have been designed to address these needs.

Products

High-Performance Shared Storage Systems

At the core of our high-performance shared storage product line is our Quantum StorNext software that enables high-performance video editing and management of large video and image datasets. Major broadcasters, studios, post-production companies, sports franchises, and corporate video entities around the world use StorNext.

Our StorNext software is a parallel file processing system that provides fast streaming performance and data access, a shared file storage environment for Apple Macintosh, Microsoft Windows, and Linux workstations, and intelligent data management to protect data across its lifecycle. StorNext runs on standard servers and is sold with storage arrays that are used within the StorNext environment. These storage arrays include:

- The Quantum F-Series**:** A line of ultra-fast, highly available NVMe SSD flash storage arrays for editing, rendering, and processing of video content and other large unstructured datasets.
- Quantum QXS-Series: A line of high performance, reliable hybrid storage arrays, offered with either HDDs, SSDs, or some combination of the two.

Customers are now deploying the StorNext file system with a combination of NVMe storage and more traditional SSD and HDD storage to balance cost and performance. Our StorNext software can also manage data across different types, or pools, of storage, such as public cloud object stores and disk-based object storage systems. StorNext supports a broad range of both private and public object stores to meet customer needs. For customers that archive video and image data for years, StorNext is also integrated with our tape storage, and can assign infrequently-used but important data to tape to create a large-scale active archive.

Tape Storage

Our Scalar® tape systems are low-cost, long-term data storage used by the biggest clouds and leading enterprises to archive and preserve digital content for decades. The product line scales from entry-level libraries for small backup environments up to massive petabyte and even exabyte scale archive libraries.

Our tape systems provide storage density, offline secure storage to protect against ransomware and malware, and an intelligent, advanced diagnostics engine designed to reduce downtime and operational expense relative to other tape systems. Quantum tape systems are used by thousands of enterprises around the world as well as by large cloud service providers. In addition to the Quantum Scalar tape systems, we also sell LTO tape cartridges as well as standalone LTO tape drives for small business and desktop use.

Backup Storage Systems

Our DXi backup systems provide high-performance, scalable storage for backup and multi-site disaster recovery. Our variable-length de-duplication technology maximizes data reduction, our replication engine enables multi-site protection and data recovery, and our high-efficiency design enables customers to maximize backup performance while minimizing data center footprint.

Surveillance and Industrial IoT Storage Systems

Our Quantum VS-Series is the latest addition to our high-performance video platform portfolio. Our VS-Series product line is a hyperconverged surveillance platform that enables security departments and facilities departments to retain more surveillance footage at low cost and converge and run entire building operations on a single box.

At the core of our VS-Series product line is the Quantum Cloud Storage Platform software. This software provides software-defined, high-performance block storage to record and store video, but also is a hyperconverged software platform for running video management system, or VMS applications, as well as other building and security applications, such as access control, lighting, and HVAC applications.

We offer our VS-Series in a wide range of appliance configurations, including small mini-towers ideal for five to ten camera environments such as a restaurant, retail chain, or gas station, and rackmount-able servers that can scale out to handle hundreds and thousands of cameras for large security deployments.

Ruggedized Storage Systems

We recently introduced our Quantum R-Series, a line of ruggedized, removable storage systems for in-vehicle data capture, mobile surveillance and military applications. Our R-Series has a more physically rugged design and low power requirements, so that it can be deployed in the trunk of a self-driving car, as well as in a bus, train, airplane, and even military vehicles. Our R-Series includes a removable storage magazine so that data generated in the vehicle can be easily uploaded to a shared storage environment, such as our Quantum StorNext file system, for processing and analytics.

Quantum Services

We offer a broad range of services to complement our systems and technology. Our services have historically included maintenance, implementation and training services to provide the best overall customer experience.

We recently introduced a new line of Distributed Cloud Services, a suite of services offered to complement more traditional implementation and maintenance services. Our Distributed Cloud Services are designed to provide the benefits of our products and technology with a cloud-like user experience, either via fully managed Operational Services, or via Storage-as-a-Service, ("STaaS") offerings. At the core of our Distributed Cloud Services is our Cloud-Based Analytics, ("CBA software"). Quantum products can connect to our CBA software to send log files and other telemetry data about our customers' environments to this central hub, making them part of our distributed cloud. Our global services team can then proactively manage each customer's environment in a manner customized to that customer's needs.

Global Services and Warranty

Our global services strategy is an integral component of our total customer solution. Service is typically a significant purchase factor for customers considering long-term storage for archiving and retention or data protection storage solutions. Consequently, our ability to provide comprehensive installation and integration services as well as maintenance services can be a noteworthy competitive advantage to attract new customers and retain existing customers. In addition, we believe that our ability to retain long-term customer relationships and secure repeat business is frequently tied directly to our comprehensive service capabilities and performance.

Our extensive use of technology and innovative product intelligence allows us to scale our global services operations to meet the needs of our customers. We are currently able to provide service to customers in more than 100 countries, supported by 24-hour, multi-language technical support centers located in North America, Europe and Asia. We provide our customers with warranty coverage on our products. Customers with high availability requirements may also purchase additional service to obtain faster response times on our high-performance shared storage systems, tape systems, and disk backup systems. We offer this additional support coverage at a variety of response levels up to 24-hours a day, seven-days-a-week, 365-days-a-year, for customers with stringent high-availability needs. We provide support ranging from repair and replacement to 24-hour rapid exchange to on-site service support for our midrange and enterprise-class products. In addition to these traditional installation and maintenance services, we also provide project management, managed services and other value-add services to enhance our customer's experience and engagement. These incremental services create a deeper relationship with customers that enables them to maximize the value of their Quantum solution and better positions us to retain our customers through technology transitions.

We generally warrant our hardware products against defects for periods ranging from one to three years from the date of sale. We provide warranty and non-warranty repair services through our service team and third-party service providers. In addition, we utilize various other third-party service providers throughout the world to perform repair and warranty services for us to reach additional geographic areas and industries in order to provide quality services in a cost-effective manner.

Research and Development

We compete in an industry characterized by rapid technological change and evolving customer requirements. Our success depends, in part, on our ability to introduce new products and features to meet end user needs. Our research and development teams are focused on technology and services to make our storage systems smarter and easier to manage at scale; software enhancements to make our storage more searchable and accessible, software-defined hyperconverged storage technology, next generation solid-state and hard-drive storage system software, data deduplication and other data reduction technologies, and making tape even more efficient as a storage medium for long term archival storage.

We continue to invest in research and development to improve and expand our product lines and introduce new product lines such as the Quantum F-Series, Quantum VS-Series and Quantum R-Series. Our research and development costs were $32.1 million, $38.6 million, and $44.4 million for fiscal 2019, 2018 and 2017, respectively.

Sales and Distribution Channels

Quantum Product Sales Channels

For our products, we utilize distributors, VARs and DMRs. Our integrated reseller program provides our channel partners the option of purchasing products directly or through distribution channels and provides them access to a more comprehensive product line. Additionally, we sell directly to a number of large corporate entities and government agencies.

OEM Relationships

We sell our products to several OEM customers that resell our hardware products under their own brand names and typically assume responsibility for product sales, end user service and support. We also license our software to certain OEM customers that include this software in their own brand name products. These OEM relationships enable us to reach end users not served by our branded distribution channels or our direct sales force. They also allow us to sell to select geographic or vertical markets where specific OEMs have exceptional strength.

Customers

Our sales are typically concentrated with several key customers, as we sell to OEMs, distributors, VARs and DMRs to reach end user customers. Sales to our top five customers represented 33%, 29%, 28% revenue in fiscal 2019, fiscal 2018 and fiscal 2017, respectively. During the fiscal years ended March 31, 2019, March 31, 2018 and March 31, 2017 no customers represented 10% or more of the Company’s total revenue.

Competition

The markets in which we participate are highly competitive, characterized by rapid technological change and changing customer requirements. In some cases, our competitors in one market area are customers or suppliers in another. Our competitors often have greater financial, technical, manufacturing, marketing or other resources than we do. Additionally, the competitive landscape continues to change due to merger and acquisition activity as well as new entrants into the market.

Our high-performance shared storage systems primarily face competition from the EMC business unit of Dell Inc., ("Dell"), International Business Machines Corporation, ("IBM"), NetApp, Inc., ("NetApp"), and other content storage vendors in the media and entertainment industry as well as government agencies and departments.

Our tape storage primarily compete in the midrange and enterprise reseller and end user markets with IBM, Oracle Corporation and SpectraLogic Corporation as well as Hewlett-Packard Enterprise Company, ("HPE"), through its OEM relationship with other tape system suppliers. Competitors for entry-level and OEM tape systems include BDT Products, Inc. and several others that supply or manufacture similar products. In addition, disk backup products and cloud storage are an indirect competitive alternative to tape storage.

Our backup storage systems primarily compete with products sold by Dell, HPE and Veritas Technologies LLC. Additionally, several software companies that have traditionally been partners with us have deduplication features in their products and will, at times, compete with us. A number of our competitors also license technology from other competing companies.

For standalone LTO tape drives, our main competitor is IBM, which develops and sells its own LTO tape drives. We also face competition from disk alternatives, including removable disk drives in the entry-level market.

Manufacturing and Supply Chain

We are in the process of transitioning our supply chain and manufacturing operations to deliver a variable cost model while improving customer delivered quality and service. This process includes the transition to a multi-geographical manufacturing model using a configure-to-order methodology; a redesign of our service and supplier network; and talent acquisition and development. Our supply chain and manufacturing strategy minimizes geo- political and environmental causal risks and provides flexibility to support demand fluctuations by region, further enhancing our variable cost structure.

Manufacturing of our tape systems is performed in the U.S. and Mexico with supporting third-party logistics companies in the Europe, Middle East and Africa region, or ("EMEA"), and the Asia-Pacific region, or ("APAC"). Our backup storage systems are integrated in the U.S. with supporting third-party logistics companies in EMEA and APAC. The value of utilizing well-run logistics companies and supply chain solutions is that our product logistics is optimized for cost reductions with a competitive advantage allowing the physical flow and information flow to work together seamlessly.

Our tape media is manufactured in Japan and distributed globally.

Intellectual Property and Technology

We generally rely on patent, copyright, trademark and trade secret laws and contract rights to establish and maintain our proprietary rights in our technology and products. As of March 31, 2019, we hold approximately 332 U.S. patents and have 46 pending U.S. patent applications. In general, these patents have a 20-year term from the first effective filing date for each patent. We also hold a number of foreign patents and patent applications for certain of our products and technologies. Although we believe that our patents and applications have significant value, rapidly changing technology in our industry means that our future success may also depend heavily on the technical competence and creative skills of our employees.

From time to time, third parties have asserted that the manufacture and sale of our products have infringed on their patents. We are not knowingly infringing any third-party patents. Should it ultimately be determined that licenses for third-party patents are required, we will undertake best efforts to obtain such licenses on commercially reasonable terms. See *Item 3 Legal Proceedings* for additional disclosures regarding lawsuits alleging patent infringement.

On occasion, we have entered into various patent licensing and cross-licensing agreements with other companies. We may enter into patent cross-licensing agreements with other third parties in the future as part of our normal business activities. These agreements, when and if entered into, would enable these third parties to use certain patents that we own and enable us to use certain patents owned by these third parties. We have also sold certain patents, retaining a royalty-free license for these patents.

We, along with HPE and IBM, belong to the LTO Consortium, an organization that licenses the Consortium members' patents covering the LTO specifications. Media manufacturers and other parties take licenses to the LTO Consortium patent pool in exchange for a royalty payment to the Consortium, which then distributes the royalties to each of the three Consortium members. More details regarding the Consortium and participants in the licensing arrangements available to manufacturers and other parties are available at www.lto.org.

Segment Information

We operate as a single reporting unit and operating segment for business and operating purposes. Information about revenue attributable to each of our product groups is included in *Item 7 Management's Discussion and Analysis of Financial Condition and Results of Operations* and information about revenue and long-lived assets attributable to certain geographic regions is included in Note 15 *Geographic Information* to the consolidated financial statements and risks attendant to our foreign operations is set forth below in *Item 1A Risk Factors.*

Seasonality

As is typical in our industry, we generally have the greatest demand for our products and services in the fourth quarter of each calendar year, or our fiscal third quarter. We usually experience the lowest demand for our products and services in the first and second quarters of each calendar year, or our fiscal fourth quarter and fiscal first quarter, respectively.

Backlog

We believe that product backlog has not been a meaningful indicator of net revenue that can be expected for any period. Our products are manufactured based on forecasts of customer demand and we work with our manufacturers and suppliers to support increases and decreases in demand. Orders are generally placed by customers on an as-needed basis. Product orders are confirmed and, in most cases, shipped to customers within four to six weeks. More complex systems and product configurations often have longer lead times, sometimes as much as 26 weeks. The majority of the product backlog is from these more complex systems and typically increases at the end of each fiscal quarter, with these products typically being shipped in the following quarter. Product backlog at any point in time may not translate into net revenue in any subsequent period, as unfilled orders can generally be canceled at any time by the customer.

Executive Officers

Following are the names and positions of our executive officers as of July 31, 2019, including a brief account of the business experience of each.

Name	Position with Quantum
James J. Lerner	President, Chief Executive Officer and Chairman of the Board
J. Michael Dodson	Chief Financial Officer
Elizabeth King	Chief Revenue Officer
Lewis Moorehead	Chief Accounting Officer
Don Martella	Senior Vice President, Engineering

James Lerner, 49, was appointed as President and CEO of the Company, effective July 1, 2018, and was appointed Chairman of the Board on August 7, 2018. He also serves on the Company's Board. Mr. Lerner has previously served as Vice President and Chief Operating Officer at Pivot3 Inc. from March 2017 to June 2018, and Chief Revenue Officer from November 2016 to March 2017. Prior to Pivot3, from March 2014 to August 2015, Mr. Lerner served as President of Cloud Systems and Solutions at Seagate Technology Public Limited Company. Prior to Seagate, Mr. Lerner served in various executive roles at Cisco Systems, Inc., including most recently as Senior Vice President and General Manager of the Cloud & Systems Management Technology Group. Before beginning his career as a technology company executive, Mr. Lerner was a Senior Consultant at Andersen Consulting. Mr. Lerner earned a Bachelor of Arts in Quantitative Economics and Decision Sciences from U.C. San Diego.

J. Michael Dodson, 58, was appointed Chief Financial Officer effective May 31, 2018. He was also appointed interim Chief Executive Officer, a position in which he served until Jamie Lerner joined the Company on July 1, 2018. From August 2017 to May 2018, Mr. Dodson served as the Chief Financial Officer of Greenwave Systems. Prior to joining Greenwave Systems, Mr. Dodson served as the Chief Operating Officer and Chief Financial Officer at Mattson Technology, Inc. from 2012 to 2017. He joined Mattson as Executive Vice President, Chief Financial Officer and Secretary in 2011. Prior to joining Mattson, Mr. Dodson served as Chief Financial Officer at four global public technology companies and Chief Accounting Officer for an S&P 500 company. Mr. Dodson started his career with Ernst & Young in San Jose, California. Since July 2013, he has served on the Board of Directors of Sigma Designs, Inc., a publicly-traded provider of system-on-chip solutions, including as Lead Independent Director since January 2014 and Chairman of the Audit Committee since 2015. Mr. Dodson currently serves as a director of two private entities: a charitable organization and a privately-held for-profit company. He holds a B.B.A. degree with dual majors in Accounting and Information Systems Analysis and Design from the University of Wisconsin-Madison.

Elizabeth King, 61, has served as Quantum's Chief Revenue Officer since March 2019. Prior to Quantum, from January 2017 to February 2019, she was Vice President, Go-to-Market & Enablement, HPC & AI at HPE. She joined HPE as part of HPE's acquisition of SGI, where she served as SVP of worldwide sales from January 2014 through 2016. Prior to HPE/SGI, she was vice president of strategic alliances for IBM and global systems integrators at Juniper Networks from June 2010 to January 2014. Prior to Juniper, she was vice president and general manager of the Hitachi Server Group of Hitachi Data Systems. She also held key senior sales, business development and operations roles at Nokia (formerly Alcatel-Lucent), Oracle (formerly Sun Microsystems), Raytheon, and Texas Instruments. Ms. King holds an MBA with honors from the University of Dallas and a Bachelors of Science in mechanical engineering from Lehigh University.

Lewis Moorehead, 47, has served as our Chief Accounting Officer since November 2018. Prior to joining Quantum, Mr. Moorehead was the Director of Finance, Accounting and Tax at Carvana, Co., a publicly traded on-line retailer, from November 2016 to October 2018. From September 2004 to October 2016, he served as Managing Partner at Quassey, an investment firm. While at Quassey, he also served as Vice President of Finance and Principal Accounting Officer at Limelight Networks, a NASDAQ-listed global content delivery network and SaaS provider, from March 2010 to August 2013. He has also held finance and accounting positions at eTelecare Global Solutions, Rivers and Moorehead PLLC, Intelligentias, Inc., American Express and PricewaterhouseCoopers. He holds a Bachelor of Business Administration (B.B.A.), cum laude, in Accounting from the University of Wisconsin-Whitewater.

Don Martella, 51, joined Quantum in August 2006 as Vice President, Tape Automation Engineering in connection with Quantum's acquisition of ADIC. In April 2011, he assumed his current role as Senior Vice President of Engineering. In that capacity he is responsible for our research and development and advanced manufacturing activities. Before joining Quantum, Mr. Martella held leadership positions in R&D and Quality at ADIC; and engineering and management roles at Oracle (formerly StorageTek) in the tape business. Mr. Martella holds a Masters in Business Administration and a Bachelor of Science in electrical and computer engineering from the University of Colorado.

Employees

We had approximately 800 employees worldwide as of March 31, 2019.

Available Information

Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to reports filed or furnished pursuant to Sections 13(a) and 15(d) of the Securities Exchange Act of 1934, as amended, are available free of charge on our website at https://www.quantum.com generally when such reports are available on the SEC website. The contents of our website are not incorporated into this Annual Report on Form 10-K.

The public may read and copy any materials we file with the SEC at the SEC's Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC maintains an internet site that contains reports, proxy, and information statements and other information regarding issuers that file electronically with the SEC at http://www.sec.gov.

ITEM 1A. RISK FACTORS

YOU SHOULD CAREFULLY CONSIDER THE RISKS DESCRIBED BELOW, TOGETHER WITH ALL OF THE OTHER INFORMATION INCLUDED IN THIS ANNUAL REPORT ON FORM 10-K. THE RISKS AND UNCERTAINTIES DESCRIBED BELOW ARE NOT THE ONLY ONES FACING QUANTUM. ADDITIONAL RISKS AND UNCERTAINTIES NOT PRESENTLY KNOWN TO US OR THAT WE CURRENTLY BELIEVE ARE INSIGNIFICANT MAY ALSO IMPAIR OUR BUSINESS AND OPERATIONS. THIS ANNUAL REPORT ON FORM 10-K CONTAINS FORWARD-LOOKING STATEMENTS THAT INVOLVE RISKS AND UNCERTAINTIES. PLEASE SEE PART 1 OF THIS REPORT FOR ADDITIONAL DISCUSSION OF THESE FORWARD-LOOKING STATEMENTS.

Risks Related to Our Special Committee Investigation, SEC Investigation, Restatement of Our Consolidated Financial Statements, Internal Controls and Related Matters

We are currently subject to an SEC investigation, the resolution of which could require significant management time and attention, result in significant legal expenses, and result in government enforcement actions, including penalties or fines, any of which could have a material and adverse impact on our results of operations, financial condition, liquidity and cash flows.

As previously disclosed, the SEC is investigating the Company regarding its accounting practices and internal controls related to revenue recognition for transactions commencing on April 1, 2016. Following the receipt of an initial subpoena from the SEC, our Audit Committee began an independent investigation of our accounting practices and internal control over financial reporting related to revenue recognition for transactions commencing on January 1, 2016 with the assistance of independent advisors. Subsequently, the Special Committee of our Board, undertook to continue the investigation. To date, we have incurred significant costs in connection with the Special Committee's investigation and the SEC investigation, and our management team has devoted significant time to these investigations. We expect these costs and demands on our management team to continue potentially into 2020 or longer. We are continuing to cooperate with the SEC in its investigation, but we cannot predict the outcome of this investigation. If the SEC or other governmental agencies that become involved in the future bring an enforcement or other action against us, we could face material penalties or fines, any of which could have a material and adverse impact on our results of operations, financial condition, liquidity and cash flows.

We have entered into indemnification agreements with our current and former directors and certain of our officers, and our amended and restated certificate of incorporation requires us, to the fullest extent permitted by Delaware law, to indemnify each of our directors and officers who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding by reason of the fact that he or she is or was a director or officer of the Company. Although we maintain insurance coverage in amounts and with deductibles that we believe are appropriate for our operations, our insurance coverage may not cover all claims that may be brought against us

or our current and former directors and officers, and insurance coverage may not continue to be available to us at a reasonable cost. As a result, we have been and may continue to be exposed to substantial uninsured liabilities, including pursuant to our indemnification obligations, which could materially and adversely affect our business, prospects, results of operations and financial condition.

We may receive additional inquiries from the SEC and other regulatory authorities regarding our restated financial statements or matters relating to our restatement, and we and our current and former directors and officers may be subject to future claims, investigations or proceedings. Any future inquiries from the SEC or other regulatory authorities, or future claims or proceedings as a result of the restatement or any related regulatory investigation will, regardless of the outcome, likely consume a significant amount of our internal resources and result in additional costs.

Matters relating to or arising from the restatement, the Special Committee's investigation and the SEC investigation, including adverse publicity and potential concerns from our customers, have had and could continue to have an adverse effect on our business and financial condition.

We have been and could continue to be the subject of negative publicity focusing on the restatement and adjustment of our financial statements, and we may be adversely impacted by negative reactions from our customers or others with whom we do business. Concerns include the perception of the effort required to address our accounting and control environment, the impact of the SEC investigation, and the ability for us to be a long-term provider to our customers, particularly in light of the outstanding principal amount of our debt obligations and our ability to continue to comply with the financial covenants contained within our debt agreements. Continued adverse publicity and potential concerns from our customers could harm our business and have an adverse effect on our financial condition.

We have identified deficiencies in our control environment and financial reporting process that resulted in material weaknesses in our internal control over financial reporting and have concluded that our internal control over financial reporting and our disclosure controls and procedures were not effective as of March 31, 2019. If we fail to properly remediate these or any future deficiencies or material weaknesses or to maintain proper and effective internal controls, material misstatements in our financial statements could occur and impair our ability to produce accurate and timely financial statements and could adversely affect investor confidence in our financial reports, which could negatively affect our business.

We have concluded that our internal control over financial reporting and disclosure controls and procedures was not effective as of March 31, 2019 due to the existence of material weaknesses in our control environment, financial reporting process and internal control over financial reporting, as described in *Item 9A Controls and Procedures* of this Annual Report on Form 10-K. While we completed meaningful remediation efforts during fiscal 2019 and to date in fiscal 2020 to address the identified weaknesses, we were not able to fully remediate them as of March 31, 2019, and we cannot provide assurance that our remediation efforts will be adequate to allow us to conclude that our controls are effective as of March 31, 2020, the end of our current fiscal year. We also cannot provide assurance that the material weaknesses and deficiencies identified in this Annual Report on Form 10-K will not recur, or that additional material weaknesses in our internal control over financial reporting will not arise or be identified in the future. We intend to continue our control remediation activities and to continue to improve the tone at the top of our organization, our financial reporting process, and our operational, information technology, financial systems, compliance and infrastructure procedures and controls. We also intend to continue to expand, train, retain and manage our personnel who are essential to effective internal control and compliance. In doing so, we will continue to incur expenses and expend management time.

If our remediation measures are insufficient to address the identified deficiencies, or if additional deficiencies in our internal control over financial reporting are discovered or occur in the future, our consolidated financial statements may contain material misstatements and we could be required to restate our financial results in the future. Moreover, because of the inherent limitations of any control system, material misstatements due to error or fraud may not be prevented or detected on a timely basis, or at all. If we are unable to provide reliable and timely financial reports in

the future, our business and reputation may be further harmed. Restated financial statements and failures in internal control may also cause us to fail to meet reporting obligations or debt covenants, negatively affect investor confidence in our management and the accuracy of our financial statements and disclosures, or result in adverse publicity and concerns from investors, any of which could have a negative effect on the price of our common stock, subject us to further regulatory investigations and penalties or stockholder litigation, and materially and adversely impact our business and financial condition.

The filing of this Form 10-K may not make us "current" in our Exchange Act filing obligations, which means we retain certain potential liability and may not be eligible to use certain forms or rely on certain rules of the SEC.

We followed previously issued guidance from the staff of the SEC's Division of Corporation Finance, ("Staff"), with respect to filing a comprehensive annual report on Form 10-K where issuers have been delinquent in meeting their periodic reporting requirements with the SEC. In accordance with such guidance, our filing of this Form 10-K does not necessarily mean that the Staff will conclude that we have complied with all applicable financial statement requirements or complied with all reporting requirements of the Exchange Act, nor does it foreclose any enforcement action by the SEC with respect to our disclosure, filings or failures to file reports under the Exchange Act.

This Form 10-K for the fiscal year ended March 31, 2019 includes our audited consolidated financial statements for the fiscal years ended March 31, 2019, 2018 and 2017. The consolidated financial statements for the fiscal year ended March 31, 2017 and selected financial data for fiscal years ended March 31, 2017, 2016 (unaudited) and 2015 (unaudited) are restated. We have not amended, and do not intend to amend, our Annual Reports on Form 10-K or Quarterly Reports on Form 10-Q for periods prior to September 30, 2017 that were previously filed with the SEC. We have restated our consolidated financial statements for the fiscal year ended March 31, 2017 and included restated financial data and discussion related to the three months ended June 30, 2017 and the three- and six-month periods ended September 30, 2017 that would typically be disclosed in a Quarterly Report on Form 10-Q. Additionally, because we have failed to file the Annual Report on Form 10-K for the fiscal year ended March 31, 2018 and Quarterly Reports on Form 10-Q for the fiscal quarter and year to date periods ended December 31, 2017, June 30, 2018, September 30, 2018 and December 31, 2018 and do not intend to file a separate Annual Reports on Form 10-K and Quarterly Reports on Form 10-Q for those periods, we have included the financial data and a discussion typically disclosed in an Annual Report on Form 10-K and a Quarterly Report on Form 10-Q for those respective periods.

Without the missing reports, investors may not be able to review certain financial and other disclosures that would have been contained in those reports, which would have provided an additional source of information for their evaluation of their investment in us. As a result of our failure to maintain current filings with the SEC in the past, our use of this format of the Form 10-K and any potential enforcement action from the SEC or other regulatory agencies, we may not be eligible to use certain short-form registration statements or rely on certain rules of the SEC. This could increase our transaction costs and adversely impact our ability to raise capital in a timely manner.

Risks Related to our Business Operations

We derive significant revenue from products incorporating tape technology. Our future results of operations depend in part on continued market acceptance and use of products incorporating tape technology; in the past, decreases in the market have materially and adversely impacted our business, financial condition and results of operations. In addition, if we are unable to compete with the introduction of new storage technologies by other companies, our business, financial condition and results of operations could be materially and adversely affected.

We currently derive significant revenue from products that incorporate some form of tape technology, and we expect to continue to derive significant revenue from these products in the next several years. As a result, our future results of operations depend in part on continued market acceptance and use of products employing tape technology. We believe that the storage environment is changing, including reduced demand for tape products. Decreased market acceptance or use of products employing tape technology has materially and adversely impacted our business, financial condition and results of operations, and we expect that our revenues from certain types of tape products could continue to decline, which could materially and adversely impact our business, financial condition and results of operations in the future.

Disk and solid state products, as well as various software solutions and alternative technologies such as crystal and organic material-based storage have been announced by other companies. We expect that, over time, many of our tape customers could migrate toward our other products and solutions and that revenue from these other products and solutions will generate a greater proportion of our revenue in the future. While we are making targeted investments in software, disk backup systems and other alternative technologies, these markets are characterized by rapid innovation, evolving customer demands and strong competition, including competition with several companies who are also significant customers. If we are not successful in our efforts, we may not be able to retain customers or attract new customers, and our business, financial condition and results of operations could be materially and adversely affected.

We have significant indebtedness, which imposes upon us debt service obligations, and our credit facility contains various operating and financial covenants that limit our discretion in the operation of our business. If we are unable to generate sufficient cash flows from operations and overall results of operations to meet these debt obligations or remain in compliance with the covenants, our business, financial condition and results of operations could be materially and adversely affected.

Our level of indebtedness presents significant risks to our business and investors, both in terms of the constraints that it places on our ability to operate our business and because of the possibility that we may not generate sufficient cash and results of operations to remain in compliance with our covenants and pay the principal and interest on our indebtedness as it becomes due. For further description of our outstanding debt, see the section captioned “Liquidity and Capital Resources” in Part II, *Item 7 Management’s Discussion and Analysis of Financial Condition and Results of Operations.*

As a result of our indebtedness:

- Our ability to invest in growing our business is constrained by the financial covenants contained in our credit facility, which require us to maintain a minimum fixed charge coverage ratio and liquidity levels;
- We must dedicate a portion of our cash flow from operations and other capital resources to debt service, thereby reducing our ability to fund working capital, capital expenditures, research and development and other cash requirements;
- Our flexibility in planning for, or reacting to, changes and opportunities in the markets in which we compete may be limited, including our ability to engage in mergers and acquisitions activity, which may place us at a competitive disadvantage;
- We are subject to mandatory field audits and control of cash receipts by the lenders if we do not maintain liquidity above certain thresholds;
- We may be more vulnerable to adverse economic and industry conditions; and
- We may be unable to make payments on other indebtedness or obligations.

Our credit facility contains restrictive covenants that require us to comply with and maintain certain liquidity levels and a minimum fixed charge coverage ratio, as well as restrict our ability, subject to certain thresholds, to:

- Incur debt;
- Incur liens;
- Make acquisitions of businesses or entities or sell certain assets;
- Make investments, including loans, guarantees and advances;

- Engage in transactions with affiliates;
- Pay dividends or engage in stock repurchases; and
- Enter into certain restrictive agreements.

The weakness we experienced for several years in the market for our storage, back up and data protection business, which is the primary driver of our overall cash flow and operating income, placed increased pressure on our ability to meet our liquidity and fixed charge coverage ratio covenants. We took steps, including several restructurings, to ensure that our results of operations are sufficient to meet these covenants, but if those changes do not result in longer-term improvements to the business, or our results turn out to be lower than expected, we may breach a covenant, which could result in a default under our credit facility agreements.

Our ability to make scheduled payments of the principal of, to pay interest on, or to refinance our indebtedness, including the convertible notes, or to make cash payments in connection with our convertible notes or our credit facility, depends on our future performance, which is subject to economic, financial, competitive and other factors beyond our control. Further, as our indebtedness reaches maturity, we will be required to make large cash payments or adopt one or more alternatives, such as restructuring indebtedness or obtaining additional debt or equity financing on terms that may be onerous or highly dilutive. Our ability to restructure or refinance our indebtedness will depend on the capital markets and our financial condition at such time. We may be unable to incur additional debt or refinance our existing debt on acceptable terms, if at all.

Our credit facility is collateralized by a pledge of all of our assets. If we were to default and were unable to obtain a waiver for such a default, the lenders would have a right to foreclose on our assets in order to satisfy our obligations under these agreements. Any such action on the part of the lenders against us could have a materially adverse impact on our business, financial condition and results of operations.

In connection with entering into our credit facilities and certain amendments to our prior credit facilities, we were required to issue warrants to purchase our common stock to our lenders. When exercised, these warrants will result in significant dilution to our stockholders. As a result, the issuance of common stock upon the exercise of our outstanding warrants may cause our stock price to decline.

We rely on indirect sales channels to market and sell our branded products. Therefore, the loss of or deterioration in our relationship with one or more of our resellers or distributors, or our inability to establish new indirect sales channels to drive growth of our branded revenue, especially for disk backup systems and scale-out tiered storage, could negatively affect our results of operations.

We sell the majority of our branded products to distributors such as Arrow Electronics, Inc. and other VARs and DMRs such as CDW Corporation, who in turn sell our products to end users. We use different distributors, VARs and DMRs in different countries and regions in the world. The success of these sales channels is hard to predict, particularly over time, and we have no purchase commitments or long-term orders from them that assure us of any baseline sales through these channels. Several of our resellers carry competing product lines that they may promote over our products. A reseller might not continue to purchase our products or market them effectively, and each reseller determines the type and amount of our products that it will purchase from us and the pricing of the products that it sells to end user customers. Establishing new indirect sales channels is an important part of our strategy to drive growth of our branded revenue and as our business shifts toward our branded products, these indirect sales channels will have increasing importance to our business.

When we introduce new products and solutions, as we did in the last half of our fiscal year 2019, our relationship with channel partners that historically have sold other products and solutions and that now compete with our new offerings could be adversely impacted. For example, we introduced our new F-Series all-flash array and R-Series ruggedized products in fiscal year 2019, causing us in some cases to more directly compete for primary storage sales with channel partners that sell other primary storage products.

Our results of operations could be adversely affected by any number of factors related to our channel partners, including:

- A change in competitive strategy that adversely affects a distributor's or reseller's willingness or ability to distribute our products;
- The reduction, delay or cancellation of orders or the return of a significant amount of products;
- Our inability to gain traction in developing new indirect sales channels for our branded products;
- The loss of one or more of our distributors or resellers;
- Any financial difficulties of our distributors or resellers that result in their inability to pay amounts owed to us; or
- Changes in requirements or programs that allow our products to be sold by third parties to government customers.

If our products fail to meet our or our customers' specifications for quality and reliability, we may face liability and reputational or financial harm which may adversely impact our results of operations and our competitive position may suffer.

Although we place great emphasis on product quality, we may from time to time experience problems with the performance of our products, which could result in one or more of the following:

- Increased costs related to fulfillment of our warranty obligations;
- The reduction, delay or cancellation of orders or the return of a significant amount of products;
- Failure analysis causing distraction of the sales, operations and management teams; or
- The loss of reputation in the market and customer goodwill.

These factors could cause our business, financial condition and results of operations to be materially and adversely affected.

In addition, we face potential liability for performance problems of our products because our end users employ our storage technologies for the storage and backup of important data and to satisfy regulatory requirements. Loss of this data could cost our customers significant amounts of money, directly and indirectly as a result of lost revenues, intellectual property, proprietary business information or other harm to their business. We could also potentially face claims for product liability from our customers if our products cause property damage or bodily injury. Although there are limitations of liability in our commercial agreements and we maintain technology errors and omissions liability and general liability insurance, our insurance may not cover potential claims of these types or may not be adequate to indemnify us for all liability that may be imposed. Any imposition of liability or litigation costs that are not covered by insurance or is in excess of our limitation of liability or our insurance coverage could harm our business.

A large percentage of our sales are to a few customers, some of which are also competitors, and these customers generally have no minimum or long-term purchase commitments. The loss of, or a significant reduction in demand from, one or more key customers could materially and adversely affect our business, financial condition and results of operations.

Our product sales have been and continue to be concentrated among a small number of our directend-user customers and channel partners as a result of how we sell our products. Under our business model, we sell directly to end user customers, through distributors, VARs and DMRs (which we collectively call our "channel partners"), as well as to OEMs. We sell to many end-user customers and channel partners on purchase orders, not under the terms of a binding long-term procurement agreement. Accordingly, they generally are not obligated to purchase any minimum product volume, and our relationships with them are terminable at will. In addition, recently we have focused our direct-sales business on the largest users of hierarchical storage architectures, the so-called "Hyper-scalers;" there are very few of these extremely large storage customers. During the fiscal years ended March 31, 2019 and March 31, 2018 no customers represented 10% or more of the Company's total revenue. A significant reduction in orders from, or a loss of, one or more large customers would have a material adverse effect on our results of operations.

Some of our tape and disk products are incorporated into larger storage systems or solutions that are marketed and sold to end users by large OEM customers as well as channel partners. Because of this, we have limited market access to the end users who purchase from the OEMs and channel partners, which limits our ability to influence the end users' purchasing decisions and to forecast their future purchases of our products. Revenue from OEM customers has decreased in recent years. Certain of our large OEM customers are also our competitors, and such customers could decide to reduce or terminate their purchases of our products for competitive reasons. These market conditions increase our reliance on these OEM and channel partners. Thus, a significant reduction, delay or cancellation of their orders with us would materially and adversely affect our results of operations.

A portion of our sales are to various agencies and departments of the U.S. federal government, and funding cuts to federal spending can adversely impact our revenue. In the past, we have experienced the impact of reduced government spending and temporary government shutdowns on our sales to government agencies. Future spending cuts by the U.S. federal government, temporary shutdowns of the U.S. federal government or changes in its procurement processes or criteria could decrease our sales to the federal government and could materially and adversely affect our results of operations.

Our results of operations depend on continuing and increasing market acceptance of our existing limited number of products and on new product introductions, which may not be successful, in which case our business, financial condition and results of operations may be materially and adversely affected.

A limited number of products comprise a significant majority of our sales, and due to rapid technological change in the industry, our future results of operations depend on our ability to develop and successfully introduce new products. To compete effectively, we must continually improve existing products and introduce new ones. We have devoted and expect to continue to devote considerable management and financial resources to these efforts. Since July 2018, we have introduced several new products that are designed to solve a variety of our customers' pressing needs. Those products include:

- **F-Series:** an all-flash NVMe storage array – designed for the most demanding media workloads;
- **R-Series:** a ruggedized in-vehicle storage array purpose-built for autonomous vehicle development (to ingest large number of data streams) or for transportation surveillance applications;
- **VS-Series:** a highly resilient, hyper-converged surveillance storage system that meets all the needs of security teams; and
- **Distributed Cloud Services:** a set of Quantum services that offers cloud-like simplicity and economics foron-prem environments.

We have seen market interest in each of these new product lines; however, we cannot provide assurance that:

- Our new products will achieve market acceptance and significant market share, or that the markets for these products will continue or grow as we have anticipated;
- Our new products will be successfully or timely qualified with our customers by meeting customer performance and quality specifications which must occur before customers will place large product orders;
- We will achieve high volume production of these new products in a timely manner, if at all.
- We will introduce additional new products in the time frame we are forecasting; or
- We will not experience technical, quality, performance-related or other difficulties that could prevent or delay the introduction and market acceptance of new products;

If we are not successful in timely completion of our new product qualifications and then ramping sales to our key customers, our revenue and results of operations could be adversely impacted. In addition, if the quality of our products is not acceptable to our customers, this could result in customer dissatisfaction, lost revenue and increased warranty and repair costs.

We continue to face risks related to economic uncertainty and slow economic growth.

Uncertainty about economic conditions poses a risk as businesses may further reduce or postpone spending in response to reduced budgets, tightening of credit markets, negative financial news and declines in income or asset values which could adversely affect our business, financial condition and results of operations. The volatile economic conditions in recent years along with periods of economic uncertainty in various countries around the world has made planning more difficult for us. We continue to face risks related to uncertain tariff levels between countries where our products are manufactured and where they are sold, unstable political and economic conditions in Europe, including concerns about sovereign debt, and uncertainty related to the United Kingdom's exit from the European Union and related political matters, which could negatively impact the U.S. and global economies and adversely affect our financial results. In addition, our ability to access capital markets may be restricted, which could have an impact on our ability to react to changing economic and business conditions and could also materially and adversely affect our results of operations and financial condition.

Competition is intensifying in the data storage and protection market as a result of competitors introducing products based on new technology standards and merger and acquisition activity, which could materially and adversely affect our business, financial condition and results of operations.

Our competitors in the data storage and protection market are aggressively trying to advance and develop new technologies and products to compete against our technologies and products; consequently, we face the risk that customers could choose competitor products over ours. Competition in our markets is characterized by technological innovation and advancement. As a result of competition and new technology standards, our sales or gross margins could decline, which could materially and adversely affect our business, financial condition and results of operations. Some of those competitors, such as IBM, HPE, Seagate Technology and others, are much larger and have more diverse product offerings, and aggressively compete based on their reputations and greater size.

Technological developments and competition over the years in the tape automation market, and in the storage market in general, have resulted in decreased prices for tape automation products and our other product offerings. Pricing pressure is more pronounced in the tape automation market for entry-level products and less pronounced for enterprise products. Over time, the prices of our products and competitor products have decreased, but such products often incorporate new and/or different features and technologies from what we offered in prior years. We face risks that customers could choose competitors' products over ours due to these features and technologies or due to pricing differences. We address pricing pressure in three ways: first, by reducing production costs; second, by adding features to increase value to maintain a certain level of gross margin for our tape automation systems; and third, by selling the overall value of our technologies in solving the customer's business challenges thereby changing the conversation from a pricing negotiation to a value discussion. However, short term cost reduction efforts, and the value discussions may not yield new sales. In addition, if competition further intensifies, or if there is additional industry consolidation, our sales and gross margins for tape automation systems could decline, which could materially and adversely affect our business, financial condition and results of operations.

Industry consolidation and competing technologies with device products, which include tape drives and removable hard drives, have resulted in decreased prices and increasingly commoditized device products. Additionally, the competitive landscape in the data storage and protection market could continue to change due to merger and acquisition activity. Such transactions may impact us in a number of ways. For instance, they could result in:

- Competitors consolidating, having greater resources and becoming more competitive with us;
- Companies that we have not historically competed against entering into one or more of our primary markets and increasing competition in such markets;
- Customers that are also competitors becoming more competitive with us and/or reducing their purchase of our products; and

- Competitors acquiring our current suppliers or business partners and negatively impacting our business model.

These transactions also create uncertainty and disruption in the market because the timing of such a transaction and its degree of impact, or whether it will happen at all, are often unknown. Given these factors and others, such merger and acquisition activity may materially and adversely impact our business, financial condition and results of operations.

A significant decline in our media royalty or branded software revenues could materially and adversely affect our business, financial condition and results of operations.

Our media royalties and branded software revenues generate relatively greater profit margins than some of our other products, and can significantly impact our overall profitability. We receive media royalty revenue based on tape media cartridges sold by various tape media manufacturers and resellers. Under our patent and technology license agreements with these companies, each of the licensees determines the pricing and number of units of tape media cartridges that it sells. Our media royalty revenue varies depending on the level of sales of the various media cartridge offerings sold by the licensees and other factors, including:

- The continued use by our customers of tape media for storage;
- The size of the installed base of devices and similar products that use tape media cartridges;
- The performance of our strategic licensing partners, which sell tape media cartridges;
- The relative growth in units of newer device products, since the associated media cartridges for newer products typically sell at higher prices than the media cartridges associated with older products;
- The media consumption habits and rates of end users;
- The pattern of device retirements;
- The level of channel inventories; and
- Agreement on standards for newer generations of the tape media that generates our royalty revenue.

Our media royalties depend on royalty rates and the quantity of media consumed in the market. We do not control licensee sales of these tape media cartridges. Since 2017, we have seen royalty revenues decline substantially. Those declines are due, in part, to legal disputes between the two media manufacturers that supply our LTO tape media. For instance, litigation in Japan and in the U.S. International Trade Commission has resulted in supply of LTO being halted in the U.S. in 2019. The disputes between the two tape manufacturers were recently resolved. Continued reduced royalty rates, a reduced installed device base using tape media cartridges, or any renewed legal disputes between the manufacturers would result in further reductions in our media royalty revenue and could reduce gross margins. This could materially and adversely affect our business, financial condition and results of operations.

Our branded software revenues are also dependent on many factors, including the success of competitive offerings, our ability to execute on our product roadmap and our effectiveness at marketing and selling our branded software solutions directly or through our channel partners. Disruptions to any one of these factors could reduce our branded software revenues, which could materially and adversely affect our business, financial condition and results of operations.

Some of our products contain licensed, third-party technology that provides important product functionality and features. The loss or inability to obtain any such license could have a material adverse effect on our business.

Certain of our products contain technology licensed from third parties that provides important product functionality and features. We may not have continued access to this technology, for instance, if the licensing company ceased to exist, either from bankruptcy, dissolution or purchase by a competitor. In some cases, we may seek to enforce our contractual protections via litigation against the licensing company itself, which may cause us to incur significant legal or other costs and may not be resolved in our favor. Other legal actions, such as intellectual property actions, brought against the licensing company could also impact our future access to the technology. We also have limited

visibility or control of the technology roadmap at the licensing company and cannot ensure that the licensing company will advance the roadmap of the licensed technology in the manner best for us. Any of these actions could negatively impact our technology licensing, thereby reducing the functionality or features of our products, and could materially and adversely affect our business, financial condition and results of operations. We also face the risk of not being able to quickly implement a replacement technology or otherwise mitigate the risks associated with not having access to this licensed technology, which may also materially and adversely affect our business, financial condition and results of operations.

We have taken considerable steps towards reducing our cost structure. The steps we have taken may not reduce our cost structure to a level appropriate in relation to our future sales and therefore, these cost reductions may be insufficient to achieve profitability.

In the last several years, we have recorded significant restructuring charges and made cash payments to reduce our cost of sales and operating expenses to respond to adverse economic and industry conditions, to execute strategic management decisions and to rationalize our operations following acquisitions. During fiscal years 2016 through 2019 we have implemented restructuring plans to eliminate certain positions in the U.S. and internationally and to exit certain locations. These restructuring plans may result in decreases to our revenues or adversely affect our ability to grow our business in the future. Workforce reductions may also adversely affect employee morale and our ability to retain our employees. We may take future steps to further reduce our operating costs, including future cost reduction steps or restructurings in response to strategic decisions, adverse changes in our business or industry or future acquisitions. We may be unable to reduce our cost of sales and operating expenses at a rate and to a level appropriate in relation to our future sales, which may materially and adversely affect our business, financial condition and results of operations.

In addition, our ability to achieve the anticipated cost savings and other benefits from these restructuring plans within the expected time frame is subject to many estimates and assumptions. These estimates and assumptions are subject to significant economic, competitive and other uncertainties, some of which are beyond our control. If these estimates and assumptions are incorrect, if we experience delays, or if other unforeseen events occur, our business, financial condition and results of operations could be adversely affected.

Since mid-2018, we have hired almost an entirely new executive team, including a new CEO and new CFO. In addition, prior year restructurings and the events that led to our restatement have caused a significant loss of employees. If we are unable to integrate our new executives, as well as retain skilled executives and other employees, our business could be materially and adversely impacted.

In June of 2018, we hired a new CFO, and the following month, we hired a new CEO. Since that time we have hired several other new senior executives in many areas of our business, including sales, supply chain management, finance and legal. These changes were due in part to the events that caused us to restate our financial statements for the past several years. In addition, in fiscal 2016, 2017 and 2018, we laid off employees in order to reduce costs in response to declining sales. All of these factors have increased the possibility that employees may decide to leave our company to pursue their careers elsewhere.

We may not be able to integrate all of our new executives successfully. Further, we may be subject to continued turnover in our employee base or the inability to fill open headcount requisitions due to competition, concerns about our operational performance, business culture or other factors. In addition, we may need to rely on the performance of employees whose skill sets are not sufficiently developed to fulfill their expected job responsibilities. Any of these situations could disrupt our business, prevent us from implementing the policy and process changes advocated by new management, and otherwise impair or delay our ability to realize operational and strategic objectives and cause increased expenses and lost sales opportunities.

The loss of the services of any of our key employees, the inability to attract or retain qualified talent in the future, or delays in hiring required talent, particularly sales and engineering talent, could delay the development and introduction of our products or services and/or negatively affect our ability to sell our products or services.

If we do not successfully manage the changes that we have made and may continue to make to our infrastructure and management, our business could be disrupted, and that could adversely impact our results of operations and financial condition.

Managing change is an important focus for us. In recent years, we have implemented several significant initiatives involving our sales and marketing, engineering and operations organizations, aimed at increasing our efficiency and better aligning these groups with our corporate strategy. In addition, we have reduced headcount to streamline and consolidate our supporting functions as appropriate in response to market or competitive conditions and following past acquisitions and have increased our reliance on certain third-party business relationships. If we are unable to successfully manage the changes that we implement and detect and address issues as they arise, our business could be disrupted and our results of operations and financial condition could be materially and adversely impacted.

Third party intellectual property infringement claims could result in substantial liability and significant costs, and, as a result, our business, financial condition and result of operations may be materially and adversely affected.

From time to time, third parties allege that our products infringe their patented or proprietary technology and demand that we purchase a license from them. For example, we are currently in patent litigation with Realtime Data LLC d/b/a IXO, which has been stayed, described in Part II, *Item 1 Legal Proceedings*. The ultimate outcome of any license discussion or litigation, including the Realtime litigation, is uncertain. Adverse resolution of any third party infringement claim could subject us to substantial liabilities and require us to refrain from manufacturing and selling certain products. In addition, the costs incurred in intellectual property litigation can be substantial, regardless of the outcome. As a result, our business, financial condition and results of operations could be materially and adversely affected.

If we fail to protect our intellectual property or if others use our proprietary technology without authorization, our competitive position may suffer.

Our future success and ability to compete depends in part on our proprietary technology. We rely on a combination of copyright, patent, trademark and trade secrets laws and nondisclosure agreements to establish and protect our proprietary technology. However, we cannot provide assurance that patents will be issued with respect to pending or future patent applications that we have filed or plan to file or that our patents will be upheld as valid or will prevent the development of competitive products or that any actions we have taken will adequately protect our intellectual property rights. We generally enter into confidentiality agreements with our employees, consultants, customers, potential customers, contract manufacturers and others as required, in which we strictly limit access to, and distribution of, our software and further limit the disclosure and use of our proprietary information.

Despite our efforts to protect our proprietary rights, unauthorized parties may attempt to copy or otherwise obtain or use our products or technology. Enforcing our intellectual property rights can sometimes only be accomplished through the use of litigation. Our competitors may also independently develop technologies that are substantially equivalent or superior to our technology. In addition, the laws of some foreign countries do not protect our proprietary rights to the same extent as the laws of the U.S.

We license certain of our software under "open source" licenses. Because of the characteristics of open source software licenses, it may be relatively easy for competitors, some of whom have greater resources than we have, to enter our markets and compete with us.

One of the characteristics of open source software is that the source code for our open source projects is publicly available, and anyone who obtains copies has a license under certain of our intellectual property rights, which, depending on the license, may include certain of our patents, to modify and redistribute the software and use it to compete in the marketplace. Such competition can develop without the degree of overhead and lead time required by traditional proprietary software companies. It is possible for competitors to use our open source project software to develop their own software, potentially reducing the demand for our solution and putting price pressure on our subscription offerings. We cannot guarantee that competitive pressure or the availability of new open source software will not result in price reductions, reduced operating margins and loss of market share, any one of which could harm our business, financial condition, results of operations and cash flows.

In addition, we use our own open source project software in our proprietary products. As a result, there is a risk that we may inadvertently release as open source certain code that was intended to be kept as proprietary, that reveals confidential information regarding the inner workings of our proprietary products, or that could enable competitors to more readily reverse engineer or replicate aspects of our proprietary technology that we would otherwise protect as trade secrets. We may also accept contributions from third parties to our open source projects, and it may be difficult for us to accurately determine the origin of the contributions and whether their use, including in our proprietary products, infringes, misappropriates or violates third party intellectual property or other rights. The availability of certain of our own software in source code form may also enable others to detect and exploit security vulnerabilities in our products.

Our products contain "open source" software and failure to comply with the terms of the open source license could have a material adverse effect on our competitive positions and financial results.

Certain products or technologies acquired or developed by us include "open source" software. Open source software is typically licensed for use at no initial charge. Certain open source software licenses, however, require users of the open source software to license to others any software that is based on, incorporates or interacts with, the open source software under the terms of the open source license. Although we endeavor to comply fully with such requirements, third parties could claim that we are required to license larger portions of our software than we believe we are required to license under open source software licenses. If such claims were successful, they could adversely impact our competitive position and financial results by providing our competitors with access to sensitive information that may help them develop competitive products. In addition, our use of open source software may harm our business and subject us to intellectual property claims, litigation or proceedings in the future because:

- Open source license terms may be ambiguous and may subject us to unanticipated obligations regarding our products, technologies and intellectual property;
- Open source software generally cannot be protected under trade secret law; and
- It may be difficult for us to accurately determine the origin of the open source code and whether the open source software infringes, misappropriates or violates third party intellectual property or other rights.

As a result of our global manufacturing and sales operations, we are subject to a variety of risks related to our business outside of the U.S., any of which could, individually or in the aggregate, have a material adverse effect on our business.

A significant portion of our manufacturing and sales operations and supply chain occurs in countries other than the U.S. We also have sales outside the U.S. We utilize contract manufacturers to produce and fulfill orders for our products and have suppliers for various components, several of which have operations located in foreign countries including China, Hungary, Japan, Malaysia, Singapore, Mexico, the Philippines and Thailand. Because of these operations, we are subject to a number of risks including:

- Import and export duties and value-added taxes;
- Import, export and trade regulation changes that could erode our profit margins or restrict our ability to transport our products;
- Reduced or limited protection of our intellectual property;
- Compliance with multiple and potentially conflicting regulatory requirements and practices;
- Commercial laws that favor local businesses;
- Exposure to economic fluctuations including inflationary risk and continuing sovereign debt risk;
- Shortages in component parts and raw materials;
- The burden and cost of complying with foreign and U.S. laws governing corporate conduct outside the U.S. including the Foreign Corrupt Practices Act, the United Kingdom Bribery Act and other similar regulations;

- Adverse movement of foreign currencies against the U.S. dollar (the currency in which our results are reported) and uncertain global economic conditions generally;
- Inflexible employee contracts and employment laws that may make it difficult to terminate or change the compensation structure for employees in some foreign countries in the event of business downturns;
- Recruiting employees in highly competitive markets and wage inflation in certain markets;
- Potential restrictions on the transfer of funds between countries;
- Political instability, military, social and infrastructure risks, especially in emerging or developing economies;
- Natural disasters, including earthquakes, flooding, typhoons and tsunamis; and
- Cultural differences that affect the way we do business.

Any or all of these risks could have a material adverse effect on our business.

Our quarterly results of operations have fluctuated significantly, and past quarterly results of operations should not be used to predict future performance.

Our quarterly results of operations have fluctuated significantly in the past and could fluctuate significantly in the future. As a result, our quarterly results of operations should not be used to predict future performance. Quarterly results of operations could be materially and adversely affected by a number of factors, including, but not limited to:

- Fluctuations in spending by IT departments as a result of economic conditions or fluctuations in U.S. federal government and in foreign spending;
- Failure by our contract manufacturers to complete shipments in the last month of a quarter during which a substantial portion of our products are typically shipped;
- Changes in product mix;
- New product announcements by us or our competitors which may cause delays in purchasing;
- Customers canceling, reducing, deferring or rescheduling significant orders as a result of excess inventory levels, weak economic conditions or other factors;
- Seasonality, including customer fiscal year-ends and budget availability impacting customer demand for our products;
- Declines in large customer orders;
- Declines in royalty or software revenues;
- Product development and ramp cycles and product performance or quality issues of ours or our competitors;
- Poor execution of and performance against expected sales and marketing plans and strategies;
- Reduced demand from our OEM or distribution, VAR, DMR and other large customers;
- Increased competition which may, among other things, increase pricing pressure or reduce sales;
- Restructuring actions or unexpected costs; and
- Foreign exchange fluctuations.

If we fail to meet our projected quarterly results, our business, financial condition and results of operations may be materially and adversely affected.

Our manufacturing, component production and service repair are outsourced to third party contract manufacturers, component suppliers and service providers. We recently shifted some of our production from one contract manufacturer to another in order to reduce manufacturing costs. If we do not realize the cost savings we anticipate, or cannot obtain products, parts and services from these third parties in a cost effective and timely manner that meets our customers' expectations, this could materially and adversely impact our business, financial condition and results of operations.

Many aspects of our supply chain and operational results are dependent on the performance of third-party business partners. Inmid-2019, we moved some of our manufacturing from one contract manufacturer to a different one located in Mexico. We did so in order to realize substantial cost savings. After we made this decision, the U.S. Government threatened to impose tariffs on products imported from Mexico, which could result in our inability to recognize the cost savings we anticipated in making the decision to shift to a contract manufacturer in Mexico.

Consequently, we face a number of risks as a result of these relationships, including, among others:

- *Sole source of product supply*

In many cases, our business partner may be the sole source of supply for the products or parts they manufacture, or the services they provide, for us. Because we are relying on one supplier, we are at greater risk of experiencing shortages, reduced production capacity or other delays in customer deliveries that could result in customer dissatisfaction, lost sales and increased expenses, each of which could materially damage customer relationships and result in lost revenue.

- *Costs and purchase commitments*

We may not be able to control the costs for the products our business partners manufacture for us or the services they provide to us. They procure inventory to build our products based upon a forecast of customer demand that we provide. We could be responsible for the financial impact on the contract manufacturer, supplier or service provider of any reduction or product mix shift in the forecast relative to materials that they had already purchased under a prior forecast. Such a variance in forecasted demand could require us to pay them for finished goods in excess of current customer demand or for excess or obsolete inventory and generally incur higher costs. As a result, we could experience reduced gross margins and operating losses based on these purchase commitments. With respect to service providers, although we have contracts for most of our third-party repair service vendors, the contract period may not be the same as the underlying service contract with our customer. In such cases, we face risks that the third-party service provider may increase the cost of providing services over subsequent periods contracted with our customer. In addition, the cost benefits we expect to obtain from using certain contract manufacturers outside the U.S. may not be realized due to increased import-export costs, including tariffs and other taxes.

- *Financial condition and stability*

Our third-party business partners may suffer adverse financial or operational results or may be negatively impacted by global and local economic conditions. Therefore, we may face interruptions in the supply of product components or service as a result of financial or other volatility affecting our supply chain. We could suffer production downtime or increased costs to procure alternate products or services as a result of the possible inadequate financial condition of one or more of our business partners.

- *Quality and supplier conduct*

We have limited control over the quality of products and components produced and services provided by our supply chain and third-party contract manufacturing and service business partners. Therefore, the quality of the products, parts or services may not be acceptable to our customers and could result in customer dissatisfaction, lost revenue and increased warranty costs. In addition, we have limited control over the manner in which our business partners conduct their business. Sub-tier suppliers selected by the primary third party could have process control issues or could select components with latent defects that manifest over a longer period of time. We may face negative consequences or publicity as a result of a third party's failure to comply with applicable compliance, trade, environmental or employment regulations. Any or all of these risks could have a material adverse effect on our business.

Because we may order components from suppliers in advance of receipt of customer orders for our products that include these components, we could face a material inventory risk if we fail to accurately forecast demand for our products or manage production, which could have a material and adverse effect on our results of operations and cash flows.

Although we use third parties to manufacture our products, in some cases we may retain the responsibility to purchase component inventory to support third party manufacturing activities, which presents a number of risks that could materially and adversely affect our financial condition. For instance, as part of our component planning, we may place orders with or pay certain suppliers for components in advance of receipt of customer orders. We may occasionally enter into negotiated orders with vendors early in the manufacturing process of our products to ensure that we have sufficient components for our products to meet anticipated customer demand. Because the design and manufacturing process for these components can be complicated, it is possible that we could experience a design or manufacturing flaw that could delay or even prevent the production of the components for which we previously committed to pay. We also face the risk of ordering too many components, or conversely, not enough components, since supply orders are generally based on forecasts of customer orders rather than actual customer orders. In addition, in some cases, we may make non-cancelable order commitments to our suppliers for work-in-progress, supplier's finished goods, custom sub-assemblies, discontinued (end-of-life) components and Quantum-unique raw materials that are necessary to meet our lead times for finished goods. If we cannot change or be released from supply orders, we could incur costs from the purchase of unusable components, either due to a delay in the production of the components or other supplies or as a result of inaccurately predicting supply orders in advance of customer orders. These same risks exist with our third-party contract manufacturing partners. Our business and results of operations could be materially and adversely affected if we incur increased costs or are unable to fulfill customer orders.

Because we rely heavily on distributors and other resellers to market and sell our products, if one or more distributors were to experience a significant deterioration in its financial condition or its relationship with us, this could disrupt the distribution of our products and reduce our revenue, which could materially and adversely affect our business, financial condition and results of operations.

We heavily utilize distributors and VARs to perform the functions necessary to market and sell our products in certain product and geographic segments. To fulfill this role, the distributor must maintain an acceptable level of financial stability, creditworthiness and the ability to successfully manage business relationships with the customers it serves directly. Under our distributor agreements with these companies, each of the distributors determines the type and amount of our products that it will purchase from us and the pricing of the products that it sells to its customers. If the distributor is unable to perform in an acceptable manner, we may be required to reduce the amount of sales of our product to the distributor or terminate the relationship. We may also incur financial losses for product returns from distributors or for the failure or refusal of distributors to pay obligations owed to us. Either scenario could result in fewer of our products being available to the affected market segments, reduced levels of customer satisfaction and/or increased expenses, which could in turn have a material and adverse impact on our business, results of operations and financial condition.

Our stock price has been affected by the Company's lack of current financial statements, de-listing from a national exchange, and the perceived issues related to the recently-concluded restatement of our financial statements for fiscal years 2015-2017. In addition, there are other factors and events that could cause the trading price of our common stock to decline.

The Company's lack of public financial information since November 2017 has had a number of negative effects: investors have not had any detailed information on which to base an investment decision; we have been delisted from the New York Stock Exchange; institutional investors' investment policies prohibit them from purchasing our stock; all of which we believe has had a negative effect on our stock price.

In addition to these factors, which we believe has caused our stock price to trade lower than it would if we had widely known financial information, the trading price of our common stock may fluctuate in response to a number of events and factors, such as:

- Quarterly variations in our results of operations;
- Failure to meet our expectations or the expectations of securities analysts and investors;
- Failure to comply with applicable regulatory requirements or any investigations or enforcement actions related to a potential failure to comply with applicable regulations;

- Significant changes in our brand or reputation;
- New products, services, innovations and strategic developments by our competitors or us, or business combinations and investments by our competitors or us;
- Changes in our capital structure, including issuance of additional debt or equity to the public, and the issuance of common stock upon exercise of our outstanding warrants;
- Large or sudden purchases or sales of stock by existing or new investors; and
- The result of any litigation or governmental investigation, which could result in liabilities and reputational harm.

Other macro-economic forces also could affect our stock price, including:

- Changes in interest rates;
- Fluctuations in the stock market in general and market prices for technology companies in particular;
- Tariffs imposed by the U.S. Government on sales originating in or being shipped to countries with which we haveon-going trade or other political conflicts;

Any of these events and factors may cause our stock price to rise or fall and may adversely affect our business and financing opportunities.

Our operation and design processes are subject to safety and environmental regulations which could lead to increased costs, or otherwise adversely affect our business, financial condition and results of operations.

We are subject to a variety of laws and regulations relating to, among other things, the use, storage, discharge and disposal of materials and substances used in our facilities as well as the safety of our employees and the public. Current regulations in the U.S. and various international jurisdictions restrict the use of certain potentially hazardous materials used in electronic products and components (including lead and some flame retardants), impose a "take back" obligation on manufacturers for the financing of the collection, recovery and disposal of electrical and electronic equipment and require extensive investigation into and disclosure regarding certain minerals used in our supply chain. We have implemented procedures and will likely continue to introduce new processes to comply with current and future safety and environmental legislation. However, measures taken now or in the future to comply with such legislation may adversely affect our costs or product sales by requiring us to acquire costly equipment or materials, redesign processes or to incur other significant expenses in adapting our supply chain, waste disposal and emission management processes. Furthermore, safety or environmental claims or our failure to comply with present or future regulations could result in the assessment of damages or imposition of fines against us or the suspension of affected operations, which could have an adverse effect on our business, financial condition and results of operations.

We are subject to many laws and regulations, and violation of or changes in those requirements could materially and adversely affect our business.

We are subject to numerous U.S. and international laws and requirements regarding corporate conduct, fair competition, corruption prevention and import and export practices, including laws applicable to U.S. government contractors. In addition, the SEC has adopted disclosure rules related to the supply of certain minerals originating from the conflict zones of the Democratic Republic of the Congo or adjoining countries, and we have incurred costs to comply with such regulations and may realize other costs relating to the sourcing and availability of minerals used in our products. While we maintain a rigorous corporate ethics and compliance program, we may be subject to increased regulatory scrutiny, significant monetary fines or penalties, suspension of business opportunities or loss of jurisdictional operating rights as a result of any failure to comply with those requirements. If we were to be subject to a compliance investigation, we may incur increased personnel and legal costs. Our supply and distribution models may be reliant upon the actions of our third-party business partners and we may also be exposed to potential liability resulting from their violation of these or other compliance requirements. Further, our U.S. and international business models are based on currently applicable regulatory requirements and exceptions. Changes in those requirements or exceptions could necessitate changes to our business model. Any of these consequences could materially and adversely impact our business and results of operations.

A cybersecurity breach into our products when used by our customers could adversely affect our ability to conduct our business, harm our reputation, expose us to significant liability or otherwise damage our financial results.

A cybersecurity breach into a system we have sold to a customer could negatively affect our reputation as a trusted provider of large-scale storage, archive and data protection products by adversely affecting the market's perception of the security or reliability of our products and services. Many of our customers and partners store sensitive data on our products, and a cybersecurity breach related to our products could harm our reputation and potentially expose us to significant liability.

We also maintain sensitive data related to our employees, strategic partners and customers, including intellectual property, proprietary business information and personally identifiable information on our own systems. We employ sophisticated security measures; however, we may face threats across our infrastructure including unauthorized access, security breaches and other system disruptions.

It is critical to our business that our employees', strategic partners' and customers' sensitive information remains secure and that our customers perceive that this information is secure. A cybersecurity breach could result in unauthorized access to, loss of, or unauthorized disclosure of such information. A cybersecurity breach could expose us to litigation, indemnity obligations, government investigations and other possible liabilities. Additionally, a cyber-attack, whether actual or perceived, could result in negative publicity which could harm our reputation and reduce our customers' confidence in the effectiveness of our solutions, which could materially and adversely affect our business and results of operations. A breach of our security systems could also expose us to increased costs including remediation costs, disruption of operations or increased cybersecurity protection costs that may have a material adverse effect on our business. Although we maintain technology errors and omissions liability insurance, our insurance may not cover potential claims of these types or may not be adequate to indemnify us for inability that may be imposed. Any imposition or liability or litigation costs that are not covered by insurance or in excess of our insurance coverage could harm our business.

Our actual or perceived failure to adequately protect personal data could adversely affect our business, financial condition and results of operations.

A variety of state, national, foreign, and international laws and regulations apply to the collection, use, retention, protection, disclosure, transfer and other processing of personally identifiable information. These privacy- and data protection-related laws and regulations are evolving, with new or modified laws and regulations proposed and implemented frequently and existing laws and regulations subject to new or different interpretations. Compliance with these laws and regulations can be costly and can delay or impede the development of new products.

For example, in 2016, the European Parliament enacted the General Data Protection Regulation (or "GDPR") which governs the collection, storage and use of personal information gathered in the European Union, regardless of where such information is stored.In 2018, California enacted the Consumer Privacy Act ("CCPA"), which regulates information stored by companies doing business in California. The regulations implementing the CCPA have not yet been published, and the implementation of standards for GDPR compliance continue to evolve. Our products' and internal systems' actual or alleged failure to comply with applicable laws and regulations, or to protect personal data, could result in enforcement actions and significant penalties against us, which could result in negative publicity, increase our operating costs, subject us to claims or other remedies and have a material adverse effect on our business, financial condition, and results of operations.

We must maintain appropriate levels of service parts inventories. If we do not have sufficient service parts inventories, we may experience increased levels of customer dissatisfaction. If we hold excessive service parts inventories, we may incur financial losses.

We maintain levels of service parts inventories to satisfy future warranty obligations and also to earn service revenue by providing enhanced and extended warranty and repair service during and beyond the warranty period. We estimate the required amount of service parts inventories based on historical usage and forecasts of future warranty and extended warranty requirements, including estimates of failure rates and costs to repair, and out of warranty revenue. Given the significant levels of judgment inherently involved in the process, we cannot provide assurance that we will be able to maintain appropriate levels of service parts inventories to satisfy customer needs and to avoid financial losses from excess service parts inventories. If we are unable to maintain appropriate levels of service parts inventories, our business, financial condition and results of operations may be materially and adversely impacted.

From time to time we have made acquisitions. The failure to successfully integrate future acquisitions could harm our business, financial condition and results of operations.

As a part of our business strategy, we have in the past and may make acquisitions in the future, subject to certain debt covenants. We may also make significant investments in complementary companies, products or technologies. If we fail to successfully integrate such acquisitions or significant investments, it could harm our business, financial condition and results of operations. Risks that we may face in our efforts to integrate any recent or future acquisitions include, among others:

- Failure to realize anticipated synergies from the acquisition;
- Difficulties in assimilating and retaining employees;
- Potential incompatibility of business cultures or resistance to change;
- Coordinating geographically separate organizations;
- Diversion of management's attention from ongoing business concerns;
- Coordinating infrastructure operations in a rapid and efficient manner;
- The potential inability to maximize our financial and strategic position through the successful incorporation of acquired technology and rights into our products and services;
- Failure of acquired technology or products to provide anticipated revenue or margin contribution;
- Insufficient revenues to offset increased expenses associated with the acquisition;
- Costs and delays in implementing or integrating common systems and procedures;
- Reduction or loss of customer orders due to the potential for market confusion, hesitation and delay;
- Impairment of existing customer, supplier and strategic relationships of either company;
- Insufficient cash flows from operations to fund the working capital and investment requirements;
- Difficulties in entering markets in which we have no or limited direct prior experience and where competitors in such markets have stronger market positions;
- The possibility that we may not receive a favorable return on our investment, the original investment may become impaired, and/or we may incur losses from these investments;
- Dissatisfaction or performance problems with the acquired company;
- The assumption of risks of the acquired company that are difficult to quantify, such as litigation;
- The cost associated with the acquisition, including restructuring actions, which may require cash payments that, if large enough, could materially and adversely affect our liquidity; and
- Assumption of unknown liabilities or other unanticipated adverse events or circumstances.

Acquisitions present many risks, and we may not realize the financial and strategic goals that were contemplated at the time of any transaction. We cannot provide assurance that we will be able to successfully integrate any business, products, technologies or personnel that we may acquire in the future, and our failure to do so could negatively impact our business, financial condition and results of operations.

If the future outcomes related to the estimates used in recording tax liabilities to various taxing authorities result in higher tax liabilities than estimated, then we would have to record tax charges, which could be material.

We have provided amounts and recorded liabilities for probable and estimable tax adjustments required by various taxing authorities in the U.S. and foreign jurisdictions. If events occur that indicate payments of these amounts will be less than estimated, then reversals of these liabilities would create tax benefits recognized in the periods when we determine the liabilities have reduced. Conversely, if events occur which indicate that payments of these amounts will be greater than estimated, then tax charges and additional liabilities would be recorded. In particular, various foreign jurisdictions could challenge the characterization or transfer pricing of certain intercompany transactions. In the event of an unfavorable outcome of such challenge, there exists the possibility of a material tax charge and adverse impact on the results of operations in the period in which the matter is resolved or an unfavorable outcome becomes probable and estimable.

Certain changes in stock ownership could result in a limitation on the amount of net operating loss and tax credit carryovers that can be utilized each year. Should we undergo such a change in stock ownership, it would severely limit the usage of these carryover tax attributes against future income, resulting in additional tax charges, which could be material.

We are exposed to fluctuations in foreign currency exchange rates, and an adverse change in foreign currency exchange rates relative to our position in such currencies could have a material adverse impact on our business, financial condition and results of operations.

We do not currently use derivative financial instruments for speculative purposes. We have used in the past, and may use in the future, foreign currency forward contracts and derivative instruments to hedge our exposure to foreign currency exchange rates. To the extent that we have assets or liabilities denominated in a foreign currency that are inadequately hedged or not hedged at all, we may be subject to foreign currency losses, which could be significant.

Our international operations can act as a natural hedge when both operating expenses and sales are denominated in local currencies. In these instances, although an unfavorable change in the exchange rate of a foreign currency against the U.S. dollar would result in lower sales when translated to U.S. dollars, operating expenses would also be lower in these circumstances. An increase in the rate at which a foreign currency is exchanged for U.S. dollars would require more of that particular foreign currency to equal a specified amount of U.S. dollars than before such rate increase. In such cases, and if we were to price our products and services in that particular foreign currency, we would receive fewer U.S. dollars than we would have received prior to such rate increase for the foreign currency. Likewise, if we were to price our products and services in U.S. dollars while competitors priced their products in a local currency, an increase in the relative strength of the U.S. dollar would result in our prices being uncompetitive in those markets. Such fluctuations in currency exchange rates could materially and adversely affect our business, financial condition and results of operations.

Our securities are currently traded over-the-counter, not on a national exchange. We currently plan to seek a listing on a national exchange; however, there is no assurance that we will qualify for listing on that exchange. Our failure to do so would severely limit the types of institutional investors whose policies permit them to purchase our stock, would restrict our liquidity, and likely would have a negative effect on our stock price.

As a consequence of our having to restate our prior year financials, we have not been able to maintain current financial filings with the SEC. In January 2019, due to our lack of current financials, we were delisted from the New York Stock Exchange. We anticipate applying for listing on the NASDAQ market as soon as is practical after our financial reporting is current with the SEC. We understand the new listing criteria on NASDAQ and believe we will satisfy those criteria shortly after our financial statements are up to date. However, we cannot assure that the NASDAQ will accept our listing application. If they do not, and we remain an over-the-counter traded company, many institutional investors' investment policies will bar them from trading in our securities. In addition, the trading volume in the over-the-counter market is significantly lower than trading on NASDAQ, thus making it more difficult for investors to buy or sell shares at a favorable price. Consequently, our stock price could be negatively impacted by our continued trading on the over-the-counter market.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None

ITEM 2. PROPERTIES

Our headquarters is located in San Jose, California. We lease facilities in North America, Europe and Asia Pacific. We believe our facilities are adequate for our current needs. The following is a summary of the significant locations and primary functions of those facilities as of March 31, 2019:

Location	Function
North America	
San Jose, CA	Corporate headquarters, research and development
Irvine, CA	Administration, research and development, sales, service
Englewood, CO	Administration, research and development, sales, service
Mendota Heights, MN	Research and development
Richardson, TX	Research and development
Bellevue, WA	Administration, sales
New York, NY	Sales
Europe	
Paris, France	Sales, service
Boehmenkirch, Germany	Administration, service
Munich, Germany	Sales, service
Zurich, Switzerland	Administration, operations management
Bracknell, UK	Sales, service
London, UK	Sales
Asia Pacific	
Adelaide, Australia	Research and development
Kuala Lumpur, Malaysia	Customer service
Singapore City, Singapore	Administration, operations management, sales
Seoul, Korea	Sales, service
Tokyo, Japan	Sales

ITEM 3. LEGAL PROCEEDINGS

On July, 22 2016, Realtime Data LLC d/b/a IXO (“Realtime Data”) filed a patent infringement lawsuit against Quantum in the U.S. District Court for the Eastern District of Texas, alleging infringement of U.S. Patents Nos. 7,161,506, 7,378,992, 7,415,530, 8,643,513, 9,054,728, and 9,116,908. The lawsuit has been transferred to the U.S. District Court for the Northern District of California for further proceedings. Realtime Data asserts that we have incorporated Realtime Data’s patented technology into our compression products and services. Realtime Data seeks unspecified monetary damages and other relief that the Court deems appropriate. On July 31, 2017, the District Court stayed proceedings in this litigation pending decision in Inter Partes Review proceedings currently before the Patent Trial and Appeal Board relating to the Realtime patents. That stay remains pending. We believe the probability that this lawsuit will have a material adverse effect on our business, operating results or financial condition is remote.

In February 2018, two putative class action lawsuits were filed in the U.S. District Court for the Northern District of California against the Company and two former executive officers (the "Class Action"). The lawsuits were consolidated on May 16, 2018. The Class Action plaintiffs sought unspecified damages for certain alleged material misrepresentations and omissions made by us in connection with our financial statements for its fiscal year 2017. On September 25, 2018, the Court granted permission to plaintiffs in the action to file an Amended Consolidated Complaint. Before the plaintiffs filed their amended consolidated complaint, the parties met with a mediator to discuss a potential settlement of the case. On February 20, 2019, the parties reached a settlement in principal; under the terms of the settlement, we agreed to pay $8.2 million to the plaintiffs. The amount includes all of plaintiffs' attorneys' fees, and the full amount will be paid by our directors and officers liability insurance carriers. A Stipulation of Settlement was signed by the Parties on June 28, 2019, and the Court entered preliminary approval of the settlement on July 26, 2018. In its order granting preliminary approval, the Court set the date for final approval of the settlement to take place on November 14, 2019.

In May 2018, two shareholders filed litigation in California Superior Court for Santa Clara County on behalf of Quantum against several current and former officers and directors of the Company. A third action brought by a shareholder on behalf of Quantum was filed on March 4, 2019. These three lawsuits (the "Derivative Litigation"), which were consolidated by the Court, alleged, *inter alia*, that the board members and certain of the senior officers breached their fiduciary duties to the Company and its shareholders by causing the Company to make materially false and misleading statements concerning the Company's financial health, business operations, and growth prospects in its public filings and communications with investors, including misrepresentations regarding the Company's disclosure controls and procedures, revenue recognition, and internal controls over financial reporting. After extensive negotiations, the parties reached a definitive agreement to settle the Derivative Litigation in late February 2019. The settlement requires us to adopt a number of corporate governance reforms and to pay plaintiffs' attorneys' fees of $800,000, which will be paid by our directors and officers liability insurance carriers. A hearing on final approval of the Derivative Litigation settlement has been set for September 6, 2019.

In January 2018, we received a document subpoena from the SEC requesting information pertaining to our financial statements for the period April 1, 2017 through the date of the subpoena. We responded to that subpoena. In August 2018, we received a second subpoena requesting similar documents for the period April 1, 2015 through the date of the subpoena. We understand that the SEC's investigation relates to the facts and circumstances regarding the financial statements included in the restatement presented in this Annual Report on Form 10-K. We have produced a substantial volume of documents to the SEC and are cooperating with the SEC staff. The investigation is ongoing.

Additionally, from time to time, we are a party to various legal proceedings and claims arising from the normal course of business activities. Based on current available information, we do not expect that the ultimate outcome of any currently pending unresolved matters, individually or in the aggregate, will have a material adverse effect on our results of operations, cash flows or financial position.

ITEM 4. MINE SAFETY DISCLOSURE

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Our common stock was traded on the New York Stock Exchange under the symbol "QTM." On January 15, 2019, we were delisted from the NYSE. On January 16, 2019, we started trading under the symbol "QMCO" on the OTC Pink, which is operated by OTC Markets Group Inc. As of July 19, 2019, the closing price of our common stock was $3.13 per share. The per share prices reflected in the following table represent the range of high and low sales prices of our common stock for the quarters indicated. The OTC Pink quotations reflect inter-dealer prices, without retail mark-up, mark-down, or commission, and may not represent actual transactions.

Fiscal 2019	**High**	**Low**
First quarter ended June 30, 2018	$4.04	$2.06
Second quarter ended September 30, 2018	2.58	1.63
Third quarter ended December 31, 2018	2.97	1.21
Fourth quarter ended March 31, 2019	2.65	1.40

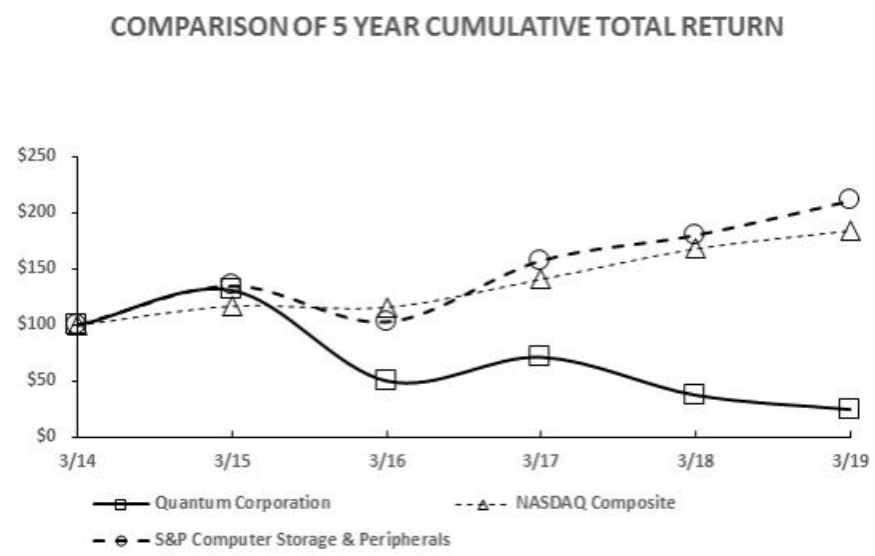
Fiscal 2018	**High**	**Low**
First quarter ended June 30, 2017	$8.97	$6.82
Second quarter ended September 30, 2017	8.60	4.96
Third quarter ended December 31, 2017	6.21	4.23
Fourth quarter ended March 31, 2018	6.40	3.62

Historically, we have not paid cash dividends on our common stock and do not intend to pay dividends in the foreseeable future. Our ability to pay dividends is restricted by the covenants in our senior secured revolving credit agreement unless we meet certain defined thresholds. See the section captioned "Liquidity and Capital Resources" in *Item 7 Management's Discussion and Analysis of Financial Condition and Results of Operations* and also Note 5: *Long-Term Debt* to the consolidated financial statements.

As of July 31, 2019, there were 358 Quantum stockholders of record, including the Depository Trust Company, which holds shares of Quantum common stock on behalf of an indeterminate number of beneficial owners. We derived the number of stockholders by reviewing the listing of outstanding common stock recorded by our transfer agent as of July 31, 2019. The information required by this item regarding equity compensation plans is provided in *Item 12 Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.*

Performance Graph

The following graph compares the total stockholder return from March 31, 2014 through March 31, 2019 of (i) our Class A common stock; (ii) the NASDAQ Composite Index; and (iii) the S&P Computer Storage & Peripherals Index, assuming an investment of $100 on March 31, 2014, including reinvestment of dividends where applicable. The results presented below are not necessarily indicative of future performance.



ITEM 6. SELECTED FINANCIAL DATA

The selected consolidated financial information below is derived from our audited consolidated financial statements for the three-year period ended March 31, 2019. As described below, the selected financial data as of and for the years ended March 31, 2016 and 2015 are unaudited, have been derived from our unaudited consolidated financial statements, which were prepared on the same basis as our audited consolidated financial statements, and reflect the impact of adjustments to, or restatement of, our previously furnished or filed financial information, including an April 1, 2014 cumulative effect adjustment to stockholders' deficit for the impact of accounting errors that affected periods prior to April 1, 2014. The selected financial data set forth below is not necessarily indicative of results of future operations, and should be read in conjunction with Item 7 *Management's Discussion and Analysis of Financial Condition and Results of Operations* and the consolidated financial statements and related Notes thereto included in this Annual Report on Form 10-K under the caption *Item 8 Financial Statements and Supplementary Data*. As indicated, the information presented in the following tables for the years ended March 31, 2017, 2016, and 2015 has been adjusted to reflect the restatement of our financial results, which is more fully described in the "Explanatory Note" immediately preceding Part I, Item 1 and in *Note 2: Restatement* to consolidated financial statements of this Annual Report on Form 10-K (and, with respect to 2016 and 2015, in this Item 6). The selected consolidated financial data in this section is not intended to replace the consolidated financial statements.

(In thousands, except per share data)	For the years ended March 31, 2019	2018	2017 (As Restated)(1)	2016 (As Restated) (Unaudited)(2)	2015 (As Restated) (Unaudited)(3)
Statement of Operations Data:					
Total revenue	$ 402,680	$ 437,684	$ 493,054	$ 479,843	$ 543,742
Total cost of revenue	235,066	264,900	287,782	276,524	300,412
Gross profit	167,614	172,784	205,272	203,319	243,330
Income (loss) from operations	(4,746)	(28,622)	6,681	(67,040)	12,578
Net income (loss)	$ (42,797)	$ (43,346)	$ (2,408)	$ (75,626)	$ 15,404
Basic net income (loss) per share	$ (1.20)	$ (1.25)	$ (0.07)	$ (2.30)	$ 0.48
Diluted net income (loss) per share	$ (1.20)	$ (1.25)	$ (0.07)	$ (2.30)	$ 0.47

	As of March 31, 2019	2018	2017 (As Restated)(1)	2016 (As Restated) (Unaudited)(2)	2015 (As Restated) (Unaudited)(3)
Balance Sheet Data:					
Total assets	$ 172,871	$ 202,639	$ 221,242	$ 230,812	$ 359,130
Short-term debt	1,650	7,500	62,827	3,000	83,345
Long-term debt	$ 145,621	$ 115,986	$ 66,676	$ 131,961	$ 68,793

(1) For further details regarding the restatement, see Note 2: Restatement in the Notes to our consolidated financial statements included in this Annual Report on Form 10-K under the caption Item 8: Financial Statements and Supplementary Data.

(2) We restated our financial results for the year ended March 31, 2016. The adjustments identified include:

1. Increases to total revenue and cost of revenue associated with prematurely recognizing product revenue sold to certain distributors, resellers and end-user customers of $2.2 million and $3.9 million, respectively. Impact to pre-tax earnings was a $0.9 million reduction for the year-ended March 31, 2016.

2. Increase in total assets of $1.3 million primarily driven by the correction of an accounting error of reflecting employee contributions within restricted cash and the associated obligation to fund disability claims as incurred for its employee funded disability plan.

(3) We restated our financial results for the year ended March 31, 2015. The adjustments identified include:

1. Change relates primarily to decreases to total revenue and cost of revenue associated with prematurely recognizing product revenue sold to certain distributors, resellers and end-user customers of $10.1 million and $8.0 million, respectively. Impact to pre-tax earnings was a $1.4 million reduction for the year-ended March 31, 2016.

2. Increase in total assets of $0.4 million primarily associated with investigation related revenue misstatements as noted in Note 2: Restatement under the caption Item 8 Financial Statements and Supplementary Data and change in method of accounting for capitalized third party contracts.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The statements in Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") regarding industry outlook, our expectations regarding the performance of our business and the other non-historical statements are forward-looking statements. These forward-looking statements are subject to numerous risks and uncertainties, including, but not limited to, the risks and uncertainties described in Item 1A Risk Factors. The following MD&A provides information that we believe to be relevant to an understanding of our consolidated financial condition and results of operations. Our actual results may differ materially from those contained in or implied by any forward-looking statements. You should read the following MD&A together with the sections entitled "Forward-Looking and Cautionary Statements" Item 1A Risk Factors, Item 6 Selected Financial Data and our consolidated financial statements and related notes included in this Annual Report under the caption Item 8 Financial Statements and Supplementary Data.

OVERVIEW

Quantum is a leader in storing and managing video and video-like data. We deliver top streaming performance for video and rich media applications, along with low cost, high density massive-scale data protection and archive systems. We help customers capture, create and share digital data and preserve and protect it for decades. We work closely with a broad network of distributors, VARs, DMRs, OEMs and other suppliers to meet customers' evolving needs.

BUSINESS

We earn our revenue from the sale of products and services through our channel partners and our sales force. Our products are sold under both the Quantum brand name and the names of various OEM customers.

Our high-performance shared storage systems are powered by our StorNext software that provides high-performance and availability to enable movie and TV production, analysis of patient records, analysis of video and image data for government and military applications, and more. Our tape storage provide low cost, long-term data storage for archiving and retention, as well as offline storage to protect against ransomware. Our DXi backup systems provide high-performance, scalable storage for backup and multi-site disaster recovery.

We offer a broad range of services including maintenance, implementation and training. We recently introduced a new line of Distributed Cloud Services designed to provide the benefits of our products and technology with a cloud-like user experience, either via fully managed Operational Services, or via Storage-as-a-Service, or STaaS offerings.

We are also a member of the consortium that develops, patents, and licenses LTO® tape technology to media manufacturing companies. We receive royalty payments for LTO media technology sold under licensing agreements.

RESULTS

We had total revenue of $402.7 million in fiscal 2019, a $35.0 million or 8% decrease from fiscal 2018, primarily due to decreased product and royalty revenue. This was partially offset by a slight increase in our service revenue. Our fiscal 2019 gross profit decreased by $5.2 million, or less than normally expected given the magnitude of the revenue decline. The decrease in gross profit was not as large relative to the total revenue decline primarily due to the year-over-year improvement in the gross margin by 2% in fiscal 2019. Despite a decrease in the high margin royalty revenue in fiscal 2019, the year-over-year increase in gross margin from 40% in fiscal 2018 to 42% in fiscal 2019 was primarily due to higher gross margin for both product and service revenue.

Our operating expenses of $172.4 million decreased $29.0 million in fiscal 2019, or 14% from the prior year. The decrease was primarily due to decreases in on-going operating expenses of $43.4 million and restructuring charges of $2.9 million offset by increases in professional fees associated with the financial restatement activities and related civil ligation defense costs of $21.0 million.

The net loss for fiscal 2019 was impacted by interest expenses of $21.1 million or an increase of $9.4 million over the fiscal 2018 and a loss on debt extinguishment of $17.5 million or an increase of $10.5 million from the prior year.

We had a $42.8 million net loss in fiscal 2019 compared to $43.3 million net loss in fiscal 2018. The Adjusted EBITDA, as defined below, increased $37.0 million to $32.5 million in fiscal 2019 from negative $4.5 million in fiscal 2018.

RESTATEMENT

The accompanying Management's Discussion and Analysis of Financial Condition and Results of Operations gives effect to the restatement adjustments made to the previously reported consolidated financial statements for the fiscal year ended March 31, 2017. For additional information and a detailed discussion of the restatement, see Note 2: *Restatement* to the Notes to our consolidated financial statements included in this Annual Report under the caption *Item 8 Financial Statements and Supplementary Data.* Restatement adjustments have also been made to the previously reported consolidated financial statements for the quarterly period ended June 30, 2017 and the quarterly and year to date period ended September 30, 2017. For additional information related to the quarterly restatement, see Note 13: *Quarterly Financial Information (Unaudited)* to the Notes to our consolidated financial statements included in this Annual Report on Form 10-K under the caption *Item 8 Financial Statements and Supplementary Data.*

NON-U.S. GAAP FINANCIAL MEASURES

To provide investors with additional information regarding our financial results, we have presented Adjusted EBITDA and Adjusted Net Income (Loss), non-U.S. GAAP financial measures defined below.

Adjusted EBITDA is a non-U.S. GAAP financial measure defined by us as net loss before interest expense, net, provision for income taxes, depreciation and amortization expense, stock-based compensation expense, restructuring charges, loss on extinguishment of debt, cost related to the financial restatement and related activities described in the Explanatory Paragraph and Note 2: *Restatement* to our consolidated financial statements and other non-recurring expenses.

Adjusted Net Income (Loss) is a non-U.S. GAAP financial measure defined by us as net loss before, restructuring charges, loss on extinguishment of debt, cost related to the financial restatement and related activities described in the Explanatory Paragraph and Note 2: *Restatement* to our consolidated financial statements and other non-recurring expenses. The Company calculates Adjusted Net Income (Loss) per Basic and Diluted share using the Company's above-referenced definition of Adjusted Net Income (Loss).

The Company considers non-recurring expenses to be expenses that have not been incurred within the prior two years and are not expected to recur within the next two years. Such expenses include certain strategic and financial restructuring expenses.

We have provided below a reconciliation of Adjusted EBITDA and Adjusted Net Income (Loss) to net loss, the most directly comparable U.S. GAAP financial measure. We have presented Adjusted EBITDA because it is a key measure used by our management and the board of directors to understand and evaluate our core operating performance and trends, to prepare and approve our annual budget and to develop short and long-term operating plans. In particular, we believe that the exclusion of the amounts eliminated in calculating Adjusted EBITDA can provide a useful measure for period-to-period comparisons of our core business performance. The Company believes Adjusted Net Income (Loss) and Adjusted Net Income (Loss) per Basic and Diluted Share serve as appropriate measures to be used in evaluating the performance of its business and help its investors better compare the Company's operating performance over multiple periods. Accordingly, we believe that Adjusted EBITDA and Adjusted Net Income (Loss) provide useful information to investors and others in understanding and evaluating our operating results in the same manner as our management and our board of directors.

Our use of Adjusted EBITDA and Adjusted Net Income (Loss) have limitations as analytical tools, and you should not consider them in isolation or as a substitute for analysis of our financial results as reported under U.S. GAAP. Some of these limitations are as follows:

- although depreciation and amortization expense are non-cash charges, the assets being depreciated and amortized may have to be replaced in the future, and Adjusted EBITDA does not reflect cash capital expenditure requirements for such replacements or for new capital expenditure requirements;
- Adjusted EBITDA does not reflect: (1) interest and tax payments that may represent a reduction in cash available to us; (2) capital expenditures, future requirements for capital expenditures or contractual commitments; (3) changes in, or cash requirements for, working capital needs; (4) the potentially dilutive impact of stock-based compensation; (5) potential future restructuring activities; (6) potential future losses on extinguishment of debt; (7) potential ongoing costs related to the financial restatement and related activities; (8) potential future strategic and financial restructuring expenses; or (9) other non-recurring expenses
- Adjusted Net Income (Loss) does not reflect: (1) potential future restructuring activities; (2) potential future losses on extinguishment of debt; (3) potential ongoing costs related to the financial restatement and related activities; or (4) potential future strategic and financial restructuring expenses; and
- other companies, including companies in our industry, may calculate Adjusted EBITDA, Adjusted Net Income or similarly titled measures differently, which reduces its usefulness as a comparative measure.

Because of these and other limitations, you should consider Adjusted EBITDA and Adjusted Net Income (Loss) along with other U.S. GAAP-based financial performance measures, including various cash flow metrics, net loss and net loss per share. The following is a reconciliation of Adjusted EBITDA and Adjusted Net Income (Loss) to net loss, the most directly comparable financial measure calculated in accordance with U.S. GAAP, for each of the periods indicated:

RECONCILIATION OF NON-GAAP TO US GAAP

(in thousands, except per share amounts)	For the years ended March 31, 2019	2018	2017 (As Restated)
U.S. GAAP Net loss	$(42,797)	$(43,346)	$ (2,408)
Interest expense, net	21,095	11,670	7,993
Income tax (benefit) expense	2,376	(3,113)	1,656
Depreciation and amortization expense	4,266	4,970	5,635
Stock based compensation expense	3,409	5,394	6,698
Restructuring charges	5,570	8,474	2,095
Loss on extinguishment of debt	17,458	6,934	41
Cost related to financial restatement and related activities	19,664	1,709	—
Non-recurring other	1,500	2,848	—
Adjusted EBITDA	$ 32,541	$ (4,460)	$ 21,710

	For the years ended March 31, 2019	2018	2017 (As Restated)
U.S. GAAP Net loss	$(42,797)	$(43,346)	$ (2,408)
Restructuring charges	5,570	8,474	2,095
Loss on extinguishment of debt	17,458	6,934	41
Cost related to financial restatement and related activities	19,664	1,709	—
Non-recurring other	1,500	2,848	—
Adjusted net income (loss)	$ 1,395	$(23,381)	$ (272)
Adjusted net income (loss) per share:			
Basic	0.04	(0.67)	(0.01)
Diluted	0.03	(0.67)	(0.01)
Weighted average shares outstanding:			
Basic	35,551	34,687	33,742
Diluted	40,515	34,687	33,742

RESULTS OF OPERATIONS
(dollars in thousands)

Revenue

	For the Year Ended March 31, 2019	% of revenue	2018	% of revenue	2017 (As Restated)	% of revenue	Change 2019 vs 2018		2018 vs 2017	
Revenue										
Product revenue	$ 244,654	61%	$ 268,582	61%	$ 308,318	62%	$ (23,928)	(9%)	$ (39,736)	(13%)
Service revenue	134,696	33%	136,523	31%	145,938	30%	(1,827)	(1%)	(9,415)	(6%)
Royalty revenue	23,330	6%	32,579	8%	38,798	8%	(9,249)	(28%)	(6,219)	(16%)
Total revenue	$ 402,680		$ 437,684		$ 493,054		$ (35,004)	(8%)	$ (55,370)	(11%)

Fiscal 2019 compared to fiscal 2018

We had total revenue of $402.7 million in fiscal 2019, a $35.0 million or 8% decrease from fiscal 2018, primarily due to decreased product and royalty revenue.

Product revenue decreased $23.9 million, or 9% in fiscal 2019 from fiscal 2018. This year-over-year decrease was primarily due to decreases in high performance shared storage systems and devices and media. Service revenue decreased $1.8 million, or 1% in fiscal 2019 compared to fiscal 2018. Royalty revenue decreased $9.2 million, or 28%, in fiscal 2019 compared to fiscal 2018 due to lower overall market volume and our sales mix being weighted towards older generation LTO technology.

Fiscal 2018 compared to fiscal 2017

We had total revenue of $437.7 million in fiscal 2018, a $55.4 million or 11% decrease from fiscal 2017, driven from declines across product, service, and royalty revenue. Product revenue decreased $39.7 million, or 13% in fiscal 2018 from fiscal 2017 due to decreases in all product revenues except an increase in high-performance shared storage systems. Service revenue decreased $9.4 million, or 6% in fiscal 2018 compared to fiscal 2017 primarily due to decreases in service revenue for our tape storage and disk backup storage systems. Royalty revenue decreased $6.2 million, or 16%, in fiscal 2018 compared to fiscal 2017 due to lower overall market volume and our sales mix being weighted towards older generation LTO technology.

Product revenue

	For the Years Ended March 31,						Change			
	2019	% of revenue	2018	% of revenue	2017 (As Restated)	% of revenue	2019 vs 2018		2018 vs 2017	
Revenue										
Primary storage systems	$ 64,797	16%	$ 80,064	18%	$ 71,323	14%	$(15,267)	(19%)	$ 8,741	12%
Secondary storage systems	120,542	30%	119,314	27%	151,245	31%	1,228	1%	(31,931)	(21%)
Device and media	59,315	15%	69,204	16%	85,750	17%	(9,889)	(14%)	(16,546)	(19%)
Total product revenue	$244,654	61%	$268,582	61%	$ 308,318	63%	$(23,928)	(9%)	$(39,736)	(13%)

Fiscal 2019 compared to fiscal 2018

Product revenue decreased $23.9 million, or 9% in fiscal 2019 from fiscal 2018. This year-over-year decrease was primarily due to decreases in primary storage systems of $15.3 million or 19% and devices and media of $9.9 million or 14%. The year-over-year decrease in primary storage systems was primarily due to shifting away from lower margin resell products towards more profitable products. The year over year decrease in devices and media was primarily due to lower media revenues driven by lower market volume and our sales mix being weighted towards older generation LTO technology. These media market conditions were primarily due to supply constraints as a result of legal disputes between the two principal suppliers of LTO tape.

Fiscal 2018 compared to fiscal 2017

Product revenue decreased $39.7 million, or 13% in fiscal 2018 from fiscal 2017. Revenue from secondary storage systems decreased $31.9 million or 21%, primarily driven by declines in our OEM tape business and domestic market sales. Revenue from devices and media declined $16.5 million, or 19% primarily due to overall device volume declines resulting from pressure from cloud technologies at the low end of the backup market and lower overall media market volume and our sale mix being weighted towards older generation LTO technology. Partially offsetting these declines was an increase in revenue of $8.7 million, or 12% from primary storage systems.

Service revenue

We offer a broad range of services including maintenance, implementation and training. Service revenue is primarily comprised of customer field support contracts which provide standard support services for our hardware. Standard service contracts may be extended or include enhanced service, such as faster service response times.

Fiscal 2019 compared to fiscal 2018

Service revenue slightly decreased $1.8 million, or 1% in fiscal 2019 compared to fiscal 2018 due to decreased service revenue for our secondary storage systems.

Fiscal 2018 compared to fiscal 2017

Service revenue decreased $9.4 million, or 6% in fiscal 2018 compared to fiscal 2017 due to decreased service revenue for our secondary storage systems.

Royalty Revenue

Fiscal 2019 compared to fiscal 2018

Royalty revenue decreased $9.2 million, or 28% in fiscal 2019 compared to fiscal 2018 due to lower overall market volume and our sales mix being weighted towards older generation LTO technology. During fiscal 2019 supply constraints on the latest generation LTO technology, which carries a higher royalty rate, impacted overall royalty revenue. The supply constraints resulted from legal disputes between the two principal suppliers of LTO tape as described under the “Risks Related to our Business Operations” Section of *Item 1A Risk Factors.* Those disputes were recently resolved.

Fiscal 2018 compared to fiscal 2017

Royalty revenue decreased $6.2 million, or 16% in fiscal 2018 compared to fiscal 2017 due to lower overall market volume and our sales mix being weighted towards older generation LTO technology, which carry a lower royalty rate.

Gross profit

	For the Years Ended March 31,						Change			
							2019 vs 2018		2018 vs 2017	
(dollars in thousands)	2019	Margin	2018	Margin	2017 (As Restated)	Margin	Profit	Basis points	Profit	Basis points
Gross profit										
Product profit	$ 64,808	26%	$ 62,471	23%	$ 81,658	26%	$ 2,337	324	$(19,187)	(319)
Service profit	79,476	59%	77,734	57%	84,816	58%	1,742	206	(7,082)	(118)
Royalty profit	23,330	100%	32,579	100%	38,798	100%	(9,249)	—	(6,219)	—
Total gross profit	$167,614	42%	$172,784	39%	$ 205,272	42%	$(5,170)	214	$(32,488)	(215)

Fiscal 2019 compared to fiscal 2018

Despite a decrease in the high margin royalty revenue in fiscal 2019, the year over year increase in gross margin from 39% in fiscal 2018 to 42% in fiscal 2019 was driven by higher gross margin for both product and service revenue.

Fiscal 2018 compared to fiscal 2017

The year over year decrease in gross margin from 42% in fiscal 2017 to 39% in fiscal 2018 was primarily due to lower product and service gross margins.

Product margin

Fiscal 2019 compared to fiscal 2018

Product gross margin increased from 23% in fiscal 2018 compared to 26% in fiscal 2019. By product, the gross margin increased for back-up storage systems, high-performance shared storage systems, devices and media.

Fiscal 2018 compared to fiscal 2017

Product gross margin decreased in 2018 compared to 2017 by 3%. The year over year gross margin for tape storage, high-performance shared storage systems and backup storage systems decreased by 2%, 2% and 4%, respectively. These decreases were primarily due to lower average selling prices due to competition.

Service margin

Fiscal 2019 compared to fiscal 2018

The year over year improvement in the service gross margin of 2% from 57% in fiscal 2018 to 59% in fiscal 2019 is primarily due to a decrease in the service spending of $3.6 million or 6% in fiscal 2019. This decrease in spending in fiscal 2019 was primarily due to a decrease in the related average service headcount of 19%.

Fiscal 2018 compared to fiscal 2017

The slight decrease of 1% in service gross margin in fiscal 2018 compared to 2017 is primarily due to a year over year decrease in service spending of $2.3 million or 4% offset by a decrease in service revenue of $9.4 million or 6%.

Royalty margin

Royalties do not have significant related cost of sales and therefore are considered to have a 100% gross margin. Therefore, royalty gross margin dollars vary directly with royalty revenue.

Research and development

	For the Years Ended March 31,						Change			
(dollars in thousands)	2019	% of revenue	2018	% of revenue	2017 (As Restated)	% of revenue	2019 vs 2018		2018 vs 2017	
Research and development	$32,113	8%	$38,562	9%	$ 44,379	9%	$(6,449)	(17)%	$(5,817)	(13)%

Fiscal 2019 compared to fiscal 2018

Research and development expense decreased $6.4 million or 17%. This decrease was primarily due to a $6.3 million or 17% decrease in compensation and benefits largely related to a lower average year over year research and development headcount of 21%.

Fiscal 2018 compared to fiscal 2017

Research and development expense decreased $5.8 million or 13%. This decrease was primarily due to a $4.1 million decrease in compensation and benefits largely related to a lower average year over year research and development headcount of 14%. Additionally, we had a year over year decrease of $0.8 million in project materials.

Sales and marketing

	For the Years Ended March 31,						Change			
(dollars in thousands)	2019	% of revenue	2018	% of revenue	2017 (As Restated)	% of revenue	2019 vs 2018		2018 vs 2017	
Sales and marketing	$69,400	17%	$102,242	23%	$ 100,527	20%	$(32,842)	(32)%	$1,715	2%

Fiscal 2019 compared to fiscal 2018

Sales and marketing expense decreased $32.8 million or 32%. This decrease was driven by our continuing efforts to optimize resources around strategic areas of our business. There was a decrease in compensation and benefits of $25.5 million largely related to a lower average year over year sales and marketing headcount of 36%. Marketing program spending was also reduced in fiscal 2019 by $5.7 million compared to the previous fiscal year.

Fiscal 2018 compared to fiscal 2017

Sales and marketing expense increased $1.7 million or 2%. This increase was primarily due to a net increase of $4.4 million in salary and software application expense from the reclassification of sales operations and associated information technology programs to the sales organization. This was largely offset by decreases in expense for marketing programs and sales compensation.

General and administrative

(dollars in thousands)	For the Years Ended March 31, 2019	% of revenue	2018	% of revenue	2017 (As Restated)	% of revenue	Change 2019 vs 2018		2018 vs 2017	
General and administrative	$65,277	16%	$52,128	12%	$51,590	10%	$13,149	25%	$538	1%

Fiscal 2019 compared to fiscal 2018

General and administrative expenses increased $13.1 million or 25%. This increase was primarily due to a $18.0 million increasein professional fees associated with the financial restatement activities and related civil ligation defense costs. This is partially offset by a $3.8 million decrease in compensation and benefits largely related to a lower average year over year general and administrative headcount of 17%, and a $1.1 million decrease in infrastructure costs related to facility consolidation activities.

Fiscal 2018 compared to fiscal 2017

General and administrative expenses increased by $0.5 million or 1%. This increase was primarily due to a $1.4 million increase in contingent fees. This increase was largely offset by decreases in compensation and benefits largely related to lower average general and administrative headcount of 20%.

Restructuring charges

(dollars in thousands)	For the Years Ended March 31, 2019	% of revenue	2018	% of revenue	2017 (As Restated)	% of revenue	Change 2019 vs 2018		2018 vs 2017	
Restructuring charges	$5,570	1%	$8,474	2%	$ 2,095	0%	$(2,904)	(34%)	$6,379	304%

Fiscal 2019 compared to fiscal 2018

Restructuring charges decreased by $2.9 million or 34%. This decrease was primarily due to the higher level of headcount reductions that occurred during 2018. In fiscal 2018, plans were announced to reduce the workforce which led to the elimination of 207 positions compared to 84 position eliminated in fiscal 2019.

Fiscal 2018 compared to fiscal 2017

Restructuring charges increased $6.4 million or 304%. This increase was primarily due to a $6.8 million increase in severance and benefits related to restructuring activities that occurred in fiscal 2018 offset by a change in estimate related to certain restructuring activities.

For additional information on our restructuring plans and disclosure of restructuring charges refer to Note 6*Restructuring Charges* to the consolidated financial statements. Until we achieve consistent and sustainable levels of profitability, we may incur restructuring charges in the future from additional strategic cost reduction efforts, and efforts to align our cost structure with our business model.

Interest expense, net

(dollars in thousands)	For the Years Ended March 31, 2019	% of revenue	2018	% of revenue	2017 (As Restated)	% of revenue	Change 2019 vs 2018		2018 vs 2017	
Interest expense, net	$21,095	5%	$11,670	3%	$ 7,993	2%	$9,425	81%	$3,677	46%

Fiscal 2019 compared to fiscal 2018

Interest expense increased by $9.4 million or 81%. This increase was primarily due to a higher interest rate and principal balance during fiscal 2019 on our long term debt.

For further information, refer to Note 5: *Long-Term Debt* to the consolidated financial statements.

Fiscal 2018 compared to fiscal 2017

Interest expense increased by $3.7 million or 46%. This increase was primarily due to higher interest rates on our term loan and revolving line of credit in fiscal 2018 compared to fiscal 2017.

Interest expense includes the amortization of debt issuance costs. For further information, refer to Note 5*Long-Term Debt* to the consolidated financial statements.

Loss on debt extinguishment

(dollars in thousands)	For the Years Ended March 31, 2019	% of revenue	2018	% of revenue	2017 (As Restated)	% of revenue	Change 2019 vs 2018		2018 vs 2017	
Loss on debt extinguishment	$17,458	4%	$6,934	2%	$ 41	0%	$10,524	152%	$6,893	nm

Fiscal 2019 compared to fiscal 2018

Loss on debt extinguishment increased $10.5 million or 152%. The fiscal 2019 loss on debt extinguishment included $14.9 million related to the August 2018 modification of our TCW Term Loan and $1.8 million related to the August 2018 amendment to the PNC Credit Facility and $0.8 million related to the December 2018 amendment to the PNC credit Facility. During fiscal 2018, we recorded a loss on extinguishment of $6.9 million related to the February 2018 amendment to our TCW Term Loan.

Fiscal 2018 compared to fiscal 2017

Loss on debt extinguishment was $6.9 million in fiscal 2018. The fiscal 2018 loss on debt extinguishment related to the February 2018 amendment to our TCW Term Loan which was accounted for as an extinguishment. The loss on debt extinguishment in fiscal 2017 was less than $0.1 million.

For further information, refer to Note 5: *Long-Term Debt* to the consolidated financial statements.

Other income, net

	For the Years Ended March 31,						Change			
(dollars in thousands)	2019	% of revenue	2018	% of revenue	2017 (As Restated)	% of revenue	2019 vs 2018		2018 vs 2017	
Other income, net	$(2,878)	(1%)	$(767)	0%	$ (601)	0%	$(2,111)	(275%)	$(166)	(28%)

Fiscal 2019 compared to fiscal 2018

Other income increased $2.1 million or 275%. This increase was primarily due to a gain of $2.8 million on the disposal of an investment offset by a $0.6 million reduction in foreign exchange gain as compared to fiscal 2018.

Fiscal 2018 compared to fiscal 2017

Other income increased $0.2 million or 28%. This increase was primarily due to a decrease in other expenses of $0.2 million as compared to fiscal 2017.

Income tax expense (benefit)

	For the Years Ended March 31,						Change			
(dollars in thousands)	2019	% of pre-tax income	2018	% of pre-tax income	2017 (As Restated)	% of pre-tax income	2019 vs 2018		2018 vs 2017	
Income tax expense (benefit)	$2,376	6%	$(3,113)	7%	$ 1,656	220%	$5,489	176%	$(4,769)	(288%)

Fiscal 2019 compared to fiscal 2018

Income tax expense (benefit) increased $5.5 million. The increase was primarily due to fiscal 2018 benefiting from a $2.1 million reserve release resulting from an audit settlement with the German tax authorities and a $2.9 million refundable tax credit resulting from the repeal of the Corporate Alternative Minimum Tax enacted as part of the Tax Cuts and Jobs Act of 2017.

Fiscal 2018 compared to fiscal 2017

Income tax expense (benefit) decreased $4.8 million. This decrease was primarily due to fiscal 2018 benefiting from a $2.1 million reserve release resulting from an audit settlement with the German tax authorities and a $2.9 million refundable tax credit resulting from the repeal of the Corporate Alternative Minimum Tax enacted as part of the Tax Cuts and Jobs Act of 2017.

For additional information, including a reconciliation of the effective tax rate, refer to Note 8: *Income Taxes* to the consolidated financial statements.

QUARTERLY DISCUSSION AND ANALYSIS

Selected Quarterly Financial Data

The following table sets forth selected financial data for each of the periods indicated. Amounts are computed independently each quarter; therefore, the sum of the quarterly amounts may not equal the total amount for the respective year due to rounding.

	For the Quarters Ended											
	As Restated								Percentage Increase/(Decrease)			
	June 30, 2017 (Q1)	September 30, 2017 (Q2)	December 31, 2017 (Q3)	March 31, 2018 (Q4)	June 30, 2018 (Q1)	September 30, 2018 (Q2)	December 31, 2018 (Q3)	March 31, 2019 (Q4)	Q1 2019 vs. Q1 2018	Q2 2019 vs. Q2 2018	Q3 2019 vs. Q3 2018	Q4 2019 vs. Q4 2018
Revenue												
Product revenue	$ 69,483	$ 67,596	$ 75,343	$ 56,160	$ 66,869	$ 51,622	$ 62,986	$ 63,177	(4%)	(24%)	(16%)	12%
Service revenue	35,117	34,910	34,875	31,621	33,564	33,352	34,097	33,683	(4%)	(4%)	(2%)	7%
Royalty revenue	9,995	9,280	5,776	7,528	7,079	4,938	4,896	6,417	(29%)	(47%)	(15%)	(15%)
Total revenue	114,595	111,786	115,994	95,309	107,512	89,912	101,979	103,277	(6%)	(20%)	(12%)	8%
Costs and expenses												
Product cost of revenue	50,680	51,602	58,119	45,710	45,438	41,319	45,819	47,270	(10%)	(20%)	(21%)	3%
Service cost of revenue	15,077	14,865	14,915	13,932	15,735	13,066	13,078	13,341	4%	(12%)	(12%)	(4%)
Total cost of revenue	65,757	66,467	73,034	59,642	61,173	54,385	58,897	60,611	(7%)	(18%)	(19%)	2%
Gross profit	48,838	45,319	42,960	35,667	46,339	35,527	43,082	42,666	(5%)	(22%)	0%	20%
Operating expense												
Research and development	10,605	10,190	9,162	8,605	8,261	7,862	7,907	8,083	(22%)	(23%)	(14%)	(6%)
Sales and marketing	27,078	25,824	26,711	22,629	19,125	16,682	16,990	16,603	(29%)	(35%)	(36%)	(27%)
General and administrative	12,424	11,506	12,416	15,782	19,391	14,072	13,481	18,333	56%	22%	9%	16%
Restructuring charges	1,631	70	4,239	2,534	3,907	294	1,227	142	140%	320%	(71%)	(94%)
Total operating expenses	51,738	47,590	52,528	49,550	50,684	38,910	39,605	43,161	(2%)	(18%)	(25%)	(13%)
Gain (loss) from operations	(2,900)	(2,271)	(9,568)	(13,883)	(4,345)	(3,383)	3,477	(495)	50%	49%	(136%)	(96%)
Other expenses and losses, net:												
Interest expense, net	2,579	2,638	2,968	3,485	3,935	4,636	6,238	6,286	53%	76%	110%	80%
Loss on debt extinguishment	—	39	—	6,895	—	12,425	5,033	—	0%	31759%	—	(100%)
Other expenses (income)	(98)	(77)	(210)	(382)	(220)	196	(3,846)	992	124%	(355%)	1731%	(360%)
Net loss before income taxes	(5,381)	(4,871)	(12,326)	(23,881)	(8,060)	(20,640)	(3,948)	(7,773)	50%	324%	(68%)	(67%)
Income tax expense (benefit)	(1,262)	228	(2,127)	48	(575)	977	337	1,637	(54%)	329%	(116%)	3310%
Net loss	$ (4,119)	$ (5,099)	$ (10,199)	$(23,929)	$ (7,485)	$ (21,617)	$ (4,285)	$ (9,410)	82%	324%	(58%)	(61%)

For further details regarding the restatement see Note 2: *Restatement* and Note 13**:** *Quarterly Financial Information (Unaudited)* to the Notes to our consolidated financial statements included in this Annual Report on Form 10-K under the caption Item 8: *Financial Statements and Supplementary Data.*

Revenue

Quarter ended June 30, 2018 compared to the quarter ended June 30, 2017

We had total revenue of $107.5 million in fiscal Q1 2019, a $7.1 million or 6% decrease from fiscal Q1 2018, this was due to decreased revenues across product, service, and royalties.

Product revenue decreased $2.6 million, or 4% in fiscal Q1 2019 compared to fiscal Q1 2018. This year over year decrease was primarily due to decreases in high performance shared storage systems and tape storage. Service revenue decreased $1.6 million, or 4% in fiscal Q1 2019 compared to fiscal Q1 2018 due to decreased service contract revenue from our tape storage. Royalty revenue decreased $2.9 million, or 29%, in fiscal Q1 2019 compared to fiscal Q1 2018 due to lower overall market volume and mix weighted towards older generation LTO technology.

Quarter ended September 30, 2018 compared to the quarter ended September 30, 2017

We had total revenue of $89.9 million in fiscal Q2 2019, a $21.9 million or 20% decrease compared to fiscal Q2 2018, this was due to decreased revenues across product, service, and royalties.

Product revenue decreased $16.0 million, or 24% in fiscal Q1 2019 compared to fiscal Q1 2018. This year over year decrease was primarily due to decreases in revenue from tape storage and devices and media. Service revenue decreased $1.6 million, or 4% in fiscal Q2 2019 compared to fiscal Q2 2018 due to decreased service contract revenue from our tape storage. Royalty revenue decreased $4.3 million, or 47%, in fiscal Q2 2019 compared to fiscal Q2 2018 due to lower overall market volume and mix weighted towards older generation LTO technology.

Quarter ended December 31, 2018 compared to the quarter ended December 31, 2017

We had total revenue of $102.0 million in fiscal Q3 2019, a $14.0 million or 12% decrease compared to fiscal Q3 2018, this was due to decreased revenues across product, service, and royalties.

Product revenue decreased $12.4 million, or 16% in fiscal Q3 2019 compared to fiscal Q3 2018. This year over year decrease was primarily due to decreases in high performance shared storage systems and devices and media. Service revenue decreased $0.8 million, or 2% in fiscal Q3 2019 compared to fiscal Q3 2018 due to decreased service contract revenue from our tape storage. Royalty revenue decreased $0.9 million, or 15%, in fiscal Q3 2019 compared to fiscal Q3 2018 due to lower overall market volume and mix weighted towards older generation LTO technology.

Quarter ended March 31, 2019 compared to the quarter ended March 31, 2018

We had total revenue of $103.3 million in fiscal Q4 2019, a $8.0 million or 8% increase compared to fiscal Q4 2018, primarily due to increases in product and service revenue. This was partially offset by a decrease in royalty revenue.

Product revenue increased $7.0 million, or 12% in fiscal Q4 2019 compared to fiscal Q4 2018. This year over year increase was primarily due to an increase in tape storage. Service revenue increased $2.1 million, or 7% in fiscal Q4 2019 compared to fiscal Q4 2018 due to increased service contract revenue from our Xcellis Workflow Storage product lines. Royalty revenue decreased $1.1 million, or 15%, in fiscal Q4 2019 compared to fiscal Q4 2018 due to lower overall market volume and mix weighted towards older generation LTO technology.

Gross margin

Quarter ended June 30, 2018 compared to the quarter ended June 30, 2017

Year over year gross margin remained relatively flat at 43% in fiscal Q1 2018 and fiscal Q1 2019.

Product gross margin increased from 27% in fiscal Q1 2018 to 32% in fiscal Q1 2019. By product, the gross margin decreased for back up storage systems which was more than offset by improvements in gross margin for high-performance shared storage systems, tape storage, devices and media.

Year over year service gross margin decreased from 57% in fiscal Q1 2018 to 53% in fiscal Q1 2019. This is primarily due to an increase in the service spending of $0.7 million or 4% in fiscal Q1 2019 combined with an decrease in service revenues of $1.6 million or 4%.

Royalties do not have significant related cost of sales and therefore are considered to have a 100% gross margin. Therefore, royalty gross margin dollars vary directly with royalty revenue.

Quarter ended September 30, 2018 compared to the quarter ended September 30, 2017

The year over year decrease in gross margin from 41% in fiscal Q2 2018 to 40% in fiscal Q2 2019 was primarily due to lower product gross margins.

Product gross profit decreased from 24% in fiscal Q2 2018 to 20% in fiscal Q2 2019. By product, the gross profit decreased for tape storage and devices and media, which was partially offset by improvements in gross profit for high-performance shared storage systems and back up storage systems.

The year over year improvement in the service gross profit of four points from 57% in fiscal Q2 2018 to 61% in fiscal Q2 2019 is primarily due to a decrease in the service spending of $1.8 million or 12% in fiscal Q2 2019 combined with an decrease in service revenues of $1.4 million or 4%. This decrease in spending in fiscal Q2 2019 was primarily due to a decrease in the related average service headcount of 23%.

Royalties do not have significant related cost of sales and therefore are considered to have a 100% gross profit. Therefore, royalty gross profit dollars vary directly with royalty revenue.

Quarter ended December 31, 2018 compared to the quarter ended December 31, 2017

The year over year increase in gross profit from 37% in fiscal Q3 2018 to 42% in fiscal Q3 2019 was primarily due to higher product and service gross margins.

Product gross profit increased by four points in fiscal Q3 2019 compared to fiscal Q3 2018. By product, the gross margin decreased for tape storage which was more than offset by improvements in gross margin for high-performance shared storage systems, back up storage systems, devices and media.

The year over year improvement in the service gross profit of five points from 57% in fiscal Q3 2018 to 62% in fiscal Q3 2019 is primarily due to a decrease in the service spending of $1.8 million or 12% in fiscal Q3 2019 combined with an decrease in service revenues of $0.4 million or 2%. This decrease in spending in fiscal Q3 2019 was primarily due to a decrease in the related average service headcount of 21%.

Royalties do not have significant related cost of sales and therefore are considered to have a 100% gross profit. Therefore, royalty gross margin dollars vary directly with royalty revenue.

Quarter ended March 31, 2019 compared to the quarter ended March 31, 2018

The year over year increase in gross profit from 37% in fiscal Q4 2018 to 41% in fiscal Q4 2019 was primarily due to higher product and service gross profits.

Product gross margin increased six points in fiscal Q4 2019 compared to fiscal Q4 2018. By product, the gross profit decreased for tape storage, back up storage systems, devices and media, which was more than offset by improvements in gross margin for high-performance shared storage systems.

The year over year improvement in the service gross profit of four points from 56% in fiscal Q4 2018 to 60% in fiscal Q4 2019 is primarily due to a decrease in the service spending of $0.6 million or 4% in fiscal Q4 2019 combined with an increase in service revenues of $2.1 million or 7%. This decrease in spending in fiscal 2019 was primarily due to a decrease in the related average service headcount of 8%.

Royalties do not have significant related cost of sales and therefore are considered to have a 100% gross margin. Therefore, royalty gross profit dollars vary directly with royalty revenue.

Research and development

Quarter ended June 30, 2018 compared to the quarter ended June 30, 2017

Research and development expense decreased $2.3 million or 22% in fiscal Q1 2019 compared to fiscal Q1 2018. This decrease was primarily due to a $2.0 million decrease or 24% in compensation and benefits largely related to a lower average year over year research and development headcount of 26%.

Quarter ended September 30, 2018 compared to the quarter ended September 30, 2017

Research and development expense decreased $2.3 million or 23% in fiscal Q2 2019 compared to fiscal Q2 2018. This decrease was primarily due to a $2.1 million or 26% decrease in compensation and benefits largely related to a lower average year over year research and development headcount of 26%.

Quarter ended December 31, 2018 compared to the quarter ended December 31, 2017

Research and development expense decreased $1.3 million or 14% in fiscal Q3 2019 compared to fiscal Q3 2018. This decrease was primarily due to a $1.1 million or 15% decrease in compensation and benefits largely related to a lower average year over year research and development headcount of 22%.

Quarter ended March 31, 2019 compared to the quarter ended March 31, 2018

Research and development expense decreased $0.5 million or 6% in fiscal Q4 2019 compared to fiscal Q4 2018. This decrease was primarily due to a $1.1 million or 15% decrease in compensation and benefits largely related to a lower average year over year research and development headcount of 5%.

Sales and marketing

Quarter ended June 30, 2018 compared to the quarter ended June 30, 2017

Sales and marketing expense decreased $8.0 million or 29% in fiscal Q1 2019 compared to fiscal Q1 2018. This decrease was driven by our continuing efforts to optimize resources around strategic areas of our business. There was a decrease in compensation and benefits of $5.3 million in fiscal 2019 compared to fiscal 2018 largely related to a lower average year over year sales and marketing headcount of 32%. Marketing program spending was also reduced in fiscal 2019 by $1.6 million compared to the previous fiscal year.

Quarter ended September 30, 2018 compared to the quarter ended September 30, 2017

Sales and marketing expense decreased $9.1 million or 35% in fiscal Q2 2019 compared to fiscal Q2 2018. This decrease was driven by our continuing efforts to optimize resources around strategic areas of our business. There was a decrease in compensation and benefits of $5.6 million in fiscal 2019 compared to fiscal 2018 largely related to a lower average year over year sales and marketing headcount of 41%. Marketing program spending was also reduced in fiscal 2019 by $1.8 million compared to the previous fiscal year.

Quarter ended December 31, 2018 compared to the quarter ended December 31, 2017

Sales and marketing expense decreased $9.7 million or 36% in fiscal Q3 2019 compared to fiscal Q3 2018. This decrease was driven by our continuing efforts to optimize resources around strategic areas of our business. There was a decrease in compensation and benefits of $6.6 million in fiscal 2019 compared to fiscal 2018 largely related to a lower average year over year sales and marketing headcount of 43%. Marketing program spending was also reduced in fiscal 2019 by $1.7 million compared to the previous fiscal year.

Quarter ended March 31, 2019 compared to the quarter ended March 31, 2018

Sales and marketing expense decreased $6.0 million or 27% in fiscal Q4 2019 compared to fiscal Q4 2018. This decrease was driven by our continuing efforts to optimize resources around strategic areas of our business. There was a decrease in compensation and benefits of $5.0 million in fiscal 2019 compared to fiscal 2018 largely related to a lower average year over year sales and marketing headcount of 27%. Marketing program spending was also reduced in fiscal 2019 by $0.6 million compared to the previous fiscal year.

General and administrative

Quarter ended June 30, 2018 compared to the quarter ended June 30, 2017

General and administrative expense increased $7.0 million or 56% in fiscal Q1 2019 compared to fiscal Q1 2018. This increase was primarily due to a $5.8 million increase in professional fees associated with the financial restatement activities and related civil ligation defense costs, and an additional $1.0 million in outside service related to the business transition. This is partially offset by a $0.9 million decrease in compensation and benefits largely related to a lower year over year general and administrative average headcount of 15%.

Quarter ended September 30, 2018 compared to the quarter ended September 30, 2017

General and administrative expense increased $2.6 million or 22% in fiscal Q2 2019 compared to fiscal Q2 2018. This increase was primarily due to a $3.3 million increase in professional fees associated with the financial restatement activities and related civil ligation defense costs. This is partially offset by a $1.2 million decrease in compensation and benefits largely related to a lower year over year general and administrative average headcount of 17%.

Quarter ended December 31, 2018 compared to the quarter ended December 31, 2017

General and administrative expense increased $1.1 million or 9% in fiscal Q3 2019 compared to fiscal Q3 2018. This increase was primarily due to a $4.6 million increase in professional fees associated with the financial restatement activities and related civil ligation defense costs. This is partially offset by a $0.7 million decrease in compensation and benefits largely related to a lower year over year general and administrative average headcount of 20%, a $0.5 million decrease in infrastructure costs related to facility consolidation activities, and a $0.9 million decrease in other expenses related to the business transition.

Quarter ended March 31, 2019 compared to the quarter ended March 31, 2018

General and administrative expense increased $2.6 million or 16% in fiscal Q4 2019 compared to fiscal Q4 2018. This increase was primarily due to a $7.2 million increase in professional fees associated with the financial restatement activities and related civil ligation defense costs. This is partially offset by a $1.0 million decrease in compensation and benefits largely related to a lower year over year general and administrative average headcount of 17%.

Restructuring charges

In the first quarter of fiscal 2019, restructuring charges increased by $2.3 million as compared to the first quarter of fiscal 2018 due to a $1.8 million increase in severance and benefits and a $0.5 million increase in facilities restructuring. In the second quarter of fiscal 2019, restructuring charges increased by $0.2 million as compared to the second quarter of fiscal 2018 due to a $0.2 million increase in severance and benefits. In the third quarter of fiscal 2019, restructuring charges decreased by $3.0 million as compared to the third quarter of fiscal 2018 due to a $3.2 million decrease in severance and benefits. In the fourth quarter of fiscal 2019, restructuring charges decreased by $2.4 million as compared to the fourth quarter of fiscal 2018 due to a $2.4 million decrease in severance and benefits

For additional information on our restructuring plans and disclosure of restructuring charges refer to Note 6:*Restructuring Charges* to the Consolidated Financial Statements. Until we achieve consistent and sustainable levels of profitability, we may incur restructuring charges in the future from additional strategic cost reduction efforts, and efforts to align our cost structure with our business model.

Interest expense, net

The increased interest expense in each of the quarter in fiscal year 2019 compared to each of the quarters in fiscal year 2018 is driven by the overall increase in interest rates on our term loans and revolving line of credit. In addition, increases in our overall debt balances during the fiscal quarters ended December 31, 2018 and March 31, 2019 in relation to the comparable periods in the prior fiscal year resulted in a further increase in our interest expense.

Loss on debt extinguishment

During the fiscal year ended March 31, 2019, the Company incurred a loss on debt extinguishment of $17.5 million which includes $14.9 million related to the August 2018 amendment to the TCW Term Loan, $1.8 million related to the August 2018 amendment to the PNC Credit Facility and $0.8 million related to the December 2018 amendment to the PNC Credit Facility.

Other expenses and losses,

In the first quarter of fiscal 2019, other income increased by $0.1 million as compared to the first quarter of fiscal 2018 due to the impact of change in mark-to-market valuation of the warrants related to our long-term debt. In the second quarter of fiscal 2019, other income decreased by $0.3 million as compared to the second quarter of fiscal 2018 due to the impact of change in mark-to-market valuation of the warrants related to our long-term debt. In the third quarter of fiscal 2019, other income increased by $3.6 million as compared to the third quarter of fiscal 2018. This increase was primarily due to a gain of $2.8 million on the disposal of an investment and an increase of $1.1 million resulting from the change in mark-to-market valuation on the warrants related to our long-term debt. In the fourth quarter of fiscal 2019, other income decreased by $1.4 million as compared to the fourth quarter of fiscal 2018. This decrease was primarily due to a decrease of $1.0 million resulting from the loss on the mark-to-market valuation on the warrants related to our long-term debt and a decrease of $0.4 million in foreign exchange gain.

Income tax expense (benefit)

Quarter ended June 30, 2018 compared to the quarter ended June 30, 2017

Income tax benefit was $0.6 million in the first quarter of fiscal 2019 compared with $1.3 million in the first quarter of fiscal 2018. The $0.7 million decrease in income tax benefit was primarily due to the first quarter of fiscal 2018 benefitting from a $1.5 million reserve release resulting from an audit settlement with the German tax authorities.

Quarter ended September 30, 2018 compared to the quarter ended September 30, 2017

Income tax expense was $1.0 million in the second quarter of fiscal 2019 compared with $0.2 million in the second quarter of fiscal 2018. The $0.8 million increase in tax expense was primarily due to higher foreign taxes in the second quarter of fiscal 2019 compared to the second quarter of fiscal 2018.

Quarter ended December 31, 2018 compared to the quarter ended December 31, 2017

Income tax expense was $0.3 million in the third quarter of fiscal 2019 compared with an income tax benefit of $2.1 million in the third quarter of fiscal 2018. The $2.4 million increase in income tax expense was primarily due to the third quarter of fiscal 2018 benefitting from a $2.9 million refundable tax credit resulting from the repeal of the Corporate Alternative Minimum Tax enacted as part of the Tax Cuts and Jobs Act of 2017.

Quarter ended March 31, 2019 compared to the quarter ended March 31, 2018

Income tax expense was $1.6 million in the fourth quarter of fiscal 2019 compared with an income tax expense of less than $0.1 million in the fourth quarter of fiscal 2018. The $1.6 million increase in income tax expense was primarily due to the fourth quarter of fiscal 2018 benefitting from a $0.6 million reserve release resulting from an audit settlement with the German tax authorities more than offset by higher foreign taxes in the fourth quarter of fiscal 2019 compared to the fourth quarter of fiscal 2018.

Liquidity and Capital Resources

We consider liquidity in terms of the sufficiency of internal and external cash resources to fund our operating, investing and financing activities. Our principal sources of liquidity include cash from operating activities, cash and cash equivalents on our balance sheet and amounts available under our Amended PNC Credit Facility (as defined below).

We require significant cash resources to meet our obligations to pay principal and interest on our outstanding debt, provide for our research and development activities, fund our working capital needs and make capital expenditures. Our future liquidity requirements will depend on multiple factors, including our research and development plans and capital asset needs. We may need or decide to seek additional funding through equity or debt financings but cannot guarantee that additional funds would be available on terms acceptable to us, if at all.

We had cash and cash equivalents of $10.8 million as of March 31, 2019, compared to $10.9 million as of March 31, 2018. These amounts exclude, as of the end of both fiscal years, $5.0 million in restricted cash that we are required to maintain under the Credit Agreements (as defined below).

Our outstanding long-term debt amounted to $145.6 million as of March 31, 2019, net of $17.3 million in unamortized debt issuance costs and $1.7 million in current portion of long-term debt, and $116.0 million as of March 31, 2018, net of $7.5 million current portion of long-term debt. We also have a revolving credit facility with PNC, which was undrawn and had an available amount of $18.9 million as of March 31, 2019 (subject to change based on certain financial metrics). See "—Debt Profile and Covenants" and "—Contractual Obligations" below for further information about our outstanding debt.

We are highly leveraged and subject to various debt covenants under our Credit Agreements (as defined below), including financial maintenance covenants that require progressive improvements in metrics related to our financial condition and results of operations. Our failure to comply with our debt covenants could materially and adversely affect our financial condition and ability to service our obligations. See "Risks Related to our Business Operations" section of *Item 1A Risk Factors.*

Cash Flows

The following table summarizes our consolidated cash flows for the periods indicated.

	Fiscal Years Ended March 31,			2019 vs. 2018	2018 vs. 2017
($ in thousands)	**2019**	**2018**	**2017 (Restated)**	**$ Change**	**$ Change**
Cash provided by (used in):					
Operating activities	$(16,859)	$ (5,032)	$ 8,556	$ (11,827)	$ (13,588)
Investing activities	235	(2,296)	(1,433)	2,531	(863)
Financing activities	16,210	(11,232)	(7,886)	27,442	(3,346)
Effect of exchange rate changes	62	(145)	17	207	(162)
Net decrease in cash and cash equivalents and restricted cash	$ (352)	$(18,705)	$ (746)		

Cash Provided by (Used in) Operating Activities

Net cash used in operating activities was $16.9 million in fiscal 2019, an increase of $11.8 million from $5.0 million in fiscal 2018, mainly reflecting a $25.4 million decrease in payables in fiscal 2019, compared to a $21.6 million increase in fiscal 2018, and an approximately $7.4 million increase in cash interest expense in fiscal 2019 compared to fiscal 2018, reflecting the terms of our refinanced debt. Our outstanding payables increased steadily through each quarter in 2018 due to our efforts to manage working capital, undertaken mainly to fund costs related to professional fees associated with the financial restatement activities and related civil ligation defense costs, and decreased steadily through fiscal 2019, except in the fourth quarter, reflecting a normalization of our payables cycles following our debt refinancing in late December 2018. These factors more than offset the impact of a $20.9 million improvement in loss from operations.

Net cash used in operating activities was $5.0 million in fiscal 2018, a net decrease of $13.6 million from cash provided by operating activities of $8.6 million in fiscal 2017. The change was driven mainly by a $33.9 million net decrease in income (loss) from operations (to a loss of $27.2 million in fiscal 2018 from income of $6.7 million in fiscal 2017) and partially offset by a $21.6 million decrease in payables in fiscal 2018, as discussed above, compared to $5.3 million increase in fiscal 2017. An approximately $4.3 million increase in cash interest expense also contributed to the change between periods.

Cash provided by (used in) investing activities

Net cash provided by investing activities was $0.2 million in fiscal 2019, reflecting investment income of $2.9 million related to an investment in an equity fund that was liquidated during the period, which more than offset $2.7 million in capital expenditures. Net cash used in investing activities was $2.3 million and $1.4 million in fiscal 2018 and 2017, respectively, reflecting capital expenditures in both years, partially offset in 2017 by $0.7 million in asset sales. Our capital expenditures in all fiscal years consisted primarily of tooling, engineering lab equipment, and leasehold improvements.

Cash provided by (used in) financing activities

Net cash provided by financing activities was $16.2 million in fiscal 2019. Net cash used in financing activities was $11.2 million in fiscal 2018 and $7.9 million in fiscal 2017. In all years, the results were driven by our debt refinancing activities, which are summarized under "—Debt Profile and Covenants" below and Note 5: *Long-Term Debt*, to our consolidated financial statements.

Debt Profile and Covenants

We are party to a senior secured revolving credit facility in an available principal amount equal to the lesser of (i) $45.0 million and (ii) the "borrowing base" (as defined under the Amended PNC Credit Agreement) (the "Amended PNC Credit Facility") under an Amended and Restated Revolving Credit and Security Agreement (the "Amended PNC Credit Agreement") with certain lenders and PNC Bank, National Association, as administrative agent. We entered into the Amended PNC Credit Agreement in December 2018 and borrowed approximately $4.4 million on the closing date, which was subsequently repaid. The Amended PNC Credit Facility had a borrowing base of $18.9 million as of March 31, 2019, all of which was available at that date and remains available as of the date of filing of this Annual Report on Form 10-K.

We are also party to a senior secured term loan facility in an aggregate principal amount of $165.0 million (the "Senior Secured Term Loan") under a Term Loan Credit and Security Agreement between us, certain lenders and U.S. Bank, National Association, as disbursing and collateral agent, entered into in December 2018 (the "Senior Secured Credit Agreement" and together with the Amended PNC Credit Agreement, the "Credit Agreements"). The Term Loan Credit Agreement provides for a senior secured term loan of $150.0 million, drawn on the closing date, and a senior secured delayed draw term loan of $15.0 million, drawn in January 2019. The proceeds of the Senior Secured Term Loan were used to repay our previously outstanding long-term debt and fund our working capital requirements. Outstanding amounts under both Credit Agreements mature and are due and payable on December 27, 2023.

Borrowings under the Amended PNC Credit Facility bear interest, at our option, equal to, (a) the greater of (i) the base rate, as defined in the Amended PNC Credit Facility, (ii) the daily Overnight Bank Funding Rate plus 0.5% and (iii) the daily LIBOR rate plus 1.0%, plus an applicable margin of (A) 3.00% for the period from the facility closing date until the date quarterly financial statements are delivered to PNC for the fiscal quarter ending June 30, 2019 and (B) thereafter, ranging from 2.50% to 3.50% based on our applicable Total leverage Ratio, as described below, or (b) the LIBOR rate plus an applicable margin of (A) 4.00% for the period from the facility closing date until the date quarterly financial statements are delivered to PNC for the fiscal quarter ending June 30, 2019 and (B) thereafter, ranging from 3.50% to 4.50% based on our applicable total leverage ratio, as defined in the Amended PNC Credit Facility agreement. Interest on the Amended PNC Credit Facility is payable quarterly.

Borrowings under the Senior Secured Term Loan bear interest at a rate per annum, at our option, equal to (a) the greater of (i) 3.00%, (ii) the Federal funds rate plus 0.50%, (iii) the LIBOR rate plus 1.0%, and (iv) the Prime rate as quoted by the Wall Street Journal, plus an applicable margin of 9.00% or (b) LIBOR Rate plus an applicable margin of 10.00%. Interest on the Senior Secured Term Loan is payable quarterly. Principal payments of 0.25% of the original balance of the Senior Secured Term Loan are due quarterly with the remaining principal balance due at maturity. Additionally, on an annual basis beginning with the fiscal year ending March 31, 2020, we will be required to perform a calculation of Excess Cash Flow, as defined in the Senior Secured Senior Secured Credit Agreement, which may require an additional payment of the principal in certain circumstances. The interest rate applicable to our borrowings under the Senior Secured Term Loan as of March 31, 2019 was 12.6%.

Pursuant to each Credit Agreement, we granted a lien to the respective agents under the Senior Secured Term Loan and the Amended PNC Credit Facility in all of the assets now owned or hereafter acquired by us, Quantum LTO Holdings, LLC, our wholly-owned direct subsidiary and any future domestic subsidiary that, at the respective agent's discretion, becomes a loan party under the Credit Agreements, including, without limitation: accounts, books, chattel paper, commercial tort claims, deposit accounts, equipment, fixtures, general intangibles, inventory, investment property, intellectual property and intellectual property licenses, equity interests, securities accounts, supporting obligations, money and cash equivalents, and the proceeds and products of each of the foregoing, in each case, subject to certain exceptions.

The Credit Agreements contain certain customary financial and other covenants, including requirements to prepay the loans in an amount equal to 100% of the net cash proceeds from certain assets dispositions, subject to certain reinvestment rights and other exceptions, and restrictions on the payment of dividends and certain other payments (subject to certain exceptions). Amounts outstanding under the Credit Agreements may become due and payable upon the occurrence of specified events, which among other things include (subject to certain exceptions and cure periods): failure to pay principal, interest, or any fees when due; breach of any representation or warranty, covenant, or other agreement in the Credit Agreements; the occurrence of a bankruptcy or insolvency proceeding with respect to the Company or any of its subsidiaries; any "Event of Default" with respect to other indebtedness involving an aggregate amount of $1.0 million or more; any lien created by the Credit Agreements or any related security documents ceasing to be valid and perfected; the Credit Agreements or any related security documents or guarantees ceasing to be legal, valid, and binding upon the parties thereto; or a change of control.

The Credit Agreements also require us to meet the following financial maintenance covenants, which are tested quarterly for compliance:

- A minimum Fixed Charge Coverage Ratio, defined in the Credit Agreements as the ratio of (x) Covenant EBITDA (as defined below) less unfunded capital expenditures (as defined in the Credit Agreements) for a given period to (y) consolidated fixed charges (as defined in the Credit Agreements, including interest, scheduled principal and fees paid on outstanding debt, cash income tax expense, certain restricted payments, and cash rent) for that period.

  The table below sets forth the minimum Fixed Charge Coverage Ratios that we must meet for each four consecutive fiscal quarter period ending on the indicated dates:

	Minimum Fixed Charge Coverage Ratio	
Fiscal Quarter Ending	Senior Secured Term Loan	Amended PNC Credit Facility
March 31, 2019	0.75:1.00	0.81:1.00
June 30, 2019	0.85:1.00	0.97:1.00
September 30, 2019	0.90:1.00	1.05:1.00
December 31, 2019	0.90:1.00	1.20:1.00
March 31, 2020	1.05:1.00	1.25:1.00
June 30, 2020	1.05:1.00	1.30:1.00
September 30, 2020	1.25:1.00	1.40:1.00
December 31, 2020 and each fiscal quarter ending thereafter	1.25:1.00	1:50:1.00

- A maximum Total Net Leverage Ratio, defined in the Credit Agreements as the ratio, on a consolidated basis, of (x)(1) with respect to the Senior Secured Term Loan, our outstanding debt (as defined under the Credit Agreements) as of a given date or (2) with respect to the Amended PNC Credit Facility, our average outstanding debt and issued but undrawn letters of credit under the Amended PNC Credit Facility (in each case, as determined pursuant to the Credit Agreements) during a fiscal quarter, minus (3) in each case, restricted and certain other cash and cash equivalents (as defined under the Credit Agreements) as of a given date, to (y) Covenant EBITDA for the four fiscal quarter period ending on the given date.

The table below sets forth the maximum Total Net Leverage Ratios that we must not exceed as of the indicated dates:

	Maximum Total Net Leverage Ratio	
Fiscal Quarter Ending	Senior Secured Term Loan	Amended PNC Credit Facility
March 31, 2019	6.00:1.00	5.43:1.00
June 30, 2019	5.50:1.00	4.80:1.00
September 30, 2019	5.00:1.00	4.40:1.00
December 31, 2019	4.50:1.00	3.75:1.00
March 31, 2020	4.00:1.00	3.50:1.00
June 30, 2020	3.75:1.00	3.25:1.00
September 30, 2020	3.50:1.00	2.75:1.00
December 31, 2020	3.25:1.00	2:50:1.00
March 31, 2021 and each fiscal quarter ending thereafter	3.00:1.00	2:50:1.00

- If our Total Net Leverage Ratio, on a consolidated basis, is greater than 3.25 to 1.00 as of a given date, we must maintain Covenant EBITDA of not less than the amount set forth in the table below for each four consecutive fiscal quarter period ending as of the dates indicated:

	Minimum Covenant EBITDA (in whole dollars)	
Fiscal Quarter Ending	Senior Secured Term Loan	Amended PNC Credit Facility
March 31, 2019	$ 25,000,000	27,500,000
June 30, 2019	$ 28,000,000	31,000,000
September 30, 2019	$ 30,000,000	33,000,000
December 31, 2019	$ 30,000,000	37,000,000
March 31, 2020	$ 35,000,000	38,000,000
June 30, 2020	$ 35,000,000	39,000,000
September 30, 2020	$ 40,000,000	45,000,000
December 31, 2020	$ 40,000,000	48,000,000
March 31, 2021	$ 40,000,000	48,000,000
June 30, 2021 and each fiscal quarter ending thereafter	$ 45,000,000	48,000,000

- With respect to the Amended PNC Credit Facility only, a maximum Total Leverage Ratio, defined in the Credit Agreements as the ratio, on a consolidated basis, of (x) our outstanding debt (as defined under the Credit Agreements) to (y) Covenant EBITDA for the four fiscal quarter period ending on the given date.

  The table below sets forth the maximum Total Net Leverage Ratios that we must not exceed as of the indicated dates:

	Maximum Total Leverage Ratio
Fiscal Quarter Ending	Amended PNC Credit Facility
March 31, 2019	6.00:1.00
June 30, 2019	5.30:1.00
September 30, 2019	5.00:1.00
December 31, 2019	4.50:1.00
March 31, 2020	4.25:1.00
June 30, 2020	4:00:1.00
September 30, 2020	3.50:1.00
December 31, 2020	3.50:1.00
March 31, 2021 and each fiscal quarter ending thereafter	3.50:1.00

- Maintain, as of the end of each quarterly period, minimum liquidity (as defined in the Credit Agreements, including certain unrestricted cash amounts and amounts available under the Amended PNC Credit Facility, less certain expenses) of at least $10.0 million.

As of the three-month period ended March 31, 2019, we reported the following covenant measures to our lenders:

- Fixed Charge Coverage Ratio of 1.37 to 1.00;
- Total Net Leverage Ratio of 4.07 to 1.00;
- Covenant EBITDA of $37.3 million (see "—Covenant EBITDA" below);
- Total Leverage Ratio of 4.41 to 1.00; and
- Liquidity of $31.4 million.

We believe we were in compliance with all covenants under the Credit Agreements as of the date of filing of this Annual Report on Form10-K.

Covenant EBITDA

Covenant EBITDA is identical to "EBITDA" as defined under the Credit Agreements and we are required to report it to our lenders pursuant to the covenants contained in the Credit Agreements. Covenant EBITDA is a key component of compliance metrics under certain covenants in the Credit Agreement, as described above. Consequently, we consider Covenant EBITDA to be an important measure of our financial condition. Covenant EBITDA reflects further adjustments to Adjusted EBITDA as discussed in "Non-U.S. GAAP Financial Measures" included above in Item 7. The key adjustments include adding back amortization of service inventory and a limitation on total allowable professional fees related to the financial restatement activities that will be added back to the Covenant EBITDA.

Covenant EBITDA is calculated under the Credit Agreements as our net loss determined based on U.S. GAAP for a given fiscal period, adjusted for certain items, including without limitation: taxes and tax credits, interest expense, depreciation and amortization, certain non-cash compensation and other charges, certain refinancing-related costs (up to certain aggregate limits), certain severance and facility closure costs (up to certain aggregate limits), certain transaction-related costs and purchase accounting and other adjustments with respect to acquisitions permitted under the Credit Agreements, certain expenses in connection with the professional fees associated with the financial restatement activities and related civil ligation defense costs (up to certain aggregate limits), and other items.

Commitments and Contingencies

Our contingent liabilities consist primarily of certain financial guarantees, both express and implied, related to product liability and potential infringement of intellectual property. We have little history of costs associated with such indemnification requirements and contingent liabilities associated with product liability may be mitigated by our insurance coverage. In the normal course of business to facilitate transactions of our services and products, we indemnify certain parties with respect to certain matters, such as intellectual property infringement or other claims. We also have indemnification agreements with our current and former officers and directors. It is not possible to determine the maximum potential amount under these indemnification agreements due to the limited history of our indemnification claims, and the unique facts and circumstances involved in each particular agreement. Historically, payments made by us under these agreements have not had a material impact on our operating results, financial position or cash flows.

We are also subject to ordinary course litigation and potential costs related to professional fees associated with the financial restatement activities and related civil ligation defense costs, See Note 11 *Commitments and Contingencies*, to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

Off Balance Sheet Arrangements

We entered into a registration rights agreement with the holders of the warrants issued to the lenders under the Term Loan Credit Agreement, as described under "—Contractual Obligations" below. The agreement calls for us to prepare and file a registration statement with the SEC and use commercially reasonable efforts to cause the registration statement to be declared effective as soon as practicable, but in no event later than October 31, 2019 (the "Registration Penalty Date"). If we are unable to file and cause a registration statement to be declared effective by the Registration Penalty Date, we would be required to pay each warrant holder an amount of cash equal to (i) $300,000 multiplied by (ii) such holder's pro rata share of all outstanding warrants on the day of a Registration Penalty Date and on every thirtieth day thereafter until such filing failure is cured. In the event we fail to make the delay payments in a timely manner, such outstanding payments shall bear interest at 5.0% until paid in full. We expect to meet all registration requirements and determined that such a payment was not probable at the time the agreement was entered into, nor was such a payment probable as of March 31, 2019 or as of the date of filing of this Annual Report on Form 10-K.

Except for this registration rights contingency and the indemnification commitments described under "—Commitments and Contingencies" above, we do not currently have any other off-balance sheet arrangements and do not have any holdings in variable interest entities.

Contractual Obligations

We have contractual obligations and commercial commitments, some of which are not recognized as liabilities in our financial statements. The table below summarizes our material enforceable and legally binding obligations and future commitments as of March 31, 2019.

		Fiscal Years Ending March 31,			
(dollars in thousands)	**Total**	**2020**	**2021 to 2022**	**2023 to 2024**	**After 2024**
Debt[a]	$164,588	$ 1,650	$ 3,300	$ 159,638	$ —
Interest on debt[b]	96,107	20,660	40,696	34,751	—
Operating leases[c]	19,356	4,424	7,097	4,130	3,705
Purchase obligations[d]	32,404	32,404	—	—	—
Total	$312,455	$59,138	$ 51,093	$ 198,519	$ 3,705

(a) Represents nominal principal amount of debt outstanding under the Senior Secured Term Loan as of March 31, 2019. See Note 5:*Long-Term Debt*, to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

(b) Estimated interest payment obligations have been calculated for all periods assuming an interest rate of 12.6%, which was the rate applicable to outstanding amounts under the Senior Secured Term Loan as of March 31, 2019.

(c) Operating leases include leases of certain facilities under non-cancelable lease agreements and equipment leases for various types of office equipment. Some of the leases have renewal options ranging from one to ten years and others contain escalation clauses.

(d) Includes primarily contractual commitments to purchase inventory from contract manufacturers and other suppliers.

In addition to the contractual obligations included in the table above, in connection with our entry into the Senior Secured Term Loan, we issued warrants to purchase approximately 7.1 million shares of our common stock, at an exercise price of $1.33 per share, to the lenders under the Term Loan Credit Agreement (the "Senior Secured Term Loan Warrants"). The exercise price and the number of shares underlying the Senior Secured Term Loan Warrants are subject to adjustment in the event of specified events, including dilutive issuances of common stock or common stock linked equity instruments at a price lower than the exercise price of the warrants, a subdivision, combination or reclassification of our common stock, or specified dividend payments. The Senior Secured Term Loan Warrants are exercisable until December 27, 2028. Upon exercise, the aggregate exercise price may be paid, at each warrant holder's election, in cash or on a net issuance basis, based upon the fair market value of our common stock at the time of exercise. The warrants liability is recorded at fair value in shareholders equity. See Note 5: *Long-Term Debt*, to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

Critical Accounting Policies, Estimates and Assumptions

The preparation of our consolidated financial statements in accordance with U.S. GAAP requires management to make judgments, estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes included elsewhere in this Annual Report on Form 10-K. On an ongoing basis, we evaluate estimates, which are based on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. We consider the following accounting policies to be critical to understanding our financial statements because the application of these policies requires significant judgment on the part of management, which could have a material impact on our financial statements if actual performance should differ from historical experience or if our assumptions were to change. The following accounting policies include estimates that require management's subjective or complex judgments about the effects of matters that are inherently uncertain. For information on our significant accounting policies, including the policies discussed below, see Note 3: *Summary of Significant Accounting Policies*, to our consolidated financial statements.

Revenue Recognition

Our revenue is derived from three main sources: (1) Products, (2) Professional services and (3) Royalties. Our performance obligations are satisfied at a point in time or over time as stand ready obligations. A majority of our revenue is recognized at a point in time when products are accepted, installed or delivered. Product revenue is recognized at the point in time when the customer takes control of the product, which typically occurs at the point of shipment. Professional services revenue primarily consists of installation, consulting and training and hardware and software support. Installation services are typically completed within a short period of time and revenue from these services is recognized upon completion, while revenue from support plans is recognized ratably over the contractual term of the service contract. We license certain products under royalty arrangements, pursuant to which our licensees periodically provide us with reports containing units sold to end users subject to the royalties. The reports substantiate that our performance obligation has been satisfied and we recognize royalty revenue based on the reports or when amounts can be reasonably estimated.

There are significant judgements used when applying ASC Topic 606 to contracts with customers. Most of our contracts contain multiple goods and services designed to meet each customers' unique storage needs. For contracts with multiple performance obligations, we allocate the transaction price to each performance obligation based on the relative standalone selling price of the good or service underlying each performance obligation. Where standalone selling price may not be directly observable (e.g., the performance obligation is not sold separately), we maximize the use of observable inputs by using information including reviewing discounting practices, performance obligations with similar customers and product groupings. We determined that invoice price is the best representation of what we expect to receive from the delivery of each performance obligation. This judgment is based on the fact that each storage solution is customizable to meet an individual customer's needs and every product's transaction price can vary depending on the mix of other products included in the same purchase order and there are no identifiable trends that provide a good representation of expected margin for each product.

Product revenue may be impacted by a variety of price adjustments or other factors, including rebates, returns and stock rotation. We use the expected value method to estimate the net consideration expected to be returned to the customer. We use historical data and current trends to drive our estimates. We record a reduction to revenue to account for these items that may result in variable consideration. We initially measure a returned asset at the carrying amount of the inventory, less any expected costs to recover the goods including potential decreases in value of the returned goods.

Income Taxes

Deferred tax assets and liabilities are recognized based on temporary differences between the financial reporting and tax bases of assets and liabilities, measured at the enacted tax rates expected to apply to taxable income in the years in which those tax assets or liabilities are expected to be realized or settled. Based on the evaluation of available evidence, both positive and negative, we recognize future tax benefits, such as net operating loss carryforwards and tax credit carryforwards, to the extent that realizing these benefits is considered to be more likely than not.

A valuation allowance is provided if we believe it is more likely than not that all or some portion of the deferred tax asset will not be realized. An increase or decrease in the valuation allowance, if any, that results from a change in circumstances, and which causes a change in our judgment about the realizability of the related deferred tax asset, is included in the tax provision.

We recognize the financial statement effects of an uncertain income tax position when it is more likely than not, based on technical merits, that the position will be sustained upon examination. We reevaluate these uncertain tax positions on a quarterly basis. This evaluation is based on factors including, but not limited to, changes in facts or circumstances and changes in tax law. We recognize penalties and tax-related interest expense as a component of income tax expense in our consolidated statements of operations. See Note 8: *Income Taxes*, to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

Inventories

Manufacturing Inventories

Our manufacturing inventory is recorded at the lower of cost or net realizable value, with cost being determined on a first-in, first-out ("FIFO") basis. Costs include material, direct labor, and an allocation of overhead in the case of work in process. Adjustments to reduce the cost of manufacturing inventory to its net realizable value, if required, are made for estimated excess, obsolete or impaired balances. Factors influencing these adjustments include declines in demand, rapid technological changes, product life cycle and development plans, component cost trends, product pricing, physical deterioration and quality issues. Revisions to these adjustments would be required if these factors differ from our estimates.

Service Parts Inventories

Our service parts inventories are recorded at the lower of cost or net realizable value, with cost being determined on a FIFO basis. Service parts inventories consist of both component parts, which are primarily used to repair defective units, and finished units, which are provided for customer use permanently or on a temporary basis while the defective unit is being repaired. We record adjustments to reduce the carrying value of service parts inventory to its net realizable value, and dispose of parts with no use and a net realizable value of zero. Factors influencing these adjustments include product life cycles, end of service life plans and the volume of enhanced or extended warranty service contracts. Estimates of net realizable value involve significant estimates and judgments about the future, and revisions would be required if these factors differ from our estimates.

Restructuring Reserves

Restructuring reserves include charges related to the realignment and restructuring of our business operations. These charges represent judgments and estimates of costs of severance, closure and consolidation of facilities and settlement of contractual obligations under our operating leases, including sublease rental rates, asset write-offs and other related costs. We reassess the reserve requirements to complete each individual plan under restructuring programs at the end of each reporting period. If these estimates change in the future or actual results differ from our estimates, additional charges may be required.

Recently Issued and Adopted Accounting Pronouncements

For recently issued and adopted accounting pronouncements, see Note 3:*Summary of Significant Accounting Policies*, to our consolidated financial statements.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

Market risk represents the risk of loss that may impact our financial position due to adverse changes in financial market prices and rates. Our market risk exposure is primarily a result of exposure due to potential changes in inflation or interest rates. We do not hold financial instruments for trading purposes.

Interest Rate Risk

Our primary market risk exposure is to changing interest rates on our long-term debt. We had total outstanding debt of $162.9 million under our variable interest Senior Secured Term Loan as of March 31, 2019. Borrowings under the Senior Secured Term Loan bear interest at a rate per annum, at the Company's option, equal to (a) the greater of (i) 3.00%, (ii) the Federal funds rate plus 0.50%, (iii) the LIBOR Rate based upon an interest period of 1 month plus 1.0%, and (iv) the Prime Rate as quoted by the Wall Street Journal, plus an applicable margin of 9.00% or (b) LIBOR Rate plus an applicable margin of 10.00%. Interest on the Senior Secured Term Loan is payable quarterly. Principal payments of 0.25% of the original balance of the Senior Secured Term Loan are due quarterly with the remaining principal balance due at maturity. Based on the amounts outstanding, a 100-basis point increase or decrease in market interest rates would result in a change to annual interest expense of approximately $1.6 million at March 31, 2019. As of March 31, 2019, we have no borrowings on our Amended TCW Credit Facility. Our other long-term debt related to lease obligations have fixed interest rates and terms, and as such, we consider the associated risk to our results of operations from changes in market rates of interest to be minimal.

Foreign Exchange Risk

We conduct business in certain international markets. Because we operate in international markets, we have exposure to different economic climates, political arenas, tax systems and regulations that could affect foreign exchange rates. Our primary exposure to foreign currency risk relates to transacting in foreign currency and recording the activity in U.S. dollars. Changes in exchange rates between the U.S. dollar and these other currencies will result in transaction gains or losses, which we recognize in our Consolidated Statements of Operations.

To the extent practicable, we minimize our foreign currency exposures by maintaining natural hedges between our assets and liabilities and revenues and expenses denominated in foreign currencies. We may enter into foreign exchange derivative contracts or other economic hedges in the future. Our goal in managing our foreign exchange risk is to reduce to the extent practicable our potential exposure to the changes that exchange rates might have on our earnings.

Inflation Risk

Based on our analysis of the periods presented, we believe that inflation has not had a material effect on our operating results. There can be no assurance that future inflation will not have an adverse impact on our operating results and financial condition.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

Independent Auditors Report

To the Board of Directors and Stockholders
Quantum Corporation
San Jose, California

Opinions on the Consolidated Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Quantum Corporation and its subsidiaries (the "Company") as of March 31, 2019 and 2018, and the related consolidated statements of operations and comprehensive loss, stockholders' deficit, and cash flows for each of the years in the three-year period ended March 31, 2019, and the related notes (collectively referred to as the consolidated financial statements). We also have audited the Company's internal control over financial reporting as of March 31, 2019, based on criteria established in *Internal Control-Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of March 31, 2019 and 2018, and the results of its operations and its cash flows for each of the years in the three-year period ended March 31, 2019 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the accompanying index presents fairly, in all material respects, the information set form therein when read in conjunction with the related consolidated financial statements. Also in our opinion, the Company did not maintain, in all material respects, effective internal controls over financial reporting as of March 31, 2019, based on the criteria established in *Internal Controls—Integrated Framework (2013)* issued by the COSO because of material weaknesses in internal control over the Company's control environment, revenue recognition and financial reporting process that existed as of March 31, 2019.

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the annual or interim financial statements will not be prevented or detected on a timely basis. The material weaknesses referred to above are described in the accompanying Management Report on Internal Control Over Financial Reporting. We considered these material weaknesses in determining the nature, timing, and extent of audit tests applied in our audits of the March 31, 2019, 2018, and 2017 consolidated financial statements, and our opinion regarding the effectiveness of the Company's internal control over financial reporting does not affect our opinion on those consolidated financial statements.

Restatement of Previously Issued Consolidated Financial Statements and Management's Conclusion Regarding Internal Control over Financial Reporting

As discussed in Note 2 to the consolidated financial statements, the Company has restated its fiscal 2017 consolidated financial statements to correct misstatements.

Management previously concluded that the Company maintained effective internal control over financial reporting as of March 31, 2017. However, management has subsequently determined that material weaknesses in internal control over financial reporting related to ineffective controls within the Company's financial reporting process existed as of that date.

Change in Accounting Principle

As discussed in Note 3 to the consolidated financial statements, the Company has changed its method of accounting for revenue in 2019 due to the adoption of Accounting Standards Update (ASU) No. 2014-09, Revenue from Contracts with Customers (Topic 606), using the modified retrospective method.

Basis for Opinion

The Company's management is responsible for these consolidated financial statements and financial statement schedule, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's consolidated financial statements on the financial statement schedule, and an opinion on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the consolidated financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Armanino LLP

We have served as the Company's auditor since 2019.

San Ramon, California

August 6, 2019

QUANTUM CORPORATION
CONSOLIDATED BALANCE SHEETS
(in thousands, except per share amounts)

	March 31, 2019	March 31, 2018
ASSETS		
Current assets:		
Cash and cash equivalents	$ 10,790	$ 10,865
Accounts receivable, net of allowance for doubtful accounts of $68 and $320 as of March 31, 2019 and 2018, respectively	86,828	96,350
Manufacturing inventories	18,440	34,428
Service part inventories	19,070	21,889
Other current assets	18,095	13,565
Restricted cash, current	1,065	1,342
Total current assets	154,288	178,439
Property and equipment, net	8,437	9,698
Intangible assets, net	34	138
Restricted cash, long-term	5,000	5,000
Other long term assets	5,112	9,364
Total assets	$ 172,871	$ 202,639
LIABILITIES AND STOCKHOLDERS' DEFICIT		
Current liabilities:		
Accounts payable	$ 37,395	$ 62,646
Deferred revenue, current	90,407	96,866
Accrued restructuring charges, current	2,876	3,166
Long-term debt, current portion	1,650	7,500
Accrued compensation	17,117	19,460
Other accrued liabilities	29,025	17,638
Total current liabilities	178,470	207,276
Deferred revenue, long-term	36,733	38,587
Accrued restructuring charges, long-term	—	2,653
Long-term debt, net of current portion	145,621	115,986
Other long-term liabilities	11,827	11,604
Total liabilities	372,651	376,106
Commitment and contingencies (Note 11)		
Stockholders' deficit		
Preferred stock 20,000 shares authorized; no shares issued or outstanding as of March 31, 2019 and 2018	—	—
Common stock, $0.01 par value per share; 1,000,000 shares authorized; 36,040 and 35,443 shares issued and outstanding at March 31, 2019 and March 31, 2018, respectively	360	354
Additional paid-in capital	499,224	481,610
Accumulated deficit	(697,954)	(655,157)
Accumulated other comprehensive loss	(1,410)	(274)
Total stockholders' deficit	(199,780)	(173,467)
Total liabilities and stockholders' deficit	$ 172,871	$ 202,639

The accompanying Notes are an integral part of these consolidated financial statements.

QUANTUM CORPORATION
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(in thousands, except per share amounts)

	Years Ended March 31,		
	2019	2018	2017 (As Restated)
Revenue:			
Product revenue	$244,654	$268,582	$ 308,318
Service revenue	134,696	136,523	145,938
Royalty revenue	23,330	32,579	38,798
Total revenue	402,680	437,684	493,054
Costs and expenses:			
Product cost of revenue	179,846	206,111	226,660
Service cost of revenue	55,220	58,789	61,122
Total cost of revenue	235,066	264,900	287,782
Gross profit	167,614	172,784	205,272
Operating expense			
Research and development	32,113	38,562	44,379
Sales and marketing	69,400	102,242	100,527
General and administrative	65,277	52,128	51,590
Restructuring charges	5,570	8,474	2,095
Total operating expenses	172,360	201,406	198,591
Income (loss) from operations	(4,746)	(28,622)	6,681
Other (income) expense,			
Interest expense	21,095	11,670	7,993
Loss on debt extinguishment	17,458	6,934	41
Other income, net	(2,878)	(767)	(601)
Net loss before income taxes	(40,421)	(46,459)	(752)
Income tax expense (benefit)	2,376	(3,113)	1,656
Net loss	$ (42,797)	$ (43,346)	$ (2,408)
Loss per share - basic and diluted	$ (1.20)	$ (1.25)	$ (0.07)
Weighted-average common shares outstanding - basic and diluted	35,551	34,687	33,742
Net loss	$ (42,797)	$ (43,346)	$ (2,408)
Change in foreign currency translation adjustments	(1,136)	1,402	(770)
Total comprehensive loss	$ (43,933)	$ (41,944)	$ (3,178)

The accompanying Notes are an integral part of these consolidated financial statements.

QUANTUM CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Years Ended March 31,		
	2019	2018	2017 (As Restated)
Cash flows from operating activities:			
Net loss	$ (42,797)	$ (43,346)	$ (2,408)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:			
Depreciation and amortization	4,266	4,970	5,635
Amortization of debt issuance costs	2,825	1,537	1,373
Provision for product and service inventories	8,851	8,146	7,609
Tax benefit from settlement and Tax Reform Act	—	(3,952)	—
Stock-based compensation expense	3,409	5,394	6,698
Non-cash interest expense	1,670	49	—
Non-cash loss on debt extinguishment	17,851	6,962	—
Non-cash restructuring charges	—	598	—
Bad debt expense	315	295	24
Deferred income taxes, net	2,356	69	497
Loss on disposal of property and equipment	268	129	11
Unrealized foreign exchange (gain) loss	(224)	1,437	(650)
Change in fair value of liability classified warrants	(143)	(210)	—
(Gain) loss on investment	(2,729)	118	—
Changes in assets and liabilities:			
Accounts receivable	8,054	6,510	(370)
Manufacturing inventories	13,054	(2,613)	3,827
Service parts inventories	(3,506)	(6,760)	(3,404)
Accounts payable	(25,356)	21,647	(5,284)
Accrued restructuring charges	(2,943)	(463)	(1,644)
Accrued compensation	(2,342)	(4,330)	1,784
Deferred revenue	(8,367)	4,228	(1,686)
Other assets and liabilities	8,629	(5,447)	(3,456)
Net cash provided by (used in) operating activities	(16,859)	(5,032)	8,556
Cash flows from investing activities:			
Purchases of property and equipment	(2,708)	(2,584)	(2,217)
Proceeds from sale of assets	51	10	736
Cash distributions from investments	2,892	278	48
Net cash provided by (used in) investing activities	235	(2,296)	(1,433)
Cash flows from financing activities:			
Borrowings of long-term debt, revolving credit facility and subordinated convertible debt, net of debt issuance costs	507,707	367,755	104,914
Repayments long-term of debt	(491,143)	(316,053)	(113,082)
Repayment of convertible subordinated debt	—	(62,827)	—
Payment of tax withholding due upon vesting of restricted stock	(354)	(1,822)	(737)
Proceeds from issuance of common stock under the employee stock purchase plan	—	1,715	1,019
Net cash provided by (used in) financing activities	16,210	(11,232)	(7,886)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	62	(145)	17
Net decrease in cash, cash equivalents and restricted cash	(352)	(18,705)	(746)
Cash, cash equivalents and restricted cash at the beginning of period	17,207	35,912	36,658
Cash, cash equivalents and restricted cash at the end of period	$ 16,855	$ 17,207	$ 35,912
Supplemental disclosure of cash flow information:			
Purchases of property and equipment included in accounts payable	$ 105	$ 173	$ 279
Transfer of inventory to property and equipment	$ 408	$ 1,036	$ 1,928
Cash Paid For:			
Interest	$ 17,677	$ 10,244	$ 5,966
Income taxes, net of refunds	$ 68	$ 1,455	$ 677

The accompanying Notes are an integral part of these consolidated financial statements.

The following table provides a reconciliation of cash, cash equivalents, and restricted cash reported within the consolidated balance sheet that sum to the total of the same such amounts shown in the consolidated statement of cash flows.

Cash and cash equivalents	$10,790	$10,865	$12,958
Restricted cash, current	1,065	1,342	2,954
Restricted cash, long-term	5,000	5,000	20,000
Total cash, cash equivalents and restricted cash at the end of period	$16,855	$17,207	$35,912

The accompanying Notes are an integral part of these consolidated financial statements.

QUANTUM CORPORATION
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' DEFICIT
(in thousands)

	Common Stock		Additional	Accumulated	Accumulated Other Comprehensive	
	Shares	Amount	Paid-in Capital	Deficit	Loss	Total
Balances at March 31, 2016 (as reported)	33,276	$ 332	$ 466,879	$ (596,940)	$ 3,844	$(125,885)
Cumulative restatement adjustments				(12,463)	(4,750)	(17,213)
Balances at March 31, 2016 (as restated)	33,276	332	466,879	(609,403)	(906)	(143,098)
Net loss				(2,408)		(2,408)
Foreign currency translation adjustments					(770)	(770)
Shares issued under employee stock purchase plan	293	3	1,016			1,019
Shares issued under employee stock incentive plans, net	693	7	(7)			—
Shares surrendered in lieu of withholding taxes for stock incentive plans	(199)	(2)	(735)			(737)
Stock-based compensation expense			6,698			6,698
Balances at March 31, 2017 (as restated)	34,063	340	473,851	(611,811)	(1,676)	(139,296)
Net loss				(43,346)		(43,346)
Foreign currency translation adjustment					1,402	1,402
Shares issued under employee stock purchase plan	316	3	1,712			1,715
Shares issued under employee stock incentive plans, net	1,064	11	(1,827)			(1,816)
Stock-based compensation expense			5,990			5,990
Reclassifications of liability classified warrants to equity			1,884			1,884
Balances at March 31, 2018	35,443	354	481,610	(655,157)	(274)	(173,467)
Net loss				(42,797)		(42,797)
Foreign currency translation adjustment					(1,136)	(1,136)
Shares issued under employee stock purchase plan	597	6	(360)			(354)
Stock-based compensation expense			3,409			3,409
Reclassification of liability classified warrants to equity			14,565			14,565
Balances at March 31, 2019	36,040	$ 360	$ 499,224	$ (697,954)	$ (1,410)	$(199,780)

The accompanying Notes are an integral part of these Consolidated Financial Statements.

QUANTUM CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1: DESCRIPTION OF BUSINESS

Quantum Corporation, together with its consolidated subsidiaries ("Quantum" or the "Company"), founded in 1980 and reincorporated in Delaware in 1987, is a proven industry leader in storing and managing video and video-like data delivering, the industry's top streaming performance for video and rich media applications, along with the lowest cost, highest density massive-scale data protection and archive systems. The Company helps customers capture, create and share digital data and preserve and protect it for decades. The Company's end-to-end, software-defined, hyperconverged storage solutions span from non-violate memory express ("NVMe"), to solid state drives, ("SSD"), hard disk drives, ("HDD"), tape and the cloud and are tied together leveraging a single namespace view of the entire data environment. The Company works closely with a broad network of distributors, value-added resellers ("VARs"), direct marketing resellers ("DMRs"), original equipment manufacturers ("OEMs") and other suppliers to meet customers' evolving needs.

NOTE 2: RESTATEMENT

Restatement of Previously Issued Financial Statements

In February 2018, the Audit Committee ("Audit Committee") of our Board of Directors (the "Board"), and subsequently a special committee of the Board (the "Special Committee") consisting of two members of the Audit Committee, began conducting an internal investigation, with the assistance of independent accounting and legal advisors, into matters related to the Company's accounting practices and internal control over financial reporting related to revenue recognition for transactions occurring between January 1, 2016 and March 31, 2018. Upon the recommendation of the Audit Committee and as a result of the investigation by the Special Committee and after consultation with the Company's management, on September 14, 2018, the Company's Board of Directors concluded that the Company's previously issued consolidated financial statements and other financial data for the fiscal years ended March 31, 2017, 2016 and 2015 contained in the Company's Annual Reports on Form 10-K for the fiscal year ended March 31, 2017, and the Company's condensed consolidated financial statements for each of the quarterly and year-to-date periods ended June 30, 2015, September 30, 2015, December 31, 2015, June 30, 2016, September 30, 2016, December 31, 2016, June 30, 2017 and September 30, 2017 (collectively, the "Non-Reliance Periods") should not be relied upon and required restatement (the "Restatement"). The Board also determined that the Company's disclosures related to these financial statements and related communications issued by or on behalf of the Company with respect to the Non-Reliance Periods, including management's assessment of internal control over financial reporting and disclosure controls and procedures, should not be relied upon.

This Note discloses the nature of the Restatement adjustments and shows the impact of the restatement on revenues, expenses, income, assets, liabilities, equity, and cash flows from operating activities, investing activities and financing activities, and the cumulative effects of these adjustments on the consolidated balance sheets, statements of operations and comprehensive loss, statement of stockholders' deficit and statements of cash flows for the fiscal year ended March 31, 2017. In addition, this Note shows the effects of the adjustment to opening accumulated deficit as of April 1, 2016, which adjustment reflects the impact of the Restatement on periods prior to the fiscal year ended March 31, 2017. The cumulative impact of the Restatement for all previously reported periods was an adjustment to increase accumulated deficit of approximately $12.5 million and decrease to accumulated other comprehensive income of approximately $4.8 million as of April 1, 2016. The impact on fiscal year 2017 was a reduction in pre-tax loss and net loss of $5.5 million and $6.1 million, respectively. The restated interim financial information for the relevant unaudited interim financial statements for the three months ended June 30, 2017 and the three-and six-months ended September 30, 2017 are included in Note 13: *Quarterly Financial Data (Unaudited)*.

Restatement Background

On January 11, 2018, the Company received a subpoena from the Securities and Exchange Commission ("SEC") seeking documents pertaining to the Company's accounting practices and internal controls related to revenue recognition for transactions commencing April 1, 2016. The Company subsequently decided to postpone the release of Quantum's results for the third quarter of fiscal 2018 and the Audit Committee began an independent investigation into the Company's accounting practices and internal controls over financial reporting related to revenue recognition for transactions occurring between January 1, 2016 and March 31, 2018, with the assistance of independent accounting and legal advisors. Subsequently, the Special Committee, undertook to continue the investigation.

In September 2018, the Special Committee substantially completed and finalized its principal findings with respect to its investigation. The principal findings included a determination that the Company engaged in certain business and sales practices that may have undermined its historical accounting treatment for transactions with several key distributors and at least one end customer. The Special Committee found that the identified transactions potentially affected by such practices commenced at least in the fourth quarter of fiscal 2015 and continued at least through the fourth quarter of fiscal 2018 (the "Investigation Related Revenue Misstatements"). The Special Committee also found that these business and sales practices may have resulted in the Company recognizing revenue for certain transactions prior to satisfying the criteria for revenue recognition required under generally accepted accounting principles in the United States of America ("U.S. GAAP").

In response to the findings of the Special Committee, the Company conducted a thorough review of its financial records for the fiscal years ended March 31, 2015, 2016 and 2017, and for each of the quarterly and year to date periods ended June 30, 2017 and September 30, 2017 to determine whether further adjustments were necessary. The Company concluded that there were material misstatements in the consolidated financial statements for the fiscal years ended March 31, 2015, 2016 and 2017 as well as the unaudited interim consolidated financial statements for the quarterly periods ended June 30, 2016, December 31, 2016, June 30, 2017 and September 30, 2017.

The Special Committee investigation is now complete, although our outside legal counsel, together with the assistance of the independent legal counsel to the Special Committee and independent accounting advisors, continue to provide support as requested in connection with the SEC investigation discussed in more detail in *Item 3—Legal Proceedings* contained in this Annual Report on Form 10-K.

As part of the Company's review of its financial records, management identified control deficiencies related to the control environment, risk assessment, information and communication, and monitoring. For further information regarding these control deficiencies, please see *Item 9A—Controls and Procedures* in this Annual Report on Form 10-K. The Company's incorrect accounting was the result of these control deficiencies. The Company's investigation found that one of these factors was that an inconsistent and sometimes inappropriate tone at the top was present under the then existing senior management that did not in certain instances result in adherence to U.S. GAAP and the Company's accounting policies and procedures. Other factors affecting the overall historic accounting environment included: lack of an effective control environment for certain accounting estimates; lack of sufficient personnel with an appropriate level of knowledge, experience and training commensurate with the Company's financial reporting requirements; lack of clear reporting structures, reporting lines and decisional authority responsibilities; lack of effective controls over certain business processes which included the execution of controls over revenue recognition and the preparation, analysis and review of significant account reconciliations and closing adjustments; and other matters. Taken together, these factors contributed to the consolidated financial statement errors that resulted in the Restatement.

Description of Restatement Matters and Restatement Adjustments

The categories of restatement adjustments and their impact on previously reported consolidated financial statements are described below.

(a) *Investigation Related Revenue* – As disclosed in Note 2: *Restatement*, the Company prematurely recognized product revenue sold to certain distributors, resellers and end-user customers. The associated product cost of revenue for each product revenue sales order was also recognized in the incorrect period. Additionally, for all transactions where product revenue was recognized prematurely, a reclassification is recorded at sell-in to reflect the movement of inventory at Quantum's warehouse to inventory at its distributor's warehouse. For the transactions where revenue was recognized prematurely, the Company restated the consolidated financial statements to reflect the revenue in the period in which the criteria for revenue recognition under U.S. GAAP have been satisfied. For revenue transactions where the criteria for revenue recognition under U.S. GAAP have not yet been satisfied, we deferred revenue recognition until all criteria are satisfied. The impact of this misstatement to the consolidated statement of operations and comprehensive loss for the fiscal year ended March 31, 2017 is a decrease to product revenue and product cost of revenue of $11.9 million and $4.5 million, respectively, and a decrease to pre-tax earnings of $7.4 million. The impact to the consolidated balance sheet at March 31, 2017 is a decrease to accounts receivable and other accrued liabilities of $13.6 million and $0.5 million, respectively and an increase to manufacturing inventories and deferred revenue current of $8.6 million and $4.1 million, respectively.

(b) *Service Revenue Amortization Convention* – The Company inappropriately recognized service revenue on a monthly convention at the beginning of the initial month of service regardless of the service period start date resulting in an acceleration of revenue recognition. Additionally, certain annual service contracts were inappropriately recognized over a 13-month period resulting in a deceleration of revenue recognition. The combined impact of these misstatements to the statement of operations and comprehensive loss for the fiscal year ended March 31, 2017 is an increase to service revenue and pre-tax earnings of $1.6 million. The impact to the consolidated balance sheet at March 31, 2017 is an increase in current and long-term deferred revenue of $3.5 million and $1.3 million, respectively.

(c) *Cash Consideration Paid to Customers* – The Company inappropriately recorded cash consideration paid to customers as expenses rather than as a reduction of revenue as such payments did not meet the identifiable benefit criteria within the Accounting Standards Codification ("ASC") 605, *Revenue Recognition* ("Topic 605") guidance. We have reclassified these expenses from sales and marketing expense to product revenue. The impact of this misstatement to the statement of operations and comprehensive loss for the fiscal year ended March 31, 2017 is a decrease to product revenue and sales and marketing expense of $2.0 million with no impact to pre-tax earnings. There was no impact to the consolidated balance sheet at March 31, 2017.

(d) *Sales Tax* – The Company inappropriately accrued U.S. states' sales tax on foreign sales. There was no impact to the consolidated statement of operations and comprehensive loss for the fiscal year ended March 31, 2017. The impact of this misstatement to the consolidated balance sheet at March 31, 2017 is a decrease to accounts receivable and other accrued liabilities of $0.5 million.

(e) *Accrued Warranty* – The Company reviewed its warranty accrual methodology and determined that previous estimates did not appropriately reflect the Company's historical experience. The Company changed its method in calculating the warranty accrual and applied the adjustments retroactively. The impact of this misstatement to the consolidated statement of operations and comprehensive loss for the fiscal year ended March 31, 2017 is an increase to service cost of revenue and a decrease to pre-tax earnings of $0.4 million. The impact to the consolidated balance sheet at March 31, 2017 is an increase in other accrued liabilities of $0.4 million.

(f) *Commissions Accrual* – Relating to misstatement (a), when the Company prematurely recognized revenue, the associated commission expense was also prematurely recognized. The Company restated commission expense to match the timing of associated revenue recognition. The impact of this misstatement to the statement of operations and comprehensive loss for the fiscal year ended March 31, 2017 is a decrease to sales and marketing expense and an increase in pre-tax earnings of $0.7 million. The impact to the consolidated balance sheet at March 31, 2017 is a decrease to accrued compensation of $1.4 million.

(g) *Short Term Disability Plan* – The Company inappropriately accounted for its employee funded disability plan and did not reflect employee contributions within restricted cash and did not recognize the obligation to fund disability claims as incurred. The impact of this misstatement on the consolidated balance sheet at March 31, 2017 is an increase to restricted cash and accrued compensation of $1.1 million. There was no impact to the statement of operations and comprehensive loss for the fiscal year ended March 31, 2017.

(h) *Third Party Maintenance Contracts* – The Company changed its method to appropriately account for capitalized third party maintenance contracts. The impact of this misstatement to the consolidated balance sheet at March 31, 2017 was a decrease to accounts payable and other current assets of $0.8 million. There was no impact of this misstatement to the consolidated statement of operations and comprehensive loss for the fiscal year ended March 31, 2017.

(i) *Debt Issuance Costs* – The Company reclassified capitalized debt issuance costs on its revolver loan from long-term debt to a current asset. The impact of this misstatement to the consolidated balance sheet at March 31, 2017 is an increase to long term debt, net of current portion and other long-term assets of $1.6 million. There was no impact to the consolidated statement of operations and comprehensive loss for the fiscal year ended March 31, 2017.

(j) *Restructuring* – The Company did not properly calculate expenses related to its restructuring activities, including failure to apply appropriate discount rates and omitting certain facilities in calculating the restructuring liabilities. The impact of this misstatement to the consolidated statement of operations and comprehensive loss for the fiscal year ended March 31, 2017 is an increase to restructuring charges and a decrease in pre-tax earnings of less than $0.1 million. The impact to the consolidated balance sheet at March 31, 2017 is an increase to current and non-current accrued restructuring charges of $1.0 million and $3.9 million, respectively.

(k) *General Presentation* – Certain activities in the statement of cash flows and consolidated balance sheets have been reclassified to conform with current fiscal year's presentation. The impact to the consolidated balance sheet at March 31, 2017 is a decrease to warranty liability and an increase to other accrued liabilities of $3.3 million. There was no impact to the consolidated statement of operations and comprehensive loss for the fiscal year ended March 31, 2017.

(l) *Australian Deferred Tax Assets and Valuation Allowance* – The Company failed to record deferred tax assets for certainbook-tax differences at an Australian affiliate and to further establish a valuation allowance against certain of the tax assets. The impact of this misstatement to the statement of operations and comprehensive loss for the fiscal year ended March 31, 2017 is an increase to income tax expense of $0.2 million. The impact to the balance sheet at March 31, 2017 is an increase to other long term assets and accumulated deficit of $0.5 million and $0.7 million, respectively.

(m) *Deferred Tax Liability Related to Unrealized Swiss Currency Gains* – The Company misclassified and under accrued Swiss income tax on unrealized currency gains attributable to a dollar-denominated intercompany note receivable. The impact of this misstatement to the consolidated balance sheet at March 31, 2017 is a decrease to other accrued liabilities of $0.6 million and an increase to accumulated other comprehensive loss and other long-term liabilities of $0.1 million and $0.5 million respectively. There was no impact of this misstatement to the statement of operations and comprehensive loss for the fiscal year ended March 31, 2017.

(n) *Reserves for Uncertain Tax Positions on Transfer Pricing* – The Company did not accrue a reserve for foreign taxes payable due to uncertain tax positions relating to its transfer pricing for services and interest income on intercompany notes and payables. The impact of this misstatement to the statement of operations and comprehensive loss for the fiscal year ended March 31, 2017 is an increase to income tax expense of $0.3 million. The impact to the consolidated balance sheet at March 31, 2017 is an increase to other long-term liabilities of $4.2 million and a decrease to the accumulated deficit of $3.8 million.

(o) *Valuation Allowance for State Credit Carryforward* – The Company failed to analyze all evidence, both positive and negative, when considering the future realization of its Texas state credit carryforward and inappropriately established a 100% valuation allowance against the related deferred tax asset. The Company reevaluated the evidence and partially removed this valuation allowance. The impact of this misstatement to the statement of operations and comprehensive loss for the fiscal year ended March 31, 2017 is an increase to income tax expense of less than $0.1 million. The impact to the consolidated balance sheet at March 31, 2017 is an increase to other long-term assets and accumulated deficit of $0.3 million.

(p) *Tax Accounting* – The Company recalculated its income tax expense on an annual and quarterly basis to account for certain errors in the previous calculations of its federal income tax receivable, federal long term income tax payable, and state income tax payable. Restatements impacting book income and various asset and liability accounts had no net effect on deferred taxes or tax expense due to the Company's position of losses and a full valuation allowance. The impact of this misstatement to the statement of operations and comprehensive loss for the fiscal year ended March 31, 2017 is a decrease to income tax expense of less than $0.1 million. The impact to the consolidated balance sheet at March 31, 2017 is a decrease to other accrued liabilities and accumulated deficit of $0.1 million and $0.9 million respectively, and an increase in other long-term liabilities of $0.7 million.

(q) *Other Adjustments* – There are other restatement matters otherwise not described in items (a) through (s) of this Note. The related adjustments are individually insignificant in the fiscal year ended March 31, 2017 but in aggregate are material to the consolidated financial statements. These misstatements include:

- Unrecognized gain (loss) of cumulative translation adjustments upon the liquidation of certain foreign entities
- Unrecognized asset retirement obligations
- Incorrect accounting for a cost method investment
- Accruals recorded in the incorrect accounting period

The aggregate impact of these misstatement to the consolidated statement of operations and comprehensive loss for the fiscal year ended March 31, 2017 is a decrease to general and administrative and other expenses of less than $0.1 million, and an increase in interest expense of less than $0.1 million. The resulting impact to pre-tax earnings is a decrease of less than $0.1 million. The impact to the consolidated balance sheet at March 31, 2017 is a decrease to property and equipment, other long-term assets, and accumulated comprehensive income of $0.3 million, $0.7 million, and $4.8 million respectively, and an increase in other accrued liabilities $0.9 million.

Consolidated financial statement adjustments tables

The following tables present the restatement adjustments to previously issued consolidated financial statements, including the previously reported consolidated balance sheet as of March 31, 2017, and the consolidated statement of operations and comprehensive loss, stockholders' deficit and statement of cash flows for the fiscal year ended March 31, 2017. The correction of misstatements affecting fiscal years prior to the fiscal year ended March 31, 2017 are reflected as a cumulative adjustment to the April 1, 2016 stockholders' deficit on the consolidated balance sheet and consolidated statement of stockholders' deficit.

QUANTUM CORPORATION
CONSOLIDATED BALANCE SHEETS
(in thousands, except per share amounts)

	March 31, 2017			
	As Reported	Restatement Adjustments	Restatement Reference	As Restated
ASSETS				
Current Assets				
Cash and cash equivalents	$ 12,958	$ —		$ 12,958
Accounts receivable, net of allowance for doubtful accounts of $16 as of March 31, 2017	116,056	(14,110)	a, d	101,946
Manufacturing inventories	27,661	8,613	a	36,274
Service part inventories	19,849	—		19,849
Other current assets	9,969	(786)	h	9,183
Restricted cash	1,832	1,122	g	2,954
Total current assets	188,325	(5,161)		183,164
Property and equipment, less accumulated depreciation	11,186	(310)	q	10,876
Intangible assets, less accumulated amortization	276	—		276
Restricted cash, long-term	20,000	—		20,000
Other long term assets	5,240	1,686	i, l, o, q	6,926
Total assets	**$ 225,027**	**$ (3,785)**		**$ 221,242**
LIABILITIES AND STOCKHOLDERS' DEFICIT				
Liabilities				
Current liabilities:				
Accounts payable	$ 41,611	(785)	h	$ 40,826
Accrued warranty	3,263	(3,263)	k	—
Deferred revenue, current	84,683	7,642	a, b	92,325
Accrued restructuring charges, current	869	1,025	j	1,894
Long-term debt current portion	—	—		—
Convertible subordinated debt, current	62,827	—		62,827
Accrued compensation	24,104	(315)	f, g	23,789
Other accrued liabilities	12,998	2,947	a, d, e, k, m, p,	15,945
Total current liabilities	230,355	7,251		237,606
Deferred revenue, long-term	37,642	1,254	b	38,896
Accrued restructuring charges, long-term	481	3,907	j	4,388
Long-term debt, net of current portion	65,028	1,648	i	66,676
Convertible subordinated debt, long-term	—	—		—
Other long-term liabilities	7,520	5,452	m, n, p	12,972
Total liabilities	341,026	19,512		360,538
Commitment and contingencies (Note 11)				
Stockholders' deficit				
Preferred stock:				
Preferred stock 20,000 shares authorized; no shares issued as of March 31, 2017	—	—		—
Common stock:				
Common stock, $0.01 par value; 1,000,000 shares authorized; 34,063 shares issued and outstanding at March 31, 2017	340	—		340
Additional paid-in capital	473,850	—		473,850
Accumulated deficit	(593,295)	(18,516)	a-b, e-f, j, l, n-q	(611,811)
Accumulated other comprehensive income	3,106	(4,781)	m, q	(1,675)
Total stockholders' deficit	(115,999)	(23,297)		(139,296)
Total liabilities and stockholders' deficit	**$ 225,027**	**$ (3,785)**		**$ 221,242**

QUANTUM CORPORATION
CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share amounts)

	Year end March 31, 2017			
	As Reported	Restatement Adjustments	Restatement References	As Restated
Revenue:				
Product revenue	$ 322,212	$ (13,894)	a, c	$ 308,318
Service revenue	144,335	1,603	b	145,938
Royalty revenue	38,798	—		38,798
Total revenue	505,345	(12,291)		493,054
Costs and expenses:				
Product cost of revenue	231,207	(4,547)	a	226,660
Service cost of revenue	60,714	408	e	61,122
Total cost of revenue	291,921	(4,139)		287,782
Gross profit	213,424	(8,152)		205,272
Operating expenses:				
Research and development	44,379	—		44,379
Sales and marketing	103,235	(2,708)	c, f	100,527
General and administrative	51,599	(9)	q	51,590
Restructuring charges	2,063	32	j	2,095
Total operating expenses	201,276	(2,685)		198,591
Income (loss) from operations	12,148	(5,467)		6,681
Other expenses and losses, net:				
Interest expense, net	7,912	81	q	7,993
Loss on debt extinguishment	41	—		41
Other income, net	(562)	(39)	q	(601)
Income (loss) before income taxes	4,757	(5,509)		(752)
Income tax expense (benefit)	1,112	544	l, n, o, p	1,656
Net income (loss)	$ 3,645	$ (6,053)		$ (2,408)
Net loss per share:				
Basic	$ 0.11			$ (0.07)
Diluted	$ 0.11			$ (0.07)
Weighted average common shares outstanding - basic	33,742			33,742
Weighted average common shares outstanding - diluted	34,113			33,742

QUANTUM CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	For the Fiscal Year Ended March 31, 2017			
	As Reported	Restatement Adjustments	Restatement Reference	As Restated
Cash flows from operating activities:				
Net income (loss)	$ 3,645	$ (6,053)	a, b, e, f, j, l, n, o, q	$ (2,408)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:				
Depreciation and amortization	5,433	202	k, q	5,635
Amortization of intangible assets	175	(175)	k	—
Amortization of debt issuance costs	1,373	—		1,373
Product and service parts lower of cost or market adjustment	4,960	2,649	k	7,609
Share-based compensation expense	6,698	—		6,698
Bad debt expense	—	24	k	24
Deferred income taxes, net	97	400	k, l, n-p	497
Loss on disposal of property and equipment	—	11	k	11
Unrealized foreign exchange (gain)/loss	—	(650)	k	(650)
Changes in assets and liabilities:				
Accounts receivable	(10,097)	9,727	a, d, k	(370)
Manufacturing inventories	12,931	(9,104)	a, k	3,827
Service parts inventories	(4,969)	1,565	k	(3,404)
Accounts payable	(4,845)	(439)	h, k	(5,284)
Accrued warranty	(167)	167	k	—
Accrued restructuring charges	(1,387)	(257)	j, k	(1,644)
Accrued compensation	1,492	292	f, g, k	1,784
Deferred revenue	(2,020)	334	a, b, k	(1,686)
Other assets and liabilities	(5,601)	2,145	a, d, e, i, k, q	(3,456)
Net cash provided by (used in) operating activities	7,718	838		8,556
Cash flows from investing activities:				
Purchases of property and equipment	(1,752)	(465)	k, q	(2,217)
Proceeds from sale of assets	—	736	k	736
Cash distributions from investments	—	48	k	48
Net cash provided by (used in) investing activities	(1,752)	319		(1,433)
Cash flows from financing activities:				
Borrowings of long-term debt and subordinated convertible debt, net of debt issuance costs	104,914	—		104,914
Repayments on long-term debt	(106,172)	(6,910)	k	(113,082)
Repayment of convertible subordinated debt	(6,910)	6,910	k	—
Payment of tax withholding due upon vesting of restricted stock	(738)	1	k	(737)
Proceeds from issuance of common stock under the employee stock purchase plan	1,020	(1)	k	1,019
Net cash provided by (used in) financing activities	(7,886)	—		(7,886)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	52	(36)	k	16
Net decrease in cash, cash equivalents and restricted cash	(1,868)	1,122		(746)
Cash, cash equivalents and restricted cash at the beginning of period	36,658	—		36,658
Cash, cash equivalents and restricted cash at the end of period	$ 34,790	$ 1,122		$ 35,912
Supplemental disclosure of cash flow information:				
Purchases of property and equipment included in accounts payable	$ 321	$ (42)		$ 279
Transfer of inventory to property and equipment	$ 1,588	$ 340		$ 1,928
Cash Paid For:				
Interest	$ 5,952	$ 14	k	$ 5,966
Taxes, net of refunds	$ 1,050	$ (373)	k	$ 677

NOTE 3: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

The accompanying consolidated financial statements of the Company have been prepared in accordance with U.S. GAAP. All intercompany balances and transactions have been eliminated. The Company reviews subsidiaries and affiliates, as well as other entities, to determine if they should be considered variable interest entities ("VIE"), and whether it should change the consolidation determinations based on changes in their characteristics. The Company considers an entity a VIE if its equity investors own an interest therein that lacks the characteristics of a controlling financial interest or if such investors do not have sufficient equity at risk for the entity to finance its activities without additional subordinated financial support or if the entity is structured with non-substantive voting interests. To determine whether or not the entity is consolidated with the Company's results, the Company also evaluates which interests are variable interests in the VIE and which party is the primary beneficiary of the VIE.

Stock Split

On April 18, 2017, the Company effected a 1 for 8 reverse stock split of its issued and outstanding shares of common stock (the "Reverse Stock Split"). The par value of the Company's common stock was unchanged as a result of the Reverse Stock Split, remaining at $0.01 per share, which resulted in reclassification of capital from par value to additional paid-in capital. All share and per share data as of and for the fiscal year ended March 31, 2017 and comparative periods included within the Company's consolidated financial statements and related footnotes have been adjusted to account for the effect of the Reverse Stock Split.

Use of Estimates

The preparation of these consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions. Certain accounting estimates involve significant judgments, assumptions and estimates by management that have a material impact on the carrying value of certain assets and liabilities, disclosures of contingent assets and liabilities and the reported amounts of revenues and expenses during the reporting period, which management considers to be critical accounting estimates. The judgments, assumptions and estimates used by management are based on historical experience, management's experience and other factors, which are believed to be reasonable under the circumstances. Because of the nature of the judgments and assumptions made by management, actual results could differ materially from these judgments and estimates, which could have a material impact on the carrying values of the Company's assets and liabilities and its results of operations.

Cash and Cash Equivalents

The Company has cash deposits and cash equivalents deposited in or managed by major financial institutions. Cash equivalents include all highly liquid investment instruments with an original maturity of three months or less, and consist primarily of money market accounts. At times the related amounts are in excess of amounts insured by the Federal Deposit Insurance Corporation. The Company has not experienced any losses with these financial institutions and does not believe it represents significant credit risk.

Restricted Cash

Restricted cash is primarily attributable to minimum cash reserve requirements under the Company's revolving credit agreements. The remaining restricted cash is comprised of bank guarantees and similar required minimum balances that serve as cash collateral in connection with various items including insurance requirements, value added taxes, ongoing tax audits and leases in certain countries.

Allowance for Doubtful Accounts

The Company maintains an allowance for doubtful accounts for estimated losses based on historical experience and expected collectability of outstanding accounts receivable. The Company performs ongoing credit evaluations of its customers' financial condition, and for the majority of its customers require no collateral. For customers that do not meet the Company's credit standards, the Company often requires a form of collateral, such as cash deposits or letters of credit, prior to the completion of a transaction. These credit evaluations require significant judgment and are based on multiple sources of information. The Company analyzes such factors as its historical bad debt experience, industry and geographic concentrations of credit risk, current economic trends and changes in customer payment terms. The Company will write-off customer balances in full to the reserve when it has determined that the balance is not recoverable. Changes in the allowance for doubtful accounts are recorded in general and administrative expenses.

Inventories

Manufacturing Inventories

The Company's manufacturing inventory is recorded at the lower of cost or net realizable value, with cost being determined on afirst-in, first-out ("FIFO") basis. Costs include material, direct labor, and an allocation of overhead in the case of work in process. Manufacturing inventories included inventory at certain distributors and customers of $3.4 million and $10.9 million as of March 31, 2019 and 2018, respectively, for which revenue recognition criteria had not been met as discussed in Note 2: *Restatement.* Adjustments to reduce the cost of manufacturing inventory to its net realizable value, if required, are made for estimated excess, obsolete or impaired balances. Factors influencing these adjustments include declines in demand, rapid technological changes, product life cycle and development plans, component cost trends, product pricing, physical deterioration and quality issues. Revisions to these adjustments would be required if these factors differ from the Company's estimates.

Service Parts Inventories

The Company's service parts inventories are recorded at the lower of cost or net realizable value, with cost being determined on a FIFO basis. The Company carries service parts because it generally provides product warranty for one to three years and earns revenue by providing enhanced and extended warranty and repair services during and beyond this warranty period. Service parts inventories consist of both component parts, which are primarily used to repair defective units, and finished units, which are provided for customer use permanently or on a temporary basis while the defective unit is being repaired. The Company records adjustments to reduce the carrying value of service parts inventory to its net realizable value, and disposes of parts with no use and a net realizable value of zero. Factors influencing these adjustments include product life cycles, end of service life plans and volume of enhanced or extended warranty service contracts. Estimates of net realizable value involve significant estimates and judgments about the future, and revisions would be required if these factors differ from the Company's estimates.

Property and Equipment, Net

Property and equipment are carried at cost, less accumulated depreciation and amortization, computed on a straight-line basis over the estimated useful lives of the assets as follows:

Machinery and equipment	3 to 5 years
Computer equipment	3 to 5 years
ERP software	10 years
Other software	3 years
Furniture and fixtures	5 years
Other office equipment	5 years
Leasehold improvements	Shorter of useful life or life of lease

When assets are retired or otherwise disposed of, the related costs and accumulated depreciation are removed from the balance sheet and any resulting gain or loss is reflected in the consolidated statements of operations and comprehensive income (loss) in the period realized.

The Company evaluates the recoverability of the carrying amount of its property and equipment whenever events or changes in circumstances indicate that the carrying amount of an asset group may not be fully recoverable. A potential impairment charge is evaluated when the undiscounted expected cash flows derived from an asset group are less than its carrying amount. Impairment losses, if applicable, are measured as the amount by which the carrying value of an asset group exceeds its fair value and are recognized in operating results. Judgment is used when applying these impairment rules to determine the timing impairment test, the undiscounted cash flows used to assess impairments and the fair value of the asset group.

Revenue Recognition

Adoption of New Revenue Recognition Standard

In May 2014 the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers (Topic 606)*, which is a comprehensive new revenue recognition model that requires a company to recognize revenue to depict the transfer of goods or services to a customer at an amount that reflects the consideration it expects to receive in exchange for those goods or services. Subsequent to the initial ASU the FASB issued the following updates and technical clarifications: ASU No. 2015-14, *Deferral of the Effective Date*, ASU No. 2016-08, *Principal versus Agent Considerations (Reporting Revenue Gross versus Net)*, ASU No. 2016-10, *Identifying Performance Obligations and Licensing*, ASU No. 2016-02, *Narrow-Scope Improvements and Practical Expedients*, ASU 2016-20, *Technical Corrections and Improvements to Topic 606*, ASU No. 2017-13, *Amendments to SEC Paragraphs Pursuant to the Staff Announcement at the July 20, 2017 EITF Meeting and Rescission of Prior SEC Staff Announcements and Observer Comments (SEC Update)* and ASU No. 2018-18, *Collaborative Arrangements (Topic 808): Clarifying the Interaction between Topic 808 and Topic 606*. The Company implemented changes to its processes, policies and internal controls to meet the impact of the new standard and disclosure requirements.

On April 1, 2018, we adopted Topic 606, using the modified retrospective transition method applied to those contracts which were not completed as of April 1, 2018. Results for reporting periods beginning after April 1, 2018 are presented under Topic 606, while prior period amounts have not been adjusted and continue to be reported in accordance with the Company's our historic accounting policy. Adoption of Topic 606 did not have a significant impact on recorded revenue in fiscal 2019.

The Company's performance obligations are satisfied at a point in time or over time as stand ready obligations. A majority of the Company's revenue is recognized at a point in time when products are accepted, installed or delivered. The Company's revenue is derived from three main sources: (1) Product, (2) Professional services, and (3) Royalties. Sales tax collected on sales is netted against government remittances and thus, recorded on a net basis.

Product Revenue

Our product revenue is comprised of multiple storage solution hardware and software offerings targeted towards consumer and enterprise customers. Revenue from product sales are recognized at the point in time when the customer takes control of the product, which typically occurs at the point of delivery. If there are significant post-delivery obligations, the related revenue is deferred until such obligations are fulfilled. Revenue from contracts with customer acceptance criteria are recognized upon end user acceptance. Our standard contractual terms are F.O.B. shipping point and net 30 payment, with exceptions on a case by case basis.

Service Revenue

Service revenue primarily consists of three components: (1) installation (2) consulting & training, and (3) post-contract customer support agreements.

We offer installation services on all our products. Customers can opt to either have Quantum or a Quantum-approved third party service provider install our products. Installation services are typically completed within a short period of time and revenue from these services are recognized at the point when installation is complete. A majority of our consulting and training revenue is derived from our StorNext product line, these services do not take significant time to complete therefore these obligations are satisfied upon completion of such services at a point in time.

Customers have the option to choose between different levels of hardware and software support, i.e. bronze, silver, or gold. Our support plans include various stand-ready obligations (such as technical assistance hot-lines, replacement parts maintenance, and remote monitoring) that are delivered

whenever called upon by our customers. Support plans provide additional services and assurance outside the scope of our primary product warranties. Revenue from support plans are recognized using a time-based measure of output over the contractual term of the service contract.

Royalty Revenue

We license certain intellectual property to third party manufacturers which gives the manufacturers rights to intellectual property including the right to either manufacture or include the intellectual property in their products for resale. Licensees pay us a per-unit royalty for sales of their products that incorporate our intellectual property. On a periodic and timely basis, the licensees provide us with reports containing units sold to end users subject to the royalties. The reports substantiate that the performance obligation has been satisfied therefore revenue is recognized based on the reports or when amounts can be reasonably estimated.

Significant Judgements

The following significant judgements were used when applying Topic 606 to contracts with customers.

Identification of performance obligations

The Company generally enters into contracts with customers to provide storage solutions to meet their individual needs. Most of the Company's contracts contain multiple goods and services designed to meet each customers' unique storage needs. Contracts with multiple goods and services have multiple distinct performance obligations as the promise to transfer hardware, installation services, and support services are capable of being distinct and provide economic benefit to customers on their own.

Stand-alone selling price

For contracts with multiple performance obligations, the Company allocates the transaction price to each performance obligation based on the relative standalone selling price ("SSP") of the good or service underlying each performance obligation. The SSP represents the amount for which the Company would sell the good or service to a customer on a standalone basis (i.e., not sold as a bundle with any other products or services). Where SSP may not be directly observable (e.g., the performance obligation is not sold separately), the Company maximized the use of observable inputs by using information including reviewing discounting practices, performance obligations with similar customers and product groupings. The Company evaluated all methods included in Topic 606 to determine SSP and concluded that invoice price is the best representation of what the Company expects to receive from the delivery of each performance obligation.

This judgment is based on; (1) the fact that each storage solution is customizable to meet an individual customer's needs (2) sales representatives use various discounting methods based on each purchase orders' unique mix of product offerings (3) every products' transaction price can vary depending on the mix of other products included in the same purchase order and (4) there are no identifiable trends that provide a good representation of expected margin for each product. In addition, individual products may have multiple values for SSP depending on factors such as where they are sold, what channel they are sold through, and other products on the purchase order. Due to the use of invoice price as SSP, Step 4 (Allocate Transaction Price) of Topic 606's 5 step model creates no differences when compared to U.S. GAAP.

Variable consideration

Product revenue includes multiple types of variable consideration, such as rebates, returns, or stock rotations. All contracts with variable consideration require payment upon satisfaction of the performance obligation with net 30 day payment terms, however payment terms can go up to net 90 days for a limited number of customers. The Company does not include significant financing components in its contracts. The Company constrains estimates of variable consideration to amounts that are not expected to result in a significant revenue reversal in the future, primarily based on the most likely level of consideration to be returned to the customer under the specific terms of the underlying programs.

The expected value method is used to estimate the consideration expected to be returned to the customer. The Company uses its large volume of historical data and current trends to drive its estimates. The Company records a reduction to revenue to account for these programs. Topic 606 requires entities to recognize a return asset and corresponding adjustment to cost of sales for its right to recover the goods returned by the customer, at the time of the initial sale. Quantum initially measures this asset at the carrying amount of the inventory, less any expected costs to recover the goods including potential decreases in the value of the returned goods.

Disaggregation of Revenue

The following tables present revenue disaggregated by major product offering and geographies (in thousands):

	Year Ended March 31, 2019			
	Americas	Europe	Asia Pacific	Consolidated
Primary storage systems	$ 37,228	$20,826	$ 6,743	$ 64,797
Secondary storage systems	69,255	38,743	12,544	120,542
Device and media	34,079	19,064	6,172	59,315
Service	87,040	37,216	10,440	134,696
Royalty	*	*	*	23,330
Total Revenue				$ 402,680

	Year Ended March 31, 2018			
	Americas	Europe	Asia Pacific	Consolidated
Primary storage systems	$ 45,889	$24,649	$ 9,526	$ 80,064
Secondary storage systems	68,385	36,733	14,196	119,314
Device and media	39,664	21,306	8,234	69,204
Service	87,960	37,875	10,688	136,523
Royalty	*	*	*	32,579
Total Revenue				$ 437,684

	Year Ended March 31, 2017 (As Restated)			
	Americas	Europe	Asia Pacific	Consolidated
Primary storage systems	$ 43,934	$19,165	$ 8,224	$ 71,323
Secondary storage systems	93,165	40,640	17,440	151,245
Device and media	52,820	23,042	9,888	85,750
Service	94,566	40,167	11,205	145,938
Royalty	*	*	*	38,798
Total Revenue				$ 493,054

* Royalty revenue is not allocable to geographic regions.

Revenue for Americas geographic region outside of the United States is not significant.

Contract Balances

Contract assets consist of unbilled receivables and are recorded when revenue is recognized in advance of scheduled billings to our customers. These situations are limited and are due to support service arrangements where services have been performed but we have not yet invoiced. Contract liabilities consist of deferred revenue which is recorded when customers have been billed for support services but the Company hasn't fulfilled its service obligation. Billing for multi-year service contracts is generally done annually. Deferred revenue was $127.1 million as of March 31, 2019 of which $90.4 million is expected to be recognized in revenue in the fiscal year ending March 31, 2020. The adoption of Topic 606 had no impact on our deferred revenue balances. We recognized approximately $83.4 million of revenue in fiscal 2019 that was included in the deferred revenue balance on March 31, 2018.

Contract balances consisted of the following (in thousands)

	Contract Balances (in thousands)			
	Accounts Receivable	Contract Assets	Deferred Revenue (Current)	Deferred Revenue (Long-term)
Opening balance, April 1, 2018	$ 96,350	$ —	$ 98,866	$ 38,587
Closing balance, March 31, 2019	86,828	—	90,407	36,733
Decrease	$ (9,522)	$ —	$ 8,459	$ (1,854)

Costs of Obtaining and Fulfilling Contracts with Customers

Topic 606 provides new guidance on capitalizing certain fulfillment costs and costs to obtain a contract. The Company's primary cost to obtain contracts is sales commissions earned by sales representatives. These costs are incremental and expected to be recovered indirectly through the margin inherent within the contract. A large portion of the Company's contracts are completed within a one-year performance period, and for contracts with a specified term of one year or less, the Company has elected to apply a practical expedient available in Topic 606, which allows the Company to recognize the incremental costs of obtaining a contract as an expense when incurred if the amortization period of the asset that the Company would otherwise have recognized is one year or less.

Only sales commissions attributed to service contracts qualify for capitalization after application of the practical expedient. The duration of these contracts ranges from 1-10 years with an insignificant number of contracts exceeding 1 year. Total costs subject to capitalization were immaterial to the Company's consolidated financial statements for the year ended March 31, 2019.

The Company's costs to fulfill contracts consist of shipping and handling activities. The Company elected to apply the practical expedient available in Topic 606 which allows entities to expense the costs of shipping and handling in the period incurred.

Remaining Performance Obligations

Topic 606 also introduced a requirement to disclose in the aggregate the amount of TTP allocated to performance obligations that remain unsatisfied. TTP allocated to performance obligations that remain unsatisfied represents contracted revenue that has not yet been recognized, which includes deferred revenue and contractually agreed upon amounts, yet to be invoiced, that will be recognized as revenue in future periods. Remaining performance obligation are subject to change and are affected by several factors, including terminations, changes in the scope of contracts, adjustments for revenue that has not materialized and foreign exchange adjustments.

Remaining performance obligations consisted of the following (in thousands):

	Current	Non-Current	Total
As of March 31, 2019	$103,306	$47,417	$150,723

The Company expects to recognize approximately 69% of the remaining performance obligations during the year ending March 31, 2020.

Revenue Recognition - Prior to the Adoption of Topic 606

The Company followed the guidance provided in Topic 605 prior to the adoption of Topic 606, which the Company adopted using the modified retrospective method beginning on April 1, 2018.

Under Topic 605, revenue is considered realized, earned, and recognized when all of the following occurs;

- persuasive evidence of an arrangement exists,
- delivery has occurred or services have been rendered,
- the price to the buyer is fixed or determinable, and
- when collectability is reasonably assured,

Royalty revenue is recognized when earned or when earned amounts can be reasonably estimated.

Multiple Element Arrangements

The Company enters into contracts with customers that contain multiple deliverables such as hardware, software and services, and these arrangements require assessment of each deliverable to determine its estimated selling price. Additionally, the Company used judgment in order to determine the appropriate timing of revenue recognition and to assess whether any software and non-software components function together to deliver a tangible product's essential functionality in order to ensure the arrangement is properly accounted for as software or hardware revenue. The majority of the Company's products are hardware products which contain software essential to the overall functionality of the product. Hardware products are generally sold with customer support agreements.

Consideration in such multiple element arrangements is allocated to eachnon-software element based on the fair value hierarchy, where the selling price for an element is based on vendor-specific objective evidence ("VSOE"), if available; third-party evidence ("TPE") if VSOE is not available; or the best estimate of selling price ("BESP"), if neither VSOE nor TPE is available. The Company establishes VSOE based upon the selling price of elements when sold on a standalone basis and TPE is determined based upon competitor's selling price for largely interchangeable products. For BESP, the Company considers its discounting and internal pricing practices, external market conditions and competitive positioning for similar offerings.

For software deliverables, the Company allocates consideration between multiple elements based on software revenue recognition guidance, which requires revenue to be allocated to each element based on the relative fair values of those elements. The fair value of an element must be based on VSOE. Where fair value of delivered elements is not available, revenue is recognized on the "residual method" deferring the fair value of the undelivered elements and recognizing the balance as revenue for the delivered elements. If evidence of fair value of one or more undelivered elements does not exist, all revenue is deferred and recognized at the earlier of the delivery of those elements or the establishment of fair value of the remaining undelivered elements.

Product Revenue — Hardware

Revenue for hardware products sold to distributors, VARs, DMRs, OEMs and end users is generally recognized upon shipment, consistent with the transfer of title and risk of loss. When significant post-delivery obligations exist, the related revenue is deferred until such obligations are fulfilled (sell-through basis). If there are customer acceptance criteria in the contract, the Company recognized revenue upon end user acceptance.

In the period revenue is recognized, allowances are provided for estimated future price adjustments, such as rebates, price protection and future product returns. These allowances are based on programs in existence at the time revenue is recognized, plans regarding future price adjustments, the customers' master agreements and historical product return rates. Since the Company has historically been able to reliably estimate the amount of allowances required, the Company recognized revenue, net of projected allowances, upon shipment to its customers. If the Company was unable to reliably estimate the amount of revenue adjustments in any specific reporting period, then it would be required to defer recognition of the revenue until the rights had lapsed and the Company was no longer under any obligation to reduce the price or accept the return of the product.

Product Revenue — Software

For software products, the Company generally recognized revenue upon delivery of the software. Revenue from post-contract customer support agreements, which entitle software customers to both telephone support and any unspecified upgrades and enhancements during the term of the agreement, is classified as product revenue, as the value of these support arrangements are the upgrades and enhancements to the software licenses themselves and there is no on-site support. The Company recognized revenue from its post-contract customer support ratably over the term of the agreement. The Company licenses certain software to customers under licensing agreements that allow those customers to embed the Company's software into specific products offered by the customer. The Company also licenses its software to licensees who pay a fee based on the amount of sales of their products that incorporate the Company's software. On a periodic basis, the licensees provide the Company with reports listing their sales to end users for which they owe the Company license fees. As the reports substantiate delivery has occurred, the Company recognized revenue based on the information in these reports or when amounts could be reasonably estimated.

Service Revenue

Revenue for service is generally recognized upon the services being rendered. Service revenue primarily consists of customer field support agreements for the Company's hardware products. For customer field support agreements, revenue equal to the separately stated price of these service contracts is initially deferred and recognized as revenue ratably over the contract period.

Royalty Revenue

The Company licenses certain intellectual property to third party manufacturers under arrangements that are represented by master contracts. The master contracts give the third-party manufacturers rights to the intellectual property which include allowing them to either manufacture or include the intellectual property in products for resale. As consideration, the licensees pay the Company a per-unit royalty for sales of their products that incorporate the Company's intellectual property. On a periodic and timely basis, the licensees provide the Company with reports listing units sold to end users subject to the royalties. As the reports substantiate delivery has occurred, the Company recognized revenue based on the information either in these reports or when amounts can be reasonably estimated.

Shipping and Handling Fees

Shipping and handling fees are included in cost of revenue and were $9.1 million, $10.3 million and $10.4 million for the years ended March 31, 2019, 2018, and 2017, respectively.

Research and Development Costs

Expenditures relating to the development of new products and processes are expensed as incurred. These costs include expenditures for employee compensation, materials used in the development effort, other internal costs, as well as expenditures for third party professional services. The Company has determined that technological feasibility for its software products is reached shortly before the products are released to manufacturing. Costs incurred after technological feasibility is established have not been material. The Company expenses software-related research and development costs as incurred. Research and development costs were $32.1 million, $38.6 million, and $44.4 million for the years ended March 31, 2019, 2018 and 2017, respectively.

Advertising Expense

The Company expenses advertising costs as incurred. Advertising expenses were $4.5 million, $8.9 million and $9.7 million for the years ended March 31, 2019, 2018 and 2017, respectively.

Restructuring Reserves

Restructuring reserves include charges related to the realignment and restructuring of the Company's business operations. These charges represent judgments and estimates of the Company's costs of severance, closure and consolidation of facilities and settlement of contractual obligations under its operating leases, including sublease rental rates, asset write-offs and other related costs. The Company reassesses the reserve requirements to complete each individual plan under the restructuring programs at the end of each reporting period. If these estimates change in the future or actual results differ from the Company's estimates, additional charges may be required.

Foreign Currency Translation and Remeasurement

The Company translates the assets and liabilities of its non-U.S. dollar functional currency subsidiaries into U.S. dollars using exchange rates in effect at the end of each period. Revenue and expenses for these subsidiaries are translated using rates that approximate those in effect during the period. Gains and losses from these translations are recognized in foreign currency translation adjustments included in accumulated other comprehensive loss. The Company's subsidiaries that use the U.S. dollar as their functional currency remeasure monetary assets and liabilities at exchange rates in effect at the end of each period, and inventories, property, and nonmonetary assets and liabilities at historical rates. Gains and losses from these remeasurements are included in other (income) expense in the accompanying consolidated statements of operations.

Income Taxes

The Company accounts for income taxes in accordance with ASC Topic 740, *Income Taxes* in which deferred tax asset and liabilities are recognized based on differences between the financial reporting carrying values of assets and liabilities and the tax basis of those assets and liabilities, measured at the enacted tax rates expected to apply to taxable income in the years in which those tax assets or liabilities are expected to be realized or settled.

A valuation allowance is provided if the Company believes it is more likely than not that all or some portion of the deferred tax asset will not be realized. An increase or decrease in the valuation allowance, if any, that results from a change in circumstances, and which causes a change in the Company's judgment about the realizability of the related deferred tax asset, is included in the tax provision.

The Company assesses whether tax benefits claimed or expected to be claimed on a tax return should be recorded in the financial statements. The Company may recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, including resolution of any related appeals or litigation processes, based on the technical merits of the position. The tax benefit to be recognized in the financial statements from such a position is measured as the largest amount of benefit that has a greater than fifty percent likelihood of being realized upon ultimate settlement. The Company reevaluates these uncertain tax positions on a quarterly basis. This evaluation is based on factors including, but not limited to, changes in facts or circumstances and changes in tax law. The Company recognizes penalties and tax-related interest expense as a component of income tax expense in the consolidated statements of operations.

Asset Retirement Obligations

The Company records an asset retirement obligation for the fair value of legal obligations associated with the retirement of tangible long-lived assets and a corresponding increase in the carrying amount of the related asset in the period in which the obligation is incurred. In periods subsequent to initial measurement, the Company recognizes changes in the liability resulting from the passage of time and revisions to either the timing or the amount of the original estimate. Over time, the liability is accreted to its present value and the capitalized cost is depreciated over the estimated useful life of the asset. The Company's obligations relate primarily to certain legal obligations to remediate leased property on which certain assets are located.

Warranty Expense

The Company warranties its products against certain defects and the terms range from one to three years. The Company provides for the estimated costs of fulfilling its obligations under hardware warranties at the time the related revenue is recognized. The Company estimates the provision based on historical and projected product failure rates, historical and projected repair costs, and knowledge of specific product failures (if any). The Company regularly reassess its estimates to determine the adequacy of the recorded warranty liability and adjusts the provision as necessary.

Debt Issuance Costs

Debt issuance costs for revolving credit agreements are capitalized and amortized over the term of the underlying agreements on a straight-line basis. Amortization of these debt issuance costs is included in interest expense while the unamortized debt issuance cost balance is included in other current assets and other assets. Debt issuance costs for the Company's convertible debt and term loans are recorded as a reduction to the carrying amount and are amortized over their term using the effective interest method. Amortization of these debt issuance costs is included in interest expense.

Stock-Based Compensation

The Company classifies stock-based awards granted in exchange for services as either equity awards or liability awards. The classification of an award as either an equity award or a liability award is generally based upon cash settlement options. Equity awards are measured based on the fair value of the award at the grant date. Liability awards are re-measured to fair value each reporting period. Each reporting period, the Company recognizes the change in fair value of awards issued to non-employees as expense. The Company recognizes stock-based compensation on a straight-line basis over the award's requisite service period, which is generally the vesting period of the award, less actual forfeitures. No compensation expense is recognized for awards for which participants do not render the requisite services. For equity and liability awards earned based on performance or upon occurrence of a contingent event, when and if the awards will be earned is estimated. If an award is not considered probable of being earned, no amount of stock-based compensation is recognized. If the award is deemed probable of being earned, related compensation expense is recorded over the estimated service period. To the extent the estimate of awards considered probable of being earned changes, the amount of stock-based compensation recognized will also change.

Fair Value Measurements

The fair value of financial instruments is based on estimates using quoted market prices, discounted cash flows or other valuation techniques. Those techniques are significantly affected by the assumptions used, including the discount rate and the estimated timing and amount of future cash flows. Therefore, the estimates of fair value may differ substantially from amounts that ultimately may be realized or paid at settlement or maturity of the financial instruments, and those differences may be material. Accordingly, the aggregate fair value amounts presented may not represent the value as reported by the institution holding the instrument.

The Company uses the three-tier hierarchy established by U.S. GAAP, which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring the fair value of its financial instruments. This hierarchy indicates to what extent the inputs used in the Company's calculations are observable in the market. The different levels of the hierarchy are defined as follows:

Level 1: Unadjusted quoted prices in active markets for identical assets or liabilities.

Level 2: Other than quoted prices that are observable in the market for the asset or liability, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or model-derived valuations or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3: Inputs are unobservable and reflect management's estimates of assumptions that market participants would use in pricing the asset or liability.

Concentrations

The Company sells products to customers in a wide variety of industries on a worldwide basis. In countries or industries where the Company is exposed to material credit risk, the Company may require collateral, including cash deposits and letters of credit, prior to the completion of a transaction. The Company does not believe it has significant credit risk beyond that provided for in the consolidated financial statements in the ordinary course of business. During the fiscal years ended March 31, 2019, 2018 and 2017 no customers represented 10% or more of the Company's total revenue. The Company had one customer comprising approximately 21% of accounts receivable as of March 31, 2019, one customer comprising approximately 10% of accounts receivable as of March 31, 2018 and one customer comprising approximately 11% of accounts receivable as of March 31, 2017.

If the Company is unable to obtain adequate quantities of the inventory needed to sell its products, the Company could face costs increases or delays or discontinuations in product shipments, which could have a material/adverse effect on the Company's results of operations. In many cases, the Company's business partner may be the sole source of supply for the products or parts they manufacture, or services they provide, for the Company. Some of the products the Company purchases from these sources are proprietary or complex in nature, and therefore cannot be readily or easily replaced by alternative sources.

Segment Reporting

Business segments are defined as components of an enterprise about which discrete financial information is available and is evaluated regularly by the chief operating decision maker in deciding how to allocate resources and in assessing operating performance. Based on the way the Company manages its business, the Company has determined that it currently operates with one reportable segment. The chief operating decision maker focuses on consolidated results in assessing operating performance and allocating resources. Furthermore, the Company offers similar products and services and uses similar processes to sell those products and services to similar classes of customers.

The Company's chief operating decision-maker is its Chief Executive Officer who makes resource allocation decisions and assesses performance based on financial information presented on a consolidated basis. There are no segment managers who are held accountable by the chief operating decision-maker, or anyone else, for operations, operating results, and planning for levels or components below the consolidated unit level. Accordingly, the Company has determined that it has a single reportable segment and operating segment structure.

Defined Contribution Plan

The Company sponsors a qualified 401(k) retirement plan for its U.S employees. The plan covers substantially all employees who have attained the age of 18. Participants may voluntarily contribute to the plan up to the maximum limits established by Internal Revenue Service regulations. The Company made matching contributions to employees of $0.8 million and $1.3 million, during the fiscal years ended March 31, 2018 and 2017, respectively. No matching contributions were made in the fiscal years ended March 31, 2019.

Recently Adopted Accounting Pronouncements

In August 2014, the Financial Accounting Standards Board ("FASB") issued ASU No. 2014-15, *Presentation of Financial Statements – Going Concern (Topic 205-40): Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern* ("ASU 2014-15"). ASU 2014-15 requires that management assess an entity's ability to continue as a going concern by incorporating and expanding upon certain principles that are currently in U.S. auditing standards. ASU 2014-15 is effective for annual periods ending after December 15, 2016, and for annual periods and interim periods thereafter. The Company adopted ASU 2014-15 beginning April 1, 2016, or fiscal 2017. The Company evaluated its forecasted earnings, cash flows and liquidity to evaluate any situations, including payment of its convertible notes upon maturity, that would trigger additional assessment and reporting under this standard. Based upon such evaluation, the adoption did not impact the Company's consolidated financial statements or related disclosures.

In April 2015, the FASB issued ASU No. 2015-05, *Customer's Accounting for Fees Paid in a Cloud Computing Arrangement* ("ASU 2015-05"). ASU 2015-05 requires that customers apply the same criteria as vendors to determine whether a cloud computing arrangement ("CCA") contains a software license or is solely a service contract. Under ASU 2015-05, fees paid by a customer in a CCA will be within the scope of internal-use software guidance if both of the following criteria are met: 1) the customer has the contractual right to take possession of the software at any time without significant penalty and 2) it is feasible for the customer to run the software on its own hardware (or to contract with another party to host the software). ASU 2015-05 may be applied prospectively to all agreements entered into or materially modified after the adoption date or retrospectively. The Company adopted ASU 2015-05 prospectively beginning April 1, 2016, or fiscal 2017, and adoption did not impact its consolidated financial statements or related disclosures.

In July 2015, the FASB issued ASU No. 2015-11, *Inventory* (Topic 330) ("ASU 2015-11"). ASU 2015-11 requires that an entity measure all inventory at the lower of cost and net realizable value, except for inventory that is measured using last-in, first-out (LIFO) or the retail inventory method. The Company adopted ASU 2015-11 prospectively beginning April 1, 2017, or fiscal 2018, and adoption did not impact its consolidated financial statements or related disclosures.

In March 2016, the FASB issued ASU No. 2016-09, *Compensation—Stock compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting* ("ASU 2016-09"). ASU 2016-09 amended several aspects of the accounting for stock-based payment transactions, including simplifying the accounting for income tax consequences of stock-based payments, changing how classification is impacted by statutory withholding requirements, clarifying how statutory withholdings should be classified on the statement of cash flows, and permitting companies to make an accounting policy election to estimate forfeitures or recognize them as they occur. The Company adopted ASU 2016-09 beginning April 1, 2017, or fiscal 2018, using multiple transition approaches as prescribed by the guidance. The Company's tax windfall benefits are reported in the statement of operations instead of equity to the extent that the Company does not have an offsetting valuation allowance and such benefits are recorded within its deferred taxes. The Company has elected to account for forfeitures as they occur. Additionally, the new guidance has changed how management calculates EPS under the treasury stock method. The adoption of ASU 2016-09 did not impact the Company's consolidated financial statements or related disclosures.

In August 2016, the FASB issued ASU No. 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Receipts and Cash Payments* ("ASU 2016-15"). ASU 2016-15 provides guidance on the following eight specific cash flow issues: 1) debt prepayment or debt extinguishment costs, 2) settlement of zero-coupon debt instruments or other debt instruments with coupon interest rates that are insignificant in relation to the effective interest rate of the borrowing, 3) contingent consideration payments made after a business combination, 4) proceeds from the settlement of insurance claims, 5) proceeds from the settlement of corporate-owned life insurance policies, including bank-owned life insurance policies, 6) distributions received from equity method investees, 7) beneficial interests in securitization transactions and 8) separately identifiable cash flows and application of the predominance principle. The Company adopted ASU 2016-15 beginning April 1, 2018, or fiscal 2019, using a retrospective method for all periods presented in accordance with the guidance. The adoption of ASU 2016-15 did not impact the Company's consolidated financial statements or related disclosures.

In November 2016, the FASB issued ASU No. 2016-18, *Statement of Cash Flows (Topic 230): Restricted Cash (a consensus of the FASB Emerging Issues Task Force*) ("ASU 2016-18"). Previously, transfers between cash and cash equivalents and restricted cash were included within operating and investing activities on the Company's consolidated statements of cash flows. ASU 2016-18 requires amounts generally described as restricted cash to be included with cash and cash equivalents when reconciling the total beginning and ending amounts for the periods shown on the statements of cash flows. The Company adopted ASU 2016-18 beginning April 1, 2018, of fiscal 2019, on a retrospective basis. Upon adoption, its restricted cash balances of $6.1 million, $6.3 million, and $23.0 million at March 31, 2019, March 31, 2018, and March 31, 2017, respectively, are included in cash, cash equivalents, and restricted cash on the Company's consolidated statements of cash flows. The following change to the Company's condensed consolidated statements of cash flows for the years ended March 31, 2018 and March 31, 2017 respectively are: Investing Activities $16.6 million and $20.2 million. Cash, Cash Equivalents and Restricted Cash as of March 31, 2016, March 31, 2017, and March 31, 2018 of $36.7 million, $35.9 million, and $17.2 million, respectively.

In January 2017, the FASB issued ASU No. 2017-01, *Business Combinations (Topic 805): Clarifying the Definition of a Business* ("ASU 2017-01"). ASU 2017-01 clarifies the definition of a business with the objective of adding guidance to assist entities with evaluating whether a transaction should be accounted for as acquisitions (or disposals) of assets or businesses. For public companies, this ASU is effective for annual periods beginning after December 15, 2017, including interim periods within those periods. The Company adopted ASU 2017-01 beginning April 1, 2018, or fiscal 2019, using a prospective method. The adoption of ASU 2017-01 did not impact the Company's consolidated financial statements or related disclosures.

In July 2017, the FASB issued ASU No. 2017-11, *Earnings Per Share (Topic 260); Distinguishing Liabilities from Equity (Topic 480); Derivatives and Hedging (Topic 815): (Part I) Accounting for Certain Financial Instruments with Down Round Features; (Part II) Replacement of the Indefinite Deferral for Mandatorily Redeemable Financial Instruments of Certain Nonpublic Entities and Certain Mandatorily Redeemable Noncontrolling Interests with a Scope Exception* ("ASU 2017-11"). ASU 2017-11 allows companies to exclude a down round feature when determining whether a financial instrument (or embedded conversion feature) is considered indexed to the entity's own stock. As a result, financial instruments (or embedded conversion features) with down round features may no longer be required to be accounted for as derivative liabilities. A company will recognize the value of a down round feature only when it is triggered, and the strike price has been adjusted downward. For equity-classified freestanding financial instruments, an entity will treat the value of the effect of the down round as a dividend and a reduction of income available to common shareholders in computing basic earnings per share. For convertible instruments with embedded conversion features containing down round provisions, entities will recognize the value of the down round as a beneficial conversion discount to be amortized to earnings. ASU 2017-11 is effective for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. The Company early adopted ASU 2017-11 as of April 1, 2018 and its adoption impacted the accounting for warrants issued in connection with the Company's Senior Secured Term Loan discussed in Note 5*: Long-Term Debt.*

Recent Accounting Pronouncements

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)* ("ASU 2016-02"). ASU No. 2016-02 establishes the guidance in ASC 842, *Leases,* ("ASC 842") which upon adoption, supersedes prior lease guidance in ASC 840, *Leases.* The guidance in ASC 842 was subsequently amended by ASU No. 2018-01, *Leases (Topic 842): Land Easement Practical Expedient for Transition to Topic 842;* ASU No. 2018-10, *Codification Improvements to Topic 842, Leases;* ASU No. 2018-11, *Leases (Topic 842): Targeted Improvements;* ASU No. 2018-20, *Leases (Topic 842): Narrow-Scope Improvements for Lessors;* and ASU No. 2019-01, *Leases (Topic 842): Codification Improvements* (together with ASU No. 2016-02, the "New Lease Standard").

The New Lease Standard requires lessees to recognize on the balance sheet the assets and liabilities for the rights and obligations created by most leases. Lessees will classify their leases as either finance or operating, with classification affecting recognition, measurement, and presentation of expenses and cash flows arising from a lease. However, regardless of classification, both types of leases will be recognized on the balance sheet except for those leases for which the Company has elected the short-term lease practical expedient. The accounting by lessors does not fundamentally change as a result of the New Lease Standard.

The New Lease Standard is effective for the Company on April 1, 2019 for the fiscal year ended March 31, 2020. A modified retrospective transition approach is required, in which the New Lease Standard is applied to all leases existing at the date of initial application. An entity may choose to use either the effective date or the beginning of the earliest comparative period presented in the financial statements as its date of initial application. The Company adopted the New Lease Standard on April 1, 2019, or fiscal 2020 and used the effective date as the date of initial application. Consequently, financial information will not be updated, and disclosures required under the New Lease Standard will not be provided for dates and periods before April 1, 2019.

An entity is permitted to elect certain optional practical expedients for transition to the New Lease Standard. The Company elected the package of practical expedients that allows it to not reassess 1) whether any expired or existing contracts are or contain leases, 2) the lease classification for any expired or existing leases, and 3) initial direct costs for any expired or existing leases. The Company will not elect the practical expedient to use hindsight when determining the lease term.

The New Lease Standard also provides certain optional accounting policy elections related to an entity's ongoing lease accounting, which can be elected by class of underlying asset. For real estate, vehicles, computers, and office equipment, the Company elected the short-term lease exception whereby the Company will not recognize a lease liability or right-of-use asset on its balance sheet for leases that meet the definition of a short-term lease under the New Lease Standard, generally those leases with a term of 12 months or less. The Company also made an accounting policy election to combine non-lease and lease components for its leases involving real estate, vehicles, computers and office equipment. Consequently, each separate lease and non-lease component associated with that lease will be accounted for as a single combined lease component.

The adoption of the New Lease Standard resulted in the recognition of lease liabilities of $13.5 million and right-of-use assets of $12.7 million, which include the impact of existing deferred rents and tenant improvement allowances on the consolidated balance sheet as of April 1, 2019. The adoption of ASU 2016-02 is not expected to have a material impact on the Company's consolidated statements of operations or cash flows.

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments* ("ASU-2016-13"). ASU 2016-13 will change how entities account for credit impairment for trade and other receivables, as well as for certain financial assets and other instruments. ASU 2016-13 will replace the current "incurred loss" model with an "expected loss" model. Under the "incurred loss" model, a loss (or allowance) is recognized only when an event has occurred (such as a payment delinquency) that causes the entity to believe that it is probable that a loss has occurred (i.e., that it has been "incurred"). Under the "expected loss" model, a loss (or allowance) is recognized upon initial recognition of the asset that reflects all future events that leads to a loss being realized, regardless of whether it is probable that the future event will occur. The "incurred loss" model considers past events and current conditions, while the "expected loss" model includes expectations for the future which have yet to occur. ASU 2018-19, *Codification Improvements to Topic 326, Financial Instruments – Credit Losses*, was issued in November 2018 and excludes operating leases from the new guidance. The standard will require entities to record a cumulative-effect adjustment to the balance sheet as of the beginning of the first reporting period in which the guidance is effective. For public entities, ASU 2016-13 is effective for fiscal years beginning after December 15, 2019. The Company is currently evaluating the potential impact that ASU 2016-13 may have on the timing of recognition and measurement of future provisions for expected losses on its accounts receivable.

In January 2017, the FASB issued ASU No. 2017-04, *Intangibles-Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment* ("ASU 2017-04"). ASU 2017-04 will eliminate the requirement to calculate the implied fair value of goodwill (i.e. Step 2 of the current goodwill impairment test) to measure a goodwill impairment charge. Instead, entities will record an impairment charge based on the excess of a reporting unit's carrying amount over its fair value (i.e. measure the charge based on the current Step 1). Any impairment charge will be limited to the amount of goodwill allocated to an impacted reporting unit. ASU 2017-04 will not change the current guidance for completing Step 1 of the goodwill impairment test, and an entity will still be able to perform the current optional qualitative goodwill impairment assessment before determining whether to proceed to Step 1. Upon adoption, the ASU will be applied prospectively. For public companies, ASU 2017-04 will be effective for interim and annual periods beginning after December 15, 2019. The Company does not expect ASU 2017-04 to have a material impact on its consolidated financial statements or related disclosures.

In February 2018, the FASB issued ASU No. 2018-02, *Income Statement — Reporting Comprehensive Income (Topic 220), Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income* ("ASU 2018-02"). ASU 2018-02 allows a reclassification from accumulated other comprehensive income to retained earnings for stranded tax effects resulting from the Tax Cuts and Jobs Act and will improve the usefulness of information reported to financial statement users. ASU 2018-02 will require the Company to make certain disclosures about stranded tax effects. For public companies, ASU 2018-02 is effective for annual reporting periods beginning after December 15, 2018, and interim periods within those fiscal years. The Company is currently evaluating the impact ASU 2018-02 will have on its consolidated financial statements and related disclosures.

In June 2018, the FASB issued ASU No. 2018-07, *Share-based Payments to Non-Employees* ("ASU 2018-07"), to simplify the accounting for share-based payments to non-employees by aligning it with the accounting for stock-based payments to employees, with certain exceptions. For public business entities, ASU 2018-07 is effective for annual reporting periods beginning after December 15, 2018, including interim periods within that fiscal year. The Company does not expect ASU 2018-07 to have a material impact on its consolidated financial statements or related disclosures.

In August 2018, the FASB issued ASU No. 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework — Changes to the Disclosure Requirements for Fair Value Measurement* ("ASU 2018-03"). ASU 2018-03 eliminates, adds and modifies certain disclosure requirements for fair value measurements as part of the FASB's disclosure framework project. For all entities, ASU 2018-03 is effective for annual and interim reporting periods beginning after December 15, 2019. Certain amendments must be applied prospectively while others are to be applied on a retrospective basis to all periods presented. As disclosure guidance, the adoption of ASU 2018-03 will not have an effect on the consolidated financial statements.

In August 2018, the FASB issued ASU No. 2018-15, *Implementation Costs Incurred in Cloud Computing Arrangements* ("ASU 2018-15"). ASU 2018-15 aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software (and hosting arrangements that include aninternal-use software license). For public entities, ASU 2018-15 is effective for annual reporting periods beginning after December 15, 2019, and interim periods within those fiscal that fiscal year. ASU 2018-15 should be applied either retrospectively or prospectively to all implementation costs incurred after the date of adoption. The Company is currently evaluating the impact ASU 2018-15 will have on its consolidated financial statements and related disclosures.

Reclassifications

Certain prior period amounts in the consolidated financial statements, and notes thereto, have been reclassified to conform to current period presentation.

NOTE 4: BALANCE SHEET INFORMATION

Certain significant amounts included in the Company's consolidated balance sheets consist of the following (in thousands):

	March 31,	
	2019	2018
Manufacturing inventories:		
Finished goods		
Manufactured finished goods	$ 8,160	$11,215
Distributor inventory	3,345	10,870
Total finished goods	11,505	22,085
Work in progress	107	778
Raw materials	6,828	11,565
Total manufacturing inventories	$18,440	$34,428
Service inventories:		
Finished goods	$13,437	$14,863
Component parts	5,633	7,026
Total service inventories	$19,070	$21,889
Other current assets:		
Insurance receivable	$ 8,950	$ —
Prepayments	3,856	4,331
Income tax receivable	1,927	582
Other	3,362	8,652
Total other current assets	$18,095	$13,565

	As of March 31,	
	2019	2018
Property and equipment, net		
Machinery and equipment	$ 30,306	$ 34,090
Furniture and fixtures	2,073	1,942
Leasehold improvements	6,990	6,763
	39,369	42,795
Less: accumulated depreciation and amortization	(30,932)	(33,097)
Total property, plant and equipment, net	$ 8,437	$ 9,698
Other accrued liabilities:		
Accrued expenses	$ 8,925	$ 7,619
Asset retirement obligation	1,936	2,176
Accrued settlement	10,452	101
Accrued warranty	3,456	2,422
Other accrued liabilities	4,256	5,320
Total other current liabilities	$ 29,025	$ 17,638

Depreciation and amortization expense on property, plant and equipment was approximately $4.2 million, $4.8 million and $5.4 million for the fiscal years ended March 31, 2019, 2018 and 2017, respectively.

The following table details the change in the accrued warranty balance (in thousands):

	For the year ended March 31,		
	2019	2018	2017 (as restated)
Opening balance	$ 2,422	$ 3,689	$ 3,448
Additional warranties issued	5,766	5,139	7,491
Adjustments for warranties issued in prior fiscal years	326	(116)	309
Settlements	(5,058)	(6,291)	(7,559)
Ending balance	$ 3,456	$ 2,422	$ 3,689

NOTE 5: LONG-TERM DEBT

The Company's long-term debt consisted of the following (in thousands):

	As of March 31,	
	2019	2018
TCW Term Loan	$ —	$ 90,424
PNC Credit Facility	—	33,107
Senior Secured Term Loan	164,588	—
Total debt	164,588	123,531
Less: current portion	(1,650)	(7,500)
Less: unamortized debt issuance costs (1)	(17,317)	(45)
Long-term debt, net	$145,621	$115,986

(1) The unamortized debt issuance costs related to the TCW Term Loan and the Senior Secured Term Loan are presented as a reduction of the carrying amount of the corresponding debt balance on the accompanying consolidated balance sheets. Unamortized debt issuance costs related to the PNC Credit Facility are presented within other assets on the accompanying consolidated balance sheets.

Convertible Subordinated Debt

In the third quarter of fiscal 2013, the Company issued $70.0 million aggregate principal amount of 4.50% convertible subordinated notes due November 15, 2017 (the "Convertible Notes"). The Convertible Notes were convertible into shares of the Company's common stock until November 14, 2017 at the option of the holders at a conversion rate of 75.896 shares per $1,000 principal amount, a conversion price of approximately $13.20 per share. As the purchasers were qualified institutional investors, as defined in Rule 144A under the Securities Act of 1933 ("Securities Act"), the notes were not registered under the Securities Act. The Company paid 4.50% interest per annum on the principal amount of the Convertible Notes semi-annually in May and November of each year. The Convertible Notes were subordinated to any existing indebtedness and other liabilities pro-rata. The Company incurred and capitalized $2.3 million of fees related to the issuance of the Convertible Notes. These fees were amortized to interest expense over the term of the Convertible Notes with the remaining unamortized amount included as a deduction to the carrying amount while the notes were outstanding.

During the fiscal year ended March 31, 2017, the Company entered into transactions with the Convertible Note holders to repurchase an aggregate principal amount of $6.9 million of the 4.50% notes for $6.8 million of cash. In connection with these transactions, the Company recorded a gain on debt extinguishment of $0.1 million, which included a write-off of the pro-rata unamortized debt issuance costs related to its purchased notes.

During the fiscal year ended March 31, 2018, the Company entered into transactions with the Convertible Notes holders to repurchase an aggregate principal amount of $6.0 million of the 4.50% notes for $6.0 million of cash. In connection with these repurchase transactions, the Company recorded a loss on debt extinguishment of less than $0.1 million, which included a write-off of unamortized debt issuance costs related to the repurchased notes.

On November 15, 2017, the Company paid all outstanding principal and accrued interest on the Convertible Notes.

TCW Term Loan and PNC Credit Facility

On October 21, 2016 (the "Closing Date"), the Company entered into a term loan and security agreement (the "TCW Term Loan") with TCW Asset Management Company LLC ("TCW") and a revolving credit and security agreement (the "PNC Credit Facility" and together with the TCW Term Loan, the "Credit Agreements") with PNC Bank, National Association ("PNC").

Borrowings under the TCW Term Loan paid interest at a rate per annum equal to, at the Company's option, either (a) the greater of (i) 3.00%, (ii) the federal funds rate plus 0.50%, (iii) the LIBOR rate based upon an interest period of 1 month plus 1.0% and (iv) the "prime rate" last quoted by the Wall Street Journal, plus a margin ranging from 6.00% to 7.25% based on the applicable senior net leverage ratio, as defined in the TCW Term Loan agreement, or (b) the LIBOR rate plus 7.00% to 8.25% based on the applicable senior net leverage ratio. Borrowings under the PNC Credit Facility charged interest at a rate per annum equal to, at the Company's option, either (a) the greater of (i) the base rate, as defined in the PNC Credit Facility Agreement, (ii) the federal funds rate plus 0.50% and (iii) the 1 month LIBOR rate, plus 1.0%, plus an applicable margin of 1.50%, or (b) the LIBOR rate plus an applicable margin of 2.50%. Additionally, the Company was required to pay a 0.375% commitment fee on undrawn amounts under the PNC Credit Facility on a quarterly basis, which was recorded as interest expense in the period incurred.

November 2017 Amendment

In November 2017, the Company amended the Credit Agreements (the "November 2017 Amendment") to, among other things, allow the Company to access a $20.0 million delayed draw term loan (the "DDTL") which was not previously available due to failure to meet certain financial requirements. In addition, the November 2017 Amendment allowed for an additional $20.0 million in available borrowings under an incremental delayed draw term loan with TCW (the "IDDTL") and amended covenants under the Credit Agreements. The amendment also increased the applicable margins added to the base interest rates for the Credit Agreements and added prepayment penalties starting at 5.0% of the principal amount to be repaid, decreasing to zero until maturity.

In connection with the November 2017 Amendment, the Company issued warrants to purchase 330,000 shares of the Company's common stock at an exercise price of $0.01 per share to TCW ("November 2017 Amendment Warrants). TCW immediately exercised 198,000 of the November 2017 Amendment Warrants and the remaining 132,000 were contingently exercisable if the Company failed to meet certain financial requirements or repay borrowings under the IDDTL by March 31, 2019. The Company determined the fair value of the November 2017 Amendment Warrants to be approximately $1.8 million of which $1.1 million was allocated to the warrants to purchase 198,000 shares of the Company's common stock and recorded as additional paid in capital and $0.7 million allocated to the remaining contingently exercisable warrants to purchase 132,000 shares of the Company's common stock and recorded as a liability with changes in fair value recorded in the consolidated statements of operations until the exercise contingencies were met.

The Company determined that the November 2017 Amendment was a modification of both the TCW Term Loan and PNC Credit Facility. In connection with this modification, the Company incurred $2.6 million in costs related to the TCW Term Loan (including $1.8 million related to the value of the November 2017 Amendment Warrants) and $0.8 million cash paid to TCW. These debt issuance costs were reflected as a reduction of the carrying amount of the TCW Term Loan and amortized to interest expense over the term of the TCW Term Loan. The Company also incurred $0.2 million in costs related to the amendment of the PNC Credit Facility which was recorded to other current assets and other assets and amortized to interest expense over the term of the PNC Credit Facility. Approximately $0.3 million in third party costs were expensed as incurred related to the November 2017 Amendment.

February 2018 Amendment

In February 2018, the Company amended the Credit Agreements (the "February 2018 Amendment") to, among other things, (a) provide for 2% paid-in-kind interest on the TCW Term Loan, (b) allow for the release of $7.0 million in restricted cash required under the terms of the PNC Credit Facility, and (C) modify certain covenants associated with the Credit Agreements.

In connection with the February 2018 Amendment, the Company issued warrants to purchase 150,000 shares of the Company's common stock at an exercise price of $0.01 per share to TCW ("February 2018 Amendment Warrants"). TCW immediately exercised 75,000 of the February 2018 Amendment Warrants and the remaining warrants to purchase 75,000 of the Company's common stock were contingently exercisable if the Company failed to meet certain financial requirements. The Company determined the fair value of the February 2018 Amendment Warrants to be approximately $0.6 million of which $0.3 million was allocated to the non-contingent warrants to purchase 75,000 shares of the Company's common stock and recorded as additional paid in capital and $0.3 million was allocated to the remaining contingency exercisable warrants to purchase 75,000 shares of the Company's common stock and was recorded as a liability with changes in fair value recorded in the consolidated statements of operations until the exercise contingencies were met.

The Company accounted for the February 2018 Amendment related to the TCW Term Loan as a debt extinguishment. Accordingly, a $6.9 million loss on debt extinguishment was recorded during the year ended March 31, 2018 which included unamortized debt issuance costs of approximately $3.8 million and fees paid to TCW of $3.1 million (including $0.6 million related to the value of the February 2018 Amendment Warrants). The Company accounted for the February 2018 Amendment related to the PNC Credit Facility as a modification. The Company paid PNC an amendment fee of $0.6 million which was included in other current assets and amortized to interest expense over the term of the PNC Credit Facility.

August 2018 Amendment

In August 2018, the Company amended the Credit Agreements (the "August 2018 Amendment") to, among other things, (a) provide for an additional $20 million in available borrowings under an additional incremental delayed draw term loan with TCW (the "AIDDTL") of which $6.7 million was immediately borrowed, (b) accelerate the maturity date of the TCW Term Loan to January 31, 2019, (c) defer required principal and interest payments until the January 31, 2019 maturity date, (d) modify certain financial covenants and related definitions, (e) extend the due date for the Company to provide audited financial statements, and (f) require the Company to meet certain milestones related to the Company completing a refinancing transaction, as defined in the August 2018 Amendment (the "Refinancing Transaction").

In connection with the August 2018 Amendment, the Company issued warrants to purchase 1,099,533 of the Company's common stock at an exercise price of $2.11 per share. To the extent that the Company did not complete a Refinancing Transaction and repay the entire TCW Term Loan by September 30, 2018, October 31, 2018, November 30, 2018 and December 31, 2018, then on each such date the Company was required to issue additional warrants to purchase 3% of the then outstanding common stock of the Company with an exercise price equal to the closing price of the Company's common stock on the business day immediately prior to the date of issuance of the warrants. A total of 4,398,132 warrants to purchase the Company's common stock were issued related to the August 2018 Amendment (the "August 2018 Amendment Warrants") with warrants to purchase 1,099,533 shares issued on each of September 30, 2018, October 31, 2018 and November 30, 2018 with exercise prices of $2.40 per share, $2.39 per share and $2.40 per share, respectively. The August 2018 Amendment Warrants are exercisable until August 31, 2023 and contain anti-dilution provisions adjusting the exercise price and the number and type of shares underlying the warrants in the event of specified events, including a reclassification of the Company's common stock, a subdivision or combination of the Company's common stock or specified dividend payments.

The August 2018 Amendment Warrants were not exercisable until February 1, 2019, on which date, the exercise price of each of the warrants that were issued was reset to the lower of: (a) the applicable existing exercise price for such warrant or (b) the lowest of the 5-day volume-weighted average closing prices of the Company's common stock for the last five trading days in the months of September 2018, October 2018, November 2018, December 2018 and January 2019. The exercise price for all of the August 2018 Amendment Warrants was adjusted to $1.62 per share on February 1, 2019.

Due to the exercise price reset provision in the August 2018 Amendment Warrants, the Company initially recorded the value of the warrants as a liability with changes in fair value recorded as other income (expense) in the accompanying consolidated statements of operations. The Company reclassified the fair value of the warrants of $5.6 million to additional paid in capital on February 1, 2019, the exercise price reset date. A loss of approximately $0.4 million was recorded to other income (expense) during fiscal year 2019 before the reclassification to equity.

The August 2018 Amendment provided a repurchase right allowing the Company to repurchase 50% of the August 2018 Amendment Warrants issued within 30 days of repayment of amounts due under the TCW Term Loan for $0.001 per warrant. The Company repaid the TCW Term Loan on December 27, 2018 and repurchased 549,766 warrants for $550,000 which resulted in a reduction in the fair value of the August 2018 Amendment Warrants liability of $0.4 million which was recorded as other income (expense) in the accompanying consolidated statements of operations and comprehensive income.

The Company accounted for the August 2018 Amendment related to the TCW Term Loan as a debt extinguishment. Accordingly, a $14.9 million loss on debt extinguishment was recorded during the year ended March 31, 2018 related primarily to fees paid to TCW (including $5.7 million related to the value of the August 2018 Amendment Warrants). The Company also accounted for the August 2018 Amendment related to the PNC Credit Facility as a debt extinguishment and recorded a loss on debt extinguishment of approximately $1.8 million related to a portion of the unamortized debt issuance costs. The Company paid PNC an amendment fee of $1.7 million which was included in to other current assets and amortized to interest expense over the original term of the PNC Credit Facility.

As of March 31, 2018, the interest rates on the TCW Term Loan and the PNC Credit Facility were 12.6% and 7.1%, respectively.

Senior Secured Term Loan and Amended PNC Credit Facility

On December 27, 2018 (the “Closing Date”), the Company entered into a senior secured term loan of $150.0 million with U.S. Bank, National Association (“U.S. Bank”), drawn on the Closing Date, and a senior secured delayed draw term loan of $15.0 million (collectively, “the Senior Secured Term Loan”) which was drawn in January 2019. In connection with the Senior Secured Term Loan, the Company amended its existing PNC Credit Facility (the “Amended PNC Credit Facility”) providing for borrowings up to a maximum principal amount of the lesser of: (a) $45.0 million or (b) the amount of the borrowing base, as defined in the PNC Credit Facility agreement. Borrowings under the Senior Secured Term Loan and Amended PNC Credit Facility (collectively, the “December 2018 Credit Agreements”) mature on December 27, 2023.

A portion of the proceeds from the Senior Secured Term Loan was used to repay all outstanding borrowings under the TCW Term Loan. The Company recorded a loss on debt extinguishment of $0.8 million related to repayment of the TCW Term Loan including unamortized debt issuance costs of $0.1 million and costs paid to the TCW of $0.7 million. The Company accounted for the Amended PNC Credit Facility as a modification. The Company incurred $1.4 million in costs related to the amendment which was recorded to other assets and is being recognized as interest expense over the term of the Amended PNC Credit Facility.

Borrowings under the Senior Secured Term Loan bear interest at a rate per annum, at the Company’s option, equal to (a) the greater of (i) 3.00%, (ii) the Federal funds rate plus 0.50%, (iii) the LIBOR Rate based upon an interest period of 1 month plus 1.0%, and (iv) the Prime Rate as quoted by the Wall Street Journal, plus an applicable margin of 9.00% or (b) LIBOR Rate plus an applicable margin of 10.00%. Interest on the Senior Secured Term Loan is payable quarterly. Principal payments of 0.25% of the original balance of the Senior Secured Term Loan are due quarterly with the remaining principal balance due at maturity. Additionally, on an annual basis beginning with the fiscal year ending March 31, 2020, the Company will be required to perform a calculation of excess cash flow, as defined in the Senior Secured Term Loan agreement, which may require an additional payment of the principal in certain circumstances.

Borrowings under the Amended PNC Credit Facility bear interest, at the Company’s option, equal to, (a) the greater of (i) the base rate, as defined in the PNC Credit Facility, (ii) the daily Overnight Bank Funding Rate plus 0.5% and (iii) the daily LIBOR rate plus 1.0%, plus an applicable margin of (A) 3.00% for the period from the Closing Date until the date quarterly financial statements are delivered to PNC for the fiscal quarter ending June 30, 2019 and (B) thereafter, ranging from 2.50% to 3.50% based on the Company’s applicable total leverage ratio, as defined, or (b) the LIBOR Rate plus an applicable margin of (A) 4.00% for the period from the Closing Date until the date quarterly financial statements are delivered to PNC for the fiscal quarter ending June 30, 2019 and (B) thereafter, ranging from 3.50% to 4.50% based on the Company’s applicable total leverage ratio, as defined in the Amended PNC Credit Facility agreement. Interest on the Amended PNC Credit Facility is payable quarterly.

In connection with the Senior Secured Term Loan agreement, the Company issued warrants to purchase 7,110,616 shares of the Company's common stock, at an exercise price of $1.33 per share (the "Term Loan Warrants"). The exercise price and the number of shares underlying the Term Loan Warrants are subject to adjustment in the event of specified events, including dilutive issuances of common stock linked equity instruments at a price lower than the exercise price of the warrants ("Down Round Feature"), a subdivision or combination of the Company's common stock, a reclassification of the Company's common stock or specified dividend payments. The Term Loan Warrants are exercisable until December 27, 2028. Upon exercise, the aggregate exercise price may be paid, at each warrant holder's election, in cash or on a net issuance basis, based upon the fair market value of the Company's common stock at the time of exercise.

As disclosed in Note 3:*Summary of Significant Accounting Policies*, the Company early adopted ASU 2017-11, as of April 1, 2018. In accordance with ASU 2017-11, the presence of the Down Round Feature does not preclude the Term Loan Warrants from being classified in stockholders' deficit. Accordingly, the Company determined that the fair value of the warrants of $8.8 million should be classified within stockholders' deficit upon issuance.

The Company incurred $18.3 million in costs related to the Senior Secured Term Loan (including $8.8 million related to the value of the Term Loan Warrants). These debt issuance costs are reflected as a reduction of the carrying amount of the Senior Secured Term Loan and are being recognized as interest expense over the term of the Senior Secured Term Loan.

The December 2018 Credit Agreements contain certain covenants, including requirements to prepay the loans in an amount equal to 100% of the net cash proceeds from certain assets dispositions, subject to certain reinvestment rights and other exceptions and equity issuances. Amounts outstanding under the December 2018 Credit Agreements may become due and payable upon the occurrence of specified events, which among other things include (subject to certain exceptions and cure periods) (i) failure to pay principal, interest, or any fees when due, (ii) breach of any representation or warranty, covenant, or other agreement, (iii) the occurrence of a bankruptcy or insolvency proceeding with respect to the Company or any of its subsidiaries, (iv) any event of default with respect to other indebtedness involving an aggregate amount of $1.0 million or more, (v) any lien created by the December 2018 Credit Agreements or any related security documents ceasing to be valid and perfected; (vi) the December 2018 Credit Agreements or any related security documents or guarantees ceasing to be legal, valid, and binding upon the parties thereto; or a change of control shall occur. The December 2018 Credit Agreements contain financial covenants relating to a fixed charge coverage ratio, minimum EBITDA and minimum liquidity. The Amended PNC Credit Facility also includes a total net leverage ratio and total leverage ratio covenants. As of March 31, 2019, the Company was in compliance with all covenants.

The Senior Secured Term Loan contains a prepayment penalty which is calculated based on (i) if prepayment occurs prior to30-month anniversary of the Closing Date, the prepayment penalty is the present value of all required interest payments due on the Senior Secured Term Loan that are prepaid from the date of prepayment through and including the 30-month anniversary of the Closing Date calculated based on the 3 month LIBOR Rate plus 10%, plus 5.0% of the amount of principal prepaid, (ii) if prepayment occurs between the 30-month anniversary of Closing Date through the third anniversary of the Closing Date, the prepayment penalty is 5.0% of the principal prepaid and (iii) if prepayment occurs between the third anniversary of the Closing Date through the fourth anniversary of Closing Date, the prepayment penalty is 2.0% of the principal prepaid (the "Prepayment Penalty"). There is no Prepayment Penalty after the fourth anniversary of the Closing Date. In addition to the Prepayment Penalty under the terms of the Senior Secured Term Loan, the Company is permitted to prepay up to 25% of the aggregate principal amount of the outstanding Senior Secured Term Loan balance with cash proceeds of a public offering of the Company's common stock at a prepayment premium of 12% of the principal amount being repaid.

As of March 31, 2019, the interest rates on the Senior Secured Term Loan and the Amended PNC Credit Facility were 12.6% and 8.5%, respectively. As of March 31, 2019, the Company was required to maintain a $5.0 million restricted cash reserve as part of the Amended PNC Credit Facility. This balance is presented as long-term restricted cash within the accompanying consolidated balance sheet as of March 31, 2019.

Registration Rights Agreement

In connection with the December 2018 Senior Secured Term Loan, the Company entered into a registration rights agreement with the holders of the Term Loan Warrants (the "Registration Rights Agreement"). The Registration Rights Agreement grants the holders of the Term Loan Warrants certain registration rights for the shares of common stock issuable upon the exercise of the warrants. The agreement calls for the Company to prepare and file a registration statement with the SEC and use commercially reasonable efforts to cause the registration statement to be declared effective as soon as practicable, but in no event later than October 31, 2019 (the "Registration Penalty Date"). If the Company is unable to file and have a Form S-1 registration statement declared effective on the Registration Penalty Date (the "Filing Failure"), the Company is required to pay each holder of Term Loan Warrants an amount of cash equal to (i) $0.3 million multiplied by (ii) such holder's pro rata share of all Term Loan Warrants (the "Registration Delay Payments") on the day of a Registration Penalty Date and on every thirtieth day thereafter until such Filing Failure is cured. In the event the Company fails to make Registration Delay Payments in a timely manner, such Registration Delay Payments shall bear interest at 5.0% of such unpaid Registration Delay Payment until paid in ful1. The Company expects to meet all registration requirements and has determined that such a payment under the Registration Rights Agreement was not probable at the time the agreement was entered into, nor did such a payment become probable prior to or as of March 31, 2019.

Debt Maturities

As of March 31, 2019, a summary of the future scheduled maturities for the Company's outstanding long-term debt are as follows (in thousands):

	Amount
2020	$ 1,650
2021	1,650
2022	1,650
2023	1,650
2024 and thereafter	157,988
Total debt	$164,588

As of March 31, 2019, the Company had no amounts outstanding on the Amended PNC Credit Facility and had borrowing availability of $18.9 million.

NOTE 6: RESTRUCTURING CHARGES

Fiscal Year 2019

During fiscal year 2019, plans were approved to eliminate 84 positions in the U.S. and internationally. The purpose of these plans is to improve operational efficiencies and align with the Company's strategic vision. The Company incurred severance and benefits costs under this restructuring plan of approximately $4.7 million and all separations were completed by the fourth quarter of fiscal 2019.

Also in fiscal year 2019, the Company exited the remaining space at one of its facilities and incurred $0.9 million of restructuring charges as a result of vacating the additional space. As of March 31, 2019, there are three locations under a restructuring plan.

Fiscal Year 2018

In fiscal year 2018, three plans were approved to eliminate 207 positions in the U.S. and internationally. The purpose was to improve operating efficiencies in the workforce to align with the Company's transformation initiative to rationalize its cost structure. The Company incurred severance and benefits costs under these restructuring plans of approximately $8.3 million during fiscal year 2018.

The Company exited one new location during fiscal year 2018 and the costs incurred in vacating this property were fully offset by a sublease on the same property. As of March 31, 2018, the Company had five locations under a restructuring plan.

Fiscal Year 2017

In fiscal 2017, plans were approved to eliminate 43 positions in the U.S. and internationally to reduce investments in various functions of the Company's business and improve operational efficiencies. The costs associated with these actions consist of restructuring charges related to severance and benefits. Approximately $1.5 million of restructuring charges were incurred and paid under this plan.

The Company fully exited one new location during fiscal 2017. The costs incurred in vacating this property were partially offset by sublease income. As of March 31, 2017, the Company had four locations in under a restructuring plan.

Summarized activity included in "Restructuring Charges" in the accompanying consolidated statements of operations and comprehensive income for the fiscal years ended March 31, 2019, 2018 and 2017 are as follows (in thousands):

	Severance and benefits	Facilities	Total
Balance as of March 31, 2016 (as restated)	$ 354	$ 7,572	$ 7,926
Restructuring charges	1,493	654	2,147
Adjustment to prior estimates	(52)	—	(52)
Cash payments	(1,665)	(2,074)	(3,739)
Balance as of March 31, 2017 (as restated)	130	6,152	6,282
Restructuring charges	8,266	208	8,474
Cash payments	(6,368)	(1,971)	(8,339)
Other non-cash charges	(598)	—	(598)
Balance as of March 31, 2018	1,430	4,389	5,819
Restructuring charges	4,708	862	5,570
Cash payments	(6,138)	(2,375)	(8,513)
Balance as of March 31, 2019	$ —	$ 2,876	$ 2,876

	Severance and benefits	Facilities	Total
Estimated timing of future payments			
Fiscal 2020	$ —	$ 2,876	$ 2,876

Facility restructuring accruals will be paid in accordance with the respective facility lease terms and amounts above are net of estimated sublease income.

NOTE 7: STOCK INCENTIVE PLANS AND STOCK-BASED COMPENSATION

On April 19, 2017, all performance share units, restricted stock units and options to purchase our common stock outstanding under the Company's Stock Incentive Plans were adjusted to reflect the impact of the Reverse Stock Split. The Reverse Stock Split also reduced the number of shares of common stock issuable under the Company's 2012 Long Term Incentive Plan and Employee Stock Purchase Plan, as amended. The per share exercise price of all outstanding awards was increased and the number of shares of common stock issuable upon the exercise or settlement of all outstanding awards was reduced proportionately to the reverse split ratio. The following share and per share data has been adjusted to reflect the Reverse Stock Split.

2012 Long-Term Incentive Plan

The Company has a stockholder-approved 2012 Long-Term Incentive Plan (the "Plan") which has 4.6 million shares authorized for issuance of new shares at March 31, 2019. There were 4.3 million shares available for grant under the plan exclusive of 1.8 million shares reserved for issuance related to approved grants that become effective when the Company becomes current with Securities and Exchange Commission ('SEC") reporting requirements or the Company becoming current with SEC reporting requirements and being listed on a national stock exchange. There were 0.3 million stock options, performance shares and restricted shares outstanding under the Plan as of March 31, 2019.

Stock options under the Plan are granted at prices determined by the Board of Directors, but at not less than the fair market value of our common stock on the date of grant. The majority of performance share units, restricted stock units and stock options granted to employees vest over three to four years. Stock option, performance share and restricted stock grants to nonemployee directors typically vest over one year. Stock options, performance share units and restricted stock units granted under the Plan are subject to forfeiture if employment terminates. The Company accounts for all forfeitures of stock-based awards when they occur.

In February 2018, the Company enacted a deferral of release of all vested restricted stock units and performance share units granted prior to February 2018. The deferral of release impacted only pre-February 2018 restricted stock units and performance share units and was intended to prevent the release of unregistered shares to grantees. During the deferral period, a grantee retained the legal right to the awards they had vested in, but the Company deferred the release of the underlying shares until it could become current with its SEC reporting requirements. The Company ended the deferral of release in February 2019. The deferral of release and its removal were both modifications to the awards; however, the impact of the modifications were not material and no incremental compensation expense was recorded. All employees with outstanding stock-based awards were impacted by the modifications.

Other Stock Incentive Plans

In addition to the Plan, we have other stock incentive plans which are inactive for future share grant purposes, including plans assumed in acquisitions, under which stock options, stock appreciation rights, stock purchase rights, restricted stock awards and long-term performance awards to employees, consultants, officers and affiliates were authorized ("Other Plans").

Employee Stock Purchase Plan

The Company has an employee stock purchase plan (the "Purchase Plan") that allows participating employees to purchase shares of the Company's common stock at a discount to fair market value. Employees may purchase the Company's common stock at a price that is no less than the lower of 85% of the fair market value at the grant date or exercise date. The maximum number of shares that has been approved for issuance since the adoption of the Purchase Plan is 8.9 million shares. The Purchase Plan is available to all employees, subject to certain eligibility requirements. Under the Purchase Plan, rights to purchase shares are granted during the second and fourth quarter of each fiscal year. The Purchase Plan allows a maximum amount of 0.3 million shares to be purchased in any six-month offering period. Employees purchased 0.0 million shares, 0.3 million shares, and 0.3 million shares, of common stock under the Purchase Plan in fiscal 2019, 2018 and 2017, respectively. The weighted-average price of stock purchased under the Purchase Plan was $0.00, $5.43, and $3.48 per share in fiscal 2019, 2018 and 2017, respectively. There were 0.5 million shares available for issuance under the Purchase Plan as of March 31, 2019.

The following tables summarize stock-based compensation expense (in thousands):

	For the year ended March 31,		
	2019	2018	2017 (As Restated)
Stock-based compensation expense:			
Cost of revenue	$ 334	$ 725	$ 895
Research and development	440	906	1,300
Sales and marketing	179	1,790	2,256
General and administrative	2,456	1,973	2,247
Total stock-based compensation expense	$3,409	$5,394	$ 6,698

	For the year ended March 31,		
	2019	2018	2017 (As Restated)
Stock-based compensation by type of award:			
Restricted stock	$3,178	$5,004	$ 5,653
Performance share units	274	(171)	561
Stock options	(43)	44	484
Employee stock purchase plan	—	517	—
Total stock-based compensation expense	$3,409	$5,394	$ 6,698

The Company also recorded $0.6 million of stock based compensation expense which was included in restructuring charges in the accompanying consolidated statements of operations and comprehensive loss related to the modification of certain restricted stock awards.

During fiscal years 2019, 2018 and 2017, no tax benefit was realized for the tax deduction from stock-based awards due to tax benefit carryforwards and tax ordering requirements.

The following table summarizes unrecognized compensation cost related tonon-vested restricted stock units, performance share units and stock options (in thousands).

	For the years ended March 31,					
	2019		2018		2017 (As Restated)	
	Amount	Weighted-Average Remaining Recognition Period (Years)	Amount	Weighted-Average Remaining Recognition Period (Years)	Amount	Weighted-Average Remaining Recognition Period (Years)
Unrecognized Compensation Expense:						
Restricted stock	$ 2,489	1.09	$ 8,016	1.94	$ 6,308	1.73
Performance share units	742	1.23	2,143	1.94	529	1.73
Stock options	—	—	1,028	—	—	0.09
Unrecognized compensation expense	$ 3,231		$11,187		$ 6,837	

Stock Options

A summary of activity relating to our stock options is as follows (shares in thousands):

	Shares	Weighted-Average Exercise Price Per Share	Weighted-Average Remaining Contractual Term in (Years)	Aggregate Intrinsic Value
Outstanding as of March 31, 2017 (as restated)	179	$ 20.02	0.86	$ 4,760
Granted	250	$ 6.20		
Exercised	(1)	$ 5.04		
Expired	(177)	$ 20.23		
Outstanding as of March 31, 2018	251	$ 6.19	0.41	$ —
Forfeited	(250)	$ 6.20		
Expired	(1)	$ 5.04		
Outstanding, vested and exercisable as of March 31, 2019	0	$ 5.04	1.57	$ —
Vested and expected to vest as of March 31, 2019	1	$ 5.04	1.57	$ —

For estimating fair value of stock options, the Company uses the Black-Scholes Merton stock option valuation model ("Black-Scholes"), which requires the use of assumptions. The expected life of awards granted represents the period of time that they are expected to be outstanding. The Company determines the expected life based on historical experience with similar awards, giving consideration to the contractual terms, exercise patterns and post-vesting forfeitures. The Company estimates volatility based on the historical volatility of our common stock over the most recent period corresponding with the estimated expected life of the award. The Company bases the risk-free interest rate used in the Black-Scholes stock option valuation model on the implied yield currently available on U.S. Treasury zero-coupon issues with an equivalent term equal to the expected life of the award. The Company has not paid any cash dividends on its common stock and does not anticipate paying any cash dividends in the foreseeable future. The Company amortizes the fair value of stock options on a ratable basis over the requisite service periods, which are generally the vesting periods.

Assumptions used in the Black-Scholes model for stock option grants in fiscal 2018 are as follows:

Weighted-Average:	
Expected term (years)	7
Contractual term (years)	7
Risk-free interest rate	2.48%
Stock price volatility	75.52%
Grant date fair value	$ 4.29

Performance Share Units

The Company granted 0.7 million and 0.5 million of performance share units with market conditions ("Market PSUs") in fiscal 2019 and 2018, respectively. The number of Market PSUs issued is dependent on Quantum's common stock achieving certain 60-day average closing stock price targets as of specified dates and the Company becoming current with SEC reporting requirements or the Company becoming current with SEC reporting requirements and being relisted on a national stock exchange. Market PSUs issued vest 1-3 years after the issuance date based on the stock price targets achieved. The estimated fair value of these Market PSUs is determined at the issuance date using a Monte Carlo simulation model.

Assumptions used in the Monte Carlo model to calculate fair values of market PSU's during each fiscal period are as follows:

Weighted-Average:	**2019**	**2018**
Discount period (years)	1.95	7.00
Risk-free interest rate	2.63%	2.48%
Stock price volatility	69.35%	75.52%
Grant date fair value	$ 1.70	$ 4.29

The Company granted 0.4 million and 0.4 million of performance share units with financial performance conditions ("Performance PSUs") in fiscal 2018 and 2017, respectively. No Performance PSU's were issued in fiscal 2019. Performance PSUs become eligible for vesting based on Quantum achieving certain financial performance targets through the end of the fiscal year when the performance PSUs were granted. Performance PSUs are valued at the market closing share price on the date of grant and compensation expense for Performance PSUs is recognized when it is probable that the performance conditions will be achieved.

A summary of activity relating to the Company's Performance PSUs is as follows (shares in thousands):

	Shares	Weighted-Average Grant Date Fair Value Per Share
Nonvested as of March 31, 2017 (as restated)	505	$ 4.49
Granted	851	$ 4.49
Vested released	(114)	$ 5.70
Forfeited	(527)	$ 4.84
Nonvested as of March 31, 2018	715	$ 7.05
Granted	735	$ 1.70
Vested released	(34)	$ 3.45
Forfeited	(646)	$ 4.05
Nonvested as of March 31, 2019	770	$ 1.78

The fair value of Performance PSUs vested during fiscal years 2019, 2018 and 2017 was $0.1 million, $0.7 million and $0.3 million, respectively.

Restricted Stock Units

The Company granted 1.0 million, 1.5 million and 0.7 million of service-based restricted stock units ("RSUs"), during fiscal 2019, 2018, and 2017 respectively which generally vest ratably over a three-year service period. Certain RSUs are subject to the Company becoming current with SEC reporting requirements or the Company becoming current with SEC reporting requirements and being relisted on a national stock exchange, which were both evaluated as a performance condition. RSUs are valued at the market closing share price on the date of grant and compensation expense for RSUs is recognized ratably over the applicable vesting period. The fair value of RSUs vested during fiscal years 2019, 2018 and 2017 was $5.1 million, $4.8 million and $7.2 million, respectively.

A summary of activity relating to our RSUs is as follows (shares in thousands):

	Shares	Weighted-Average Grant Date Fair Value per share
Outstanding as of March 31, 2017 (as restated)	1,260	$ 7.65
Granted	1,465	$ 6.61
Vested released	(580)	$ 8.20
Forfeited	(306)	$ 7.63
Outstanding as of March 31, 2018	1,839	$ 6.65
Granted	1,005	$ 2.33
Vested released	(835)	$ 6.16
Forfeited	(696)	$ 6.73
Outstanding as of March 31, 2019	1,313	$ 3.61
Vested and expected to vest as of March 31, 2019	1,313	$ 3.61

Employee Stock Purchase Plan

The Company uses the Black-Scholes pricing model to determine the fair value of shares purchased under the Employee Stock Purchase Plan. The weighted-average fair values and the assumptions used in calculating fair values during each fiscal period are as follows:

	For the year ended March 31,		
	2019	2018	2017 (As Restated)
Option life (in years)	N/A	0.50	0.50
Risk-free interest rate	N/A	0.91%	49.50%
Stock price volatility	N/A	0.05%	75.14%
Weighted-average grant date fair value	N/A	$2.20	$ 1.89

NOTE 8: INCOME TAXES

In December 2017, the Tax Cuts and Jobs Act (the "2017 Tax Act") was enacted. The 2017 Tax Act includes a number of changes to existing U.S. tax laws that impact the company, most notably a reduction of the U.S. corporate income tax rate from 35% to 21% for tax years beginning after December 31, 2017. The 2017 Tax Act also provides for a one-time transition tax on certain foreign earnings and the acceleration of depreciation for certain assets placed into service after September 27, 2017 as well as prospective changes beginning in 2018, including acceleration of tax revenue recognition, additional limitations on executive compensation, limitations on the deductibility of interest, and significant changes to the system of taxing foreign earnings.

The changes to existing U.S. tax laws as a result of the 2017 Tax Act, which we believe have the most significant impact on the Company's federal income taxes are as follows:

Reduction of the U.S. Corporate Income Tax Rate

The 2017 Tax Act reduces the corporate tax rate from 35% to 21%. The Company, as a fiscal year filer, is required to use a 31.5% blended rate for the fiscal year ending March 31, 2018 under the 2017 Tax Act. The Company measures deferred tax assets and liabilities using enacted tax rates that will apply in the years in which the temporary differences are expected to be recovered or paid. Accordingly, the Company's deferred tax assets and liabilities were remeasured to reflect the reduction in the U.S. corporate income tax rate from 35% to 21%, resulting in a $50.6 million increase in tax expense for the year ended March 31, 2018 and a corresponding $50.6 million decrease in net deferred tax assets as of March 31, 2018. Corresponding adjustments were made to the valuation allowance resulting in no net tax expense.

Transition Tax on Unremitted Foreign Earnings

The 2017 Tax Act provides for a one-time inclusion in taxable income attributable to a deemed mandatory repatriation of certain unremitted earnings through December 31, 2017 of foreign subsidiaries of U.S. companies. This deemed repatriation results in U.S. taxes being imposed on such earnings which has not been previously taxed by the United States at rates discounted from the regular statutory corporate tax rate, subject to a reduction for available foreign tax credits. The company had an estimated $17.3 million of undistributed foreign earnings subject to the deemed mandatory repatriation, before reduction by the participation exemption of $8.8 million for a net inclusion of $8.5 million. This inclusion resulted in a commensurate decrease in deferred tax assets due to the utilization of net operating loss carryforwards to offset the inclusion. Corresponding adjustments were made to the valuation allowance resulting in no net tax expense.

Taxation of Post-Enactment Foreign Earnings

Beginning in fiscal year 2019, under the 2017 Tax Act, foreign earnings are generally eligible for a 100% exclusion from U.S. taxable income under a new territorial system of taxation. However, the 2017 Tax Act nonetheless imposes tax on certain foreign earnings pursuant to a newly enacted provision known as the global intangible low-taxed income ("GILTI") provision. The GILTI provision requires the company to include in its U.S. income tax return the earnings of certain foreign subsidiaries in excess of an allowable return on the foreign subsidiaries' tangible assets. A company may make an accounting policy election to account for GILTI as a period cost in the period in which it is incurred or to recognize deferred taxes when book-tax basis differences exist which are expected to affect the amount of the GILTI inclusion upon reversal. The company made a policy election to treat the GILTI tax as a period cost. The GILTI provision resulted in $0.5 million of income tax expense for fiscal year 2019. This inclusion resulted in a corresponding decrease in deferred tax assets due to the utilization of net operating loss carryforwards to offset the inclusion. Corresponding adjustments were made to the valuation allowance resulting in no net tax expense.

Limitation on Deductibility of Interest Expense

Beginning in fiscal year 2019, under the 2017 Tax Act, deductions for interest expense are limited to 30% of an amount generally derived as taxable income before interest, amortization and depreciation expenses (through fiscal year 2022 when this base for the limitation is further narrowed). The disallowed interest expense deduction is available as a carryforward of indefinite duration. For fiscal year 2019, $28.5 million of the Company's interest expenses were disallowed and carried forward pursuant to this limitation. The impact is that realization of the deferred tax asset attributable to the disallowed interest expense carryforward will require a greater amount of future income than the deferred tax asset for the regular net operating losses.

Components of Income and Income Taxes

Pre-tax loss reflected in the Consolidated Statements of Operations is as follows (in thousands):

	For the year ended March 31,		
	2019	2018	2017 (As Restated)
U.S.	$(40,935)	$(46,923)	$ (3,794)
Foreign	514	464	3,042
Total	$(40,421)	$(46,459)	$ (752)

The Company's provision for income tax consists of the following (in thousands):

	For the year ended March 31,		
	2019	2018	2017 (As Restated)
Current tax expense			
Federal	$ (217)	$(3,484)	$ (385)
State	31	26	37
Foreign	1,103	206	1,826
Total current	917	(3,252)	1,478
Deferred expense			
State	32	32	37
Foreign	1,427	107	141
Total deferred	1,459	139	178
Income tax expense (benefit)	$2,376	$(3,113)	$ 1,656

Effective Tax Rate

The income tax provision differs from the amount computed by applying the federal statutory rate of 21% for 2019, 31.5% for 2018, and 35% for 2017 to income (loss) before income taxes as follows (in thousands):

	For the year ended March 31,		
	2019	2018	2017 (As Restated)
Benefit at the federal statutory rate	$ (8,488)	$(14,634)	$ (263)
Equity compensation	905	1,024	2,472
Permanent items	359	564	640
Foreign taxes	(2,133)	1,336	(159)
State income taxes	(997)	(830)	(88)
Valuation allowance	10,913	(42,784)	(2,745)
Uncertain tax positions	(9,278)	(336)	1,347
Tax reform	(207)	52,682	—
Credit monetization	—	(323)	(120)
Expiration of attributes	12,268	410	1,880
Other	(966)	(222)	(1,308)
Income tax expense (benefit)	$ 2,376	$ (3,113)	$ 1,656

Deferred Tax Assets and Liabilities

Significant components of deferred tax assets and liabilities are as follows (in thousands):

	As of March 31,		
	2019	2018	2017 (Restated)
Deferred tax assets			
Inventory valuation method	$ 882	$ 1,364	$ 2,006
Accrued warranty expense	814	571	1,370
Distribution reserves	2,137	2,119	3,028
Loss carryforwards	93,308	62,369	55,784
Tax credits	20,346	20,082	20,767
Restructuring charge accruals	678	1,371	2,333
Deferred revenue	13,094	32,936	50,319
Acquired intangibles	2,822	4,776	10,752
Depreciation	—	—	1,226
Other accruals and reserves not currently deductible for tax purposes	7,051	7,146	12,003
	141,132	132,734	159,588
Less valuation allowance	(140,359)	(130,048)	(154,296)
Deferred tax assets	773	2,686	5,292
Deferred tax liabilities			
Depreciation	(450)	(638)	—
Tax on unremitted foreign earnings	—	—	(1,332)
Other	(524)	(735)	(2,552)
Deferred tax liabilities	(974)	(1,373)	(3,884)
Net deferred tax asset	$ (201)	$ 1,313	$ 1,408

As of March 31, 2019, 2018 and 2017 we had federal, state and foreign net operating loss carryforwards of approximately $332.1 million, $210.0 million, and $18.1 million, respectively. We also had federal, state, and foreign tax credit carryforwards of approximately $77.7 million, $40.0 million, and $0.9 million as of March 31, 2019, 2018 and 2017, respectively. Some of the net operating loss and tax credit carryforwards expire in varying amounts beginning in fiscal 2019 if not previously utilized. Others are not subject to expiration. As a result of the 2017 Tax Act, $2.7 million of U.S. Federal net operating loss carryforwards generated after fiscal 2018 are not subject to expiration, although their use in any taxable year is limited to 80% of the taxable income in such year.

These carryforwards include $11.1 million of acquired net operating losses and $8.3 million of acquired credits, the utilization of which is subject to various limitations due to prior changes in ownership. Certain changes in stock ownership could result in additional limitations on the amount of both acquired and self-generated net operating loss and tax credit carryovers that can be utilized each year. If the Company has previously undergone, or should it experience in the future, such a change in stock ownership, it could severely limit the usage of these carryover tax attributes against future income, resulting in additional tax charges.

Due to our history of net losses in the United States, the protracted period for utilizing tax attributes in certain foreign jurisdictions, and the difficulty in predicting future results, we believe that we cannot rely on projections of future taxable income to realize most of our deferred tax assets. Accordingly, we have established a full valuation allowance against our U.S. and certain foreign net deferred tax assets. Significant management judgement is required in assessing our ability to realize any future benefit from our net deferred tax assets. We intend to maintain this valuation allowance until sufficient positive evidence exists to support its reversal. Our income tax expense recorded in the future will be reduced to the extent that sufficient positive evidence materializes to support a reversal of, or decrease in, our valuation allowance.

At March 31, 2019, the Company had unremitted foreign earnings of approximately $90.5 million. The Company does not assert indefinite reinvestment of its foreign earnings. However, due to the combination of the transition tax, the previous inclusion in U.S. taxable income of certain foreign earnings invested in the United States, the GILTI provisions and the general exclusion of the remaining foreign earnings from U.S. taxation under the new territorial system of international taxation, the principle taxes accrued on such unremitted earnings are $3.2 million of foreign withholding taxes in jurisdictions where full tax treaty relief is not available.

Uncertain Tax Positions

A reconciliation of the gross unrecognized tax benefits follows (in thousands):

	For the year ended March 31,		
	2019	2018	2017 (As Restated)
Beginning balance	$150,559	$170,730	$ 171,374
Increase in balances related to tax positions in current period	1,718	3,298	2,789
Decrease in balances related to tax positions in prior period	(25,095)	(20,692)	(1,350)
Decrease in balances due to lapse of statute of limitations	(11,150)	(810)	(1,672)
Settlement and effective settlements with tax authorities and related remeasurements	—	(1,992)	(411)
Increase in balances related to tax positions in prior period	—	25	—
Ending balance	$116,032	$150,599	$ 170,730

During fiscal 2019, excluding interest and penalties, there was a $34.5 million change in our unrecognized tax benefits. Including interest and penalties, the total unrecognized tax benefit at March 31, 2019 was $117.0 million, $98.7 million of which, if recognized, would favorably affect the effective tax rate. At March 31, 2019, the Company had recorded accrued interest and penalties of $0.9 million. Our practice is to recognize interest and penalties related to income tax matters in the income tax provision in the Consolidated Statements of Operations. As of March 31, 2019 $111.4 million of unrecognized tax benefits were recorded as a contra deferred tax asset in other long-term assets and $5.6 million were recorded in other long-term liabilities in the Consolidated Balance Sheets.

We file our tax returns as prescribed by the laws of the jurisdictions in which we operate. Our U.S. tax returns have been audited for years through 2002 by the Internal Revenue Service. In other major jurisdictions, we are generally open to examination for the most recent three to five fiscal years. Although timing of the resolution and closure on audits is highly uncertain, we do not believe it is likely that the unrecognized tax benefits would materially change in the next 12 months.

NOTE 9: FAIR VALUE OF FINANCIAL INSTRUMENTS

The Company uses exit prices, that is the price to sell an asset or transfer a liability, to measure assets and liabilities that are within the scope of the fair value measurements guidance. The Company classifies these assets and liabilities based on the following fair value hierarchy:

Level 1: Quoted (observable) market prices in active markets for identical assets or liabilities.

Level 2: Observable inputs other than Level 1, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the asset or liability.

Level 3: Prices or valuations that require inputs that are both significant to the fair value measurement and unobservable.

The Company did not have any transfers between Level 1 and Level 2 fair value measurements during the fiscal years ended March 31, 2019 and 2018.

The Company has certain non-financial assets that are measured at fair value on anon-recurring basis when there is an indicator of impairment, and they are recorded at fair value only when an impairment is recognized. These assets include property and equipment and amortizable intangible assets. The Company did not record impairments to any non-financial assets in the fiscal years ended March 31, 2019 or fiscal 2018. The Company does not have any non-financial liabilities measured and recorded at fair value on anon-recurring basis. The carrying amounts reported in the accompanying consolidated financial statements for cash and cash equivalents, restricted cash, accounts receivable, accounts payable, accrued expenses and other current liabilities approximate their respective fair values because of the short-term nature of these accounts.

Warrant Liability

As further discussed in Note 5,*Long-Term Debt*, during fiscal year ended March 31, 2018, the Company began issuing warrants to purchase the Company's common stock in connection with the TCW Term Loan agreement and issued warrants in connection with the Senior Secured Term Loan issuance. The warrants were initially accounted for as a liability and recorded at estimated fair value on a recurring basis due to exercise price reset provisions contained with the warrant agreements. As such, the Company estimated the fair value of the warrants at the end of each reporting period using a Black-Scholes option valuation model. At the end of each reporting period, the Company recorded the changes in the estimated fair value during the period in other income (expense) in the consolidated statements of operations. As of March 31, 2018, there were 75,000 outstanding February 2018 Amendment Warrants that were classified as a liability with an estimated fair value of $0.3 million. As of March 31, 2019, there were no liability classified warrants outstanding. During the fourth quarter of the fiscal year ended March 31, 2019, the exercise price for the February 2018 Amendment Warrants reset and became fixed, at which time they were considered to be indexed to the Company's own stock and met the scope requirements for equity classification. The fair value of the warrants upon the exercise price reset was reclassified to stockholders' deficit. The Company classified the warrants liability subject to recurring fair value measurement as Level 3 prior to the reclassification to stockholders' deficit. The fair value of these warrants were based on significant inputs that were not observable in the market.

The following table summarizes the ending balances of warrant liabilities measured and recorded at fair value on a recurring basis (in thousands):

	As of March 31,	
	2019	2018
Warrant liability	$ —	$ 272

The Company uses the Black-Scholes option valuation model for estimating fair value of common stock warrants. The expected life of warrants granted represent the period of time that they are expected to be outstanding. The Company determines the expected life based on historical experience with similar awards, giving consideration to the contractual terms, exercise patterns, and post-vesting forfeitures. The Company estimates volatility based on

the historical volatility of the common stock over the most recent period corresponding with the estimated expected life of the award. The Company bases the risk-free interest rate used in the Black-Scholes stock option valuation model on the implied yield currently available on U.S. Treasury zero-coupon issues with an equivalent term equal to the expected life of the award. The Company has not paid any cash dividends on the common stock and does not anticipate paying any cash dividends in the foreseeable future. The warrant liabilities are valued at issuance and each subsequent measurement date using the Black-Scholes option valuation model.

The following table the ranges of assumptions and estimates utilized within the Black-Scholes option valuation models for each annual period (see Note 7: *Stock Incentive Plans and Stock-based Compensation* for specific details related to each issuance):

	Years ended March 31,	
	2019	2018
Inputs		
Company's stock price	$1.62 - $2.40	$3.64 - $5.63
Exercise prices	$0.01 - $2.40	$0.01
Expected term (years)	4.5 to 5.0	4.8 to 5.0
Volatility	64.1% - 71.8%	59.8% - 69.1%
Risk free rate	2.5% - 3.0%	2.1% - 2.7%
Dividend rate	0.0%	0.0%

The table presented below is a summary of changes in the fair value of the Company's Level 3 valuations for the warrant liability for the years ended March 31, 2019 and 2018 (in thousands):

	Warrant liabilities
Balance, March 31, 2017 as restated	$ —
Issuances	2,370
Settlements	(1,888)
Changes in fair value	(210)
Balance, March 31, 2018	272
Issuances	5,683
Settlements	(615)
Changes in fair value	297
Reclassifications to stockholders' deficit	(5,637)
Balance March 31, 2019	$ —

Long-Term Debt

The Company's financial liabilities were comprised primarily of long-term debt at March 31, 2019 and 2018. The Company uses significant other observable market data or assumptions (Level 2 inputs as defined in the accounting guidance) that it believes market participants would use in pricing debt.

The carrying value and fair value of the Company's financial liabilities were primarily comprised of the following as of March 31, 2019 and 2018 (in thousands):

	As of March 31,			
	2019		2018	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Long-term debt: (1)				
TCW Term Loan			$ 90,424	$ 90,424
Senior Secured Term Loan	$ 164,588	$ 143,398		
PNC Revolving Credit Agreements	—		33,107	$ 27,323
Total long-term debt	$ 164,588	$ 143,398	$123,531	$ 117,747

(1) Fair value based on outstanding borrowings and market interest rates (level 2)

NOTE 10: NET LOSS PER SHARE

Equity Instruments Outstanding

The Company has stock options, performance share units and restricted stock units granted under various stock incentive plans that, upon exercise and vesting, respectively, would increase shares outstanding. The Company had Convertible Notes, which were convertible at the option of the holders at any time prior to maturity into shares of Quantum common stock. During November 2017, the Company paid all outstanding principal and accrued interest on the Convertible Notes. The Company has also issued warrants to purchase shares of the Company's stock that are related to the TCW Term Loan and the Senior Secured Term Loan as described within Note 5: *Long-term Debt* to the consolidated financial statements.

Net Loss per Share

The following table sets forth the computation of basic and diluted net loss per share, as adjusted for the Reverse Stock Split (in thousands, except per-share data):

	For the year ended March 31,		
	2019	2018	2017 (As Restated)
Numerator:			
Net Loss	$(42,797)	$(43,346)	$ (2,408)
Denominator:			
Weighted average shares - basic and diluted	35,551	34,687	33,742
Basic net loss per share	$ (1.20)	$ (1.25)	$ (0.07)
Diluted net loss per share	$ (1.20)	$ (1.25)	$ (0.07)

The dilutive impact related to common shares from stock incentive plans and outstanding warrants is determined by applying the treasury stock method to the assumed vesting of outstanding performance share units and restricted stock units and the exercise of outstanding options and warrants. The dilutive impact related to common shares from contingently issuable performance share units is determined by applying a two-step approach using both the contingently issuable share guidance and the treasury stock method. The dilutive impact related to our convertible subordinated notes is determined by applying the if-converted method, which includes adding the related weighted average shares to the denominator and the related interest expense to net income.

For the years ended March 31, 2019, 2018 and 2017, respectively, 4,964,019, 1,913,423 and 6,823,603 shares related to performance share units, restricted stock units, warrants and convertible debt were excluded from the calculation of diluted net loss per share as these shares were anti-dilutive.

For the year ended March 31, 2017, interest expense related to the convertible subordinated notes of $3.5 million was excluded from the calculation of diluted net loss per share as the shares related to convertible subordinated notes were anti-dilutive.

NOTE 11: COMMITMENTS AND CONTINGENCIES

Lease Commitments

The Company leases certain facilities under non-cancelable lease agreements and also has equipment leases for various types of office equipment. Some of the leases have renewal options ranging from one to ten years and others contain escalation clauses. These leases are operating leases.

Rent expense was $5.8 million, $6.4 million and $6.6 million during the years ended March 31, 2019, 2018 and 2017, respectively.

The following table summarizes the payments due by fiscal year for the Company's contractual operating lease obligations as of March 31, 2019 (in thousands):

	Operating leases
For the fiscal year ended March 31,	
2020	$ 4,424
2021	3,922
2022	3,175
2023	2,185
2024	1,945
Thereafter	3,705
Total	$ 19,356

Commitments to Purchase Inventory

The Company uses contract manufacturers for its manufacturing operations. Under these arrangements, the contract manufacturer procures inventory to manufacture products based upon management's forecast of customer demand. The Company has similar arrangements with certain other suppliers. The Company is responsible for the financial impact on the supplier or contract manufacturer of any reduction or product mix shift in the forecast relative to materials that the third party had already purchased under a prior forecast. Such a variance in forecasted demand could require a cash payment for inventory in excess of current customer demand or for costs of excess or obsolete inventory. As of March 31, 2019, the Company had issued non-cancelable commitments for $32.4 million to purchase inventory from its contract manufacturers and suppliers.

Legal Matters

On July, 22 2016, Realtime Data LLC d/b/a IXO ("Realtime Data") filed a patent infringement lawsuit against Quantum in the U.S. District Court for the Eastern District of Texas, alleging infringement of U.S. Patents Nos. 7,161,506, 7,378,992, 7,415,530, 8,643,513, 9,054,728, and 9,116,908. The lawsuit has been transferred to the U.S. District Court for the Northern District of California for further proceedings. Realtime Data asserts that we have incorporated Realtime Data's patented technology into our compression products and services. Realtime Data seeks unspecified monetary damages and other relief that the Court deems appropriate. On July 31, 3017, the District Court stayed proceedings in this litigation pending decision in Inter Partes Review proceedings currently before the Patent Trial and Appeal Board and relating to the Realtime Data patents. That stay remains pending. We believe the probability that this lawsuit will have a material adverse effect on our business, operating results or financial condition is remote.

In February 2018, two putative class action lawsuits were filed in the United States District Court for the Northern District of California against the Company and two former executive officers (the "Class Action"). The lawsuits were consolidated on May 16, 2018. The Class Action plaintiffs sought unspecified damages for certain alleged material misrepresentations and omissions made by the Company in connection with its financial statements for its fiscal year 2017. On September 25, 2018, the Court granted permission to plaintiffs in the action to file an amended consolidated complaint. Before the plaintiffs filed their amended consolidated complaint, the parties met with a mediator to discuss a potential settlement of the case. On February 20, 2019, the parties reached a settlement in principal; under the terms of the settlement, the Company agreed to pay $8.2 million to plaintiffs. The amount includes all of plaintiffs' attorneys' fees, and the full amount will be paid by the Company's directors and officers liability insurance carriers. A Stipulation of Settlement was signed by the Parties on June 28, 2019, and the Court entered preliminary approval of the settlement on July 26, 2019. In its order granting preliminary approval, the Court set the date for final approval of the settlement to take place on November 14, 2019.

In May 2018, two shareholders filed litigation in California Superior Court for Santa Clara County on behalf of Quantum against several current and former officers and directors of the Company (the "Derivative Litigation"). A third action brought by a shareholder on behalf of Quantum was filed on March 4, 2019. The Derivative Litigation suits, which were consolidated by the Court, alleged, *inter alia*, that the board members and certain of the Company's senior officers breached their fiduciary duties the Company and its shareholders by causing the Company to make materially false and misleading statements concerning the Company's financial health, business operations, and growth prospects in its public filings and communications with investors, including misrepresentations regarding the Company's disclosure controls and procedures, revenue recognition, and internal controls over financial reporting. After extensive negotiations, the parties reached a definitive agreement to settle the Derivative Litigation in late February 2019. The settlement requires the Company to adopt a number of corporate governance reforms and to pay plaintiffs' attorneys' fees of $0.8 million, which will be paid by the Company's directors and officers liability insurance carriers. A hearing on final approval of the Derivative Litigation settlement has been set for September 6, 2019.

In February 2018, the Company received a document subpoena from the U.S. Securities and Exchange Commission requesting information pertaining to the Company's financial statements for the period April 1, 2017 through the date of the subpoena. The Company responded to that subpoena. In August 2018, the Company received a second subpoena requesting similar documents for the period April 1, 2015 through the date of the subpoena. We understand that the SEC's investigation relates to the facts and circumstances regarding the financial statements included in the restatement presented in this Annual Report on Form 10-K. The Company has produced a substantial volume of documents to the SEC and is cooperating with the SEC staff. The investigation is ongoing.

Additionally, from time to time, the Company is a party to various legal proceedings and claims arising from the normal course of business activities. Based on current available information, the Company does not expect that the ultimate outcome of any currently pending unresolved matters, individually or in the aggregate, will have a material adverse effect on our results of operations, cash flows or financial position.

Indemnifications

The Company has certain financial guarantees, both express and implied, related to product liability and potential infringement of intellectual property. Other than certain product liabilities recorded as of March 31, 2019, 2018 and 2017, the Company did not record a liability associated with these guarantees, as it has little or no history of costs associated with such indemnification requirements. Contingent liabilities associated with product liability may be mitigated by insurance coverage that the Company maintains.

In the normal course of business to facilitate transactions of the Company's services and products, the Company indemnifies certain parties with respect to certain matters. The Company has agreed to hold certain parties harmless against losses arising from a breach of representations or covenants, or out of intellectual property infringement or other claims made against certain parties. These agreements may limit the time within which an indemnification claim can be made and the amount of the claim. In addition, the Company has entered into indemnification agreements with its officers and directors, and the Company's bylaws contains similar indemnification obligations to its agents. It is not possible to determine the maximum potential amount under these indemnification agreements due to the limited history of the Company's indemnification claims, and the unique facts and circumstances involved in each particular agreement. Historically, payments made by the Company under these agreements have not had a material impact on its operating results, financial position or cash flows.

NOTE 12: SEGMENT REPORTING AND GEOGRAPHIC INFORMATION

The Company's chief operating decision maker reviews the financial information presented on a consolidated basis for purposes of allocating resources and evaluating its financial performance. Based on the way the Company manages its business, the Company has determined that it currently operates in one reportable segment.

The following table summarizes property and equipment, net by geographic region (in thousands):

	As of March 31,		
	2019	2018	2017 (As Restated)
United States	$7,912	$9,159	$ 10,605
International	525	539	272
Total	$8,437	$9,698	$ 10,877

See Note 3: *Summary of Significant Accounting Policies*, for disaggregated revenue information.

NOTE 13: QUARTERLY FINANCIAL DATA (UNAUDITED)

As further described in Note 2:*Restatement*, in lieu of filing quarterly reports on Form10-Q for the three months ended June 30, 2018 and 2017 (restated), the three and six months ended September 30, 2018 and 2017 (restated) and the three and nine months ended December 31, 2018 and 2017, quarterly financial data for these periods is included in this Annual Report on Form 10-K in the tables that follow. Amounts are computed independently each quarter; therefore, the sum of the quarterly amounts may not equal the total amount for the respective year due to rounding.

QUANTUM CORPORATION
QUARTERLY CONSOLIDATED BALANCE SHEETS
(in thousands, except per share amounts)

	June 30, 2017			September 30, 2017		
	As Reported	Adjustments	As Restated	As Reported	Adjustments	As Restated
ASSETS						
Current assets						
Cash and cash equivalents	$ 8,661	$ —	$ 8,661	$ 9,504	$ 4,479	$ 13,983
Accounts receivable, net of allowance for doubtful accounts of $29 and $317 as of June 30, 2017 and September 30, 2017	109,418	(11,910)	97,508	105,771	(6,545)	99,226
Manufacturing inventories	27,821	8,865	36,686	29,119	5,593	34,712
Service part inventories	19,788	—	19,788	19,915	—	19,915
Other current assets	10,005	(245)	9,760	8,795	786	9,581
Restricted cash	1,891	1,111	3,002	1,969	1,094	3,063
Total Current Assets	177,584	(2,179)	175,405	175,073	5,407	180,480
Property and equipment, less accumulated depreciation	10,455	(318)	10,137	10,745	(325)	10,420
Intangible assets, less accumulated amortization	240	—	240	204	—	204
Restricted cash, long-term	20,000	—	20,000	20,000	—	20,000
Other long-term assets	4,753	1,552	6,305	5,127	1,419	6,546
Total Assets	$ 213,032	$ (945)	$ 212,087	$ 211,149	$ 6,501	$ 217,650
LIABILITIES AND STOCKHOLDERS' DEFICIT						
Liabilities						
Current liabilities						
Accounts payable	$ 45,007	$ (513)	$ 44,494	$ 48,488	$ —	$ 48,488
Accrued warranty	3,161	(3,161)	—	2,950	(2,950)	—
Deferred revenue, current	79,996	10,460	90,456	77,090	11,415	88,505
Accrued restructuring charges, current	2,249	629	2,878	1,743	627	2,370
Convertible subordinated debt, current	62,926	—	62,926	57,034	—	57,034
Accrued compensation	22,186	(968)	21,218	23,179	(924)	22,255
Other accrued liabilities	13,309	4,035	17,344	12,927	3,634	16,561
Total current liabilities	228,834	10,482	239,316	223,411	11,802	235,213
Deferred revenue, long-term	36,697	1,452	38,149	35,906	868	36,774
Accrued restructuring charges, long-term	544	3,501	4,045	423	3,192	3,615
Long-term debt, net of current portion	60,219	1,515	61,734	70,631	5,860	76,491
Other long-term liabilities	4,736	5,666	10,402	5,112	5,924	11,036
Total liabilities	331,030	22,616	353,646	335,483	27,646	363,129
Commitment and contingencies (Note 11)						
Stockholders' deficit						
Preferred stock 20,000 shares authorized; no shares issued as of June 30, 2017 and September 30, 2017	—	—	—	—	—	—
Common stock, $0.01 par value; 1,000,000 shares authorized; 34,101 and 34,663 shares issued and outstanding at June 30, 2017 and September 30, 2017, respectively	341	—	341	347	—	347
Additional paid-in capital	475,357	—	475,357	476,409	(316)	476,093
Accumulated deficit	(596,969)	(18,961)	(615,930)	(604,832)	(16,196)	(621,028)
Accumulated other comprehensive income (loss)	3,273	(4,600)	(1,327)	3,742	(4,633)	(891)
Total stockholders' deficit	(117,998)	(23,561)	(141,559)	(124,334)	(21,145)	(145,479)
Total liabilities and stockholders' deficit	$ 213,032	$ (945)	$ 212,087	$ 211,149	$ 6,501	$ 217,650

QUANTUM CORPORATION
QUARTERLY CONSOLIDATED BALANCE SHEETS
(in thousands, except per share amounts)

	As Restated					
	June 30, 2017	September 30, 2017	December 31, 2017	June 30, 2018	September 30, 2018	December 31, 2018
ASSETS						
Current Assets:						
Cash and cash equivalents	$ 8,661	$ 13,983	$ 10,309	$ 10,227	$ 5,704	$ 10,926
Accounts receivable, net of allowance for doubtful accounts of $29, $317, $314, $1, $518 and $1,068; as of June 30, 2017, September 30, 2017, December 31, 2017, June 30, 2018, September 30, 2018, and December 31, 2018	97,508	99,226	96,156	81,427	76,304	79,571
Manufacturing inventories	36,686	34,712	35,461	30,666	21,084	15,563
Service part inventories	19,788	19,915	19,061	19,397	18,642	18,551
Other current assets	9,760	9,581	8,335	11,348	11,291	7,877
Restricted cash	3,002	3,063	3,054	1,220	6,124	1,098
Total Current Assets	175,405	180,480	172,376	154,285	139,149	133,586
Property and equipment, less accumulated depreciation	10,137	10,420	10,226	9,361	8,925	8,773
Intangible assets, less accumulated amortization	240	204	164	112	86	60
Restricted cash, long-term	20,000	20,000	12,000	5,000	—	5,000
Other long term-assets	6,305	6,546	8,663	8,500	6,034	7,572
Total Assets	$ 212,087	$ 217,650	$ 203,429	$ 177,258	$ 154,194	$ 154,991
LIABILITIES AND STOCKHOLDERS' DEFICIT						
LIABILITIES						
Current Liabilities						
Accounts payable	$ 44,494	$ 48,488	$ 57,142	$ 51,601	$ 45,021	$ 38,774
Deferred revenue, current	90,456	88,505	87,388	94,063	89,020	84,879
Accrued restructuring charges, current	2,878	2,370	5,086	2,681	4,437	3,947
Long-term debt current portion	—	—	—	9,000	127,514	1,500
Convertible subordinated debt, current	62,926	57,034	—	—	—	—
Accrued compensation	21,218	22,255	20,144	15,182	15,559	14,705
Other accrued liabilities	17,344	16,561	19,024	23,114	29,150	25,295
Total current liabilities	239,316	235,213	188,784	195,641	310,701	169,100
Deferred revenue, long-term	38,149	36,774	35,824	36,520	34,577	34,361
Accrued restructuring charges, long-term	4,045	3,615	3,098	2,432	—	—
Long-term debt, net of current portion	61,734	76,491	117,301	112,255	—	137,073
Other long-term liabilities	10,402	11,036	11,126	11,823	10,564	10,695
Total liabilities	353,646	363,129	356,133	358,671	355,842	351,229
Commitment and contingencies (Note 11)						
Stockholders' Deficit						
Preferred stock:						
Preferred stock 20,000 shares authorized; no shares issued as of June 30, 2017, September 30, 2017, December 31, 2017, June 30, 2018, September 30, 2018, and December 31, 2018	—	—	—	—	—	—
Common stock:						
Common stock, $0.01 par value; 1,000,000 shares authorized; 34,101, 34,663, 35,077, 35,443, 35,556, and 35,553 shares issued and outstanding at June 30, 2017, September 30, 2017, December 31, 2017, June 30, 2018, September 30, 2018, and December 31, 2018, respectively	341	347	351	356	358	358
Additional paid-in capital	475,357	476,093	479,289	482,028	483,494	493,347
Accumulated deficit	(615,930)	(621,028)	(631,224)	(662,640)	(684,257)	(688,543)
Accumulated other comprehensive loss	(1,327)	(891)	(1,120)	(1,157)	(1,243)	(1,400)
Total stockholders' deficit	(141,559)	(145,479)	(152,704)	(181,413)	(201,648)	(196,238)
Total liabilities and stockholders' deficit	$ 212,087	$ 217,650	$ 203,429	$ 177,258	$ 154,194	$ 154,991

QUANTUM CORPORATION
QUARTERLY CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share amounts)

	As Restated					
	Three Months Ended June 30, 2017	Three Months Ended September 30, 2017	Six Months Ended June 30, 2017	Three Months Ended December 31, 2017	Nine Months Ended December 31, 2017	Three Months Ended March 31, 2018
Revenue						
Product revenue	$ 69,483	$ 67,596	$ 137,079	$ 75,343	$ 212,422	$ 56,160
Service revenue	35,117	34,910	70,027	34,875	104,902	31,621
Royalty revenue	9,995	9,280	19,275	5,776	25,051	7,528
Total revenue	114,595	111,786	226,381	115,994	342,375	95,309
Costs and expenses:						
Product cost of revenue	50,680	51,602	102,282	58,119	160,401	45,710
Service cost of revenue	15,077	14,865	29,942	14,915	44,857	13,932
Total cost of revenue	65,757	66,467	132,224	73,034	205,258	59,642
Gross profit	48,838	45,319	94,157	42,960	137,117	35,667
Operating expenses:						
Research and development	10,605	10,190	20,795	9,162	29,957	8,605
Sales and marketing	27,078	25,824	52,902	26,711	79,613	22,629
General and administrative	12,424	11,506	23,930	12,416	36,346	15,782
Restructuring charges	1,631	70	1,701	4,239	5,940	2,534
Total operating expenses	51,738	47,590	99,328	52,528	151,856	49,550
Income (loss) from operations	(2,900)	(2,271)	(5,171)	(9,568)	(14,739)	(13,883)
Other (income) expense, net:						
Interest expense, net	2,579	2,638	5,217	2,968	8,185	3,485
Loss on debt extinguishment	-	39	39	-	39	6,895
Other (income) expenses	(98)	(77)	(175)	(210)	(385)	(382)
Loss before income taxes	(5,381)	(4,871)	(10,252)	(12,326)	(22,578)	(23,881)
Income tax expense (benefit)	(1,262)	228	(1,034)	(2,127)	(3,161)	48
Net loss	$ (4,119)	$ (5,099)	$ (9,218)	$ (10,199)	$ (19,417)	$ (23,929)
Net loss per share						
Basic	$ (0.12)	$ (0.15)	$ (0.27)	$ (0.29)	(0.56)	$ (0.68)
Diluted	$ (0.12)	$ (0.15)	$ (0.27)	$ (0.29)	(0.56)	$ (0.68)
Weighted average number of common shares						
Basic	34,093	34,580	34,338	34,820	34,499	35,263
Diluted	34,093	34,580	34,338	34,820	34,499	35,263

QUANTUM CORPORATION
QUARTERLY CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share amounts)

	Three Months Ended June 30, 2018	Three Months Ended September 30, 2018	Six Months Ended September 30, 2018	Three Months Ended December 31, 2018	Nine Months Ended December 31, 2018	Three Months Ended March 31, 2019
Revenue						
Product revenue	$ 66,869	$ 51,622	$ 118,491	$ 62,986	$ 181,477	$ 63,177
Service revenue	33,564	33,352	66,916	34,097	101,013	33,683
Royalty revenue	7,079	4,938	12,017	4,896	16,913	6,417
Total revenue	107,512	89,912	197,424	101,979	299,403	103,277
Costs and expenses:						
Product cost of revenue	45,438	41,319	86,757	45,819	132,576	47,270
Service cost of revenue	15,735	13,066	28,801	13,078	41,879	13,341
Total cost of revenue	61,173	54,385	115,558	58,897	174,455	60,611
Gross profit	46,339	35,527	81,866	43,082	124,948	42,666
Operating expense						
Research and development	8,261	7,862	16,123	7,907	24,030	8,083
Sales and marketing	19,125	16,682	35,807	16,990	52,797	16,603
General and administrative	19,391	14,072	33,463	13,481	46,944	18,333
Restructuring charges	3,907	294	4,201	1,227	5,428	142
Total operating expenses	50,684	38,910	89,594	39,605	129,199	43,161
Total costs and expenses	111,857	93,295	205,152	98,502	303,654	103,772
Gain (loss) from operations	(4,345)	(3,383)	(7,728)	3,477	(4,251)	(495)
Other expenses and losses, net:						
Interest expense, net	3,935	4,636	8,571	6,238	14,809	6,286
Loss on debt extinguishment	—	12,425	12,425	5,033	17,458	—
Other expenses (income)	(220)	196	(24)	(3,846)	(3,870)	992
Net loss before income taxes	(8,060)	(20,640)	(28,700)	(3,948)	(32,648)	(7,773)
Income tax expense	(575)	977	402	337	739	1,637
Net Loss	$ (7,485)	$ (21,617)	$ (29,103)	$ (4,285)	$ (33,387)	$ (9,410)
Net Loss Per Share						
Basic	$ (0.21)	$ (0.61)	$ (0.82)	$ (0.12)	$ (0.94)	$ (0.26)
Diluted	$ (0.21)	$ (0.61)	$ (0.82)	$ (0.12)	$ (0.94)	$ (0.26)
Weighted average number of common shares						
Basic	35,444	35,502	35,473	35,552	35,500	35,710
Diluted	35,444	35,502	35,473	35,552	35,500	35,710

QUANTUM CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Three Months Ended June 30, 2017 (as Restated)	Six Months Ended September 30, 2017 (as Restated)	Nine Months Ended December 31, 2017
Cash flows from operating activities:			
Net loss	$ (4,119)	$ (9,218)	$ (19,417)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:			
Depreciation	1,313	2,610	3,822
Amortization of debt issuance costs	427	855	1,263
Provision for product and service parts inventories	2,221	4,163	7,073
Stock based compensation	1,613	3,013	4,583
Non-cash loss on debt extinguishment	—	39	121
Non-cash restructuring charges	—	—	598
Pension Expense	393	733	1,075
Bad Debt Expense	11	292	290
Deferred Income Taxes, net	98	(319)	(2,700)
Loss on Asset Disposal	—	2	20
Unrealized Foreign Exchange (Gain) loss	1,679	1,019	963
Change in fair value of warrants	—	—	33
(Gain) loss on investment	35	72	113
Changes in assets and liabilities:			
Accounts receivable	4,595	3,065	5,846
Manufacturing inventories	(1,781)	(1,199)	(2,976)
Service parts inventories	(1,195)	(2,384)	(3,426)
Accounts payable	3,650	7,375	16,229
Accrued restructuring charges	641	(297)	1,902
Accrued compensation	(2,964)	(2,267)	(4,720)
Deferred revenue	(2,621)	(5,947)	(8,015)
Other assets and liabilities	(3,227)	(2,913)	552
Net cash provided by (used in) operating activities	769	(1,306)	3,229
Cash flows from investing activities:			
Purchases of property and equipment	(178)	(1,151)	(2,060)
Proceeds from sale of assets	65	275	4
Cash distributions from investments	278	278	278
Net cash provided by (used in) investing activities	165	(598)	(1,778)
Cash flows from financing activities:			
Borrowings of long-term debt and convertible debt, net	72,077	165,270	290,404
Repayments on debt	(77,175)	(155,766)	(239,109)
Repayment of convertible subordinated debt	—	(6,030)	(62,836)
Payment of taxes due upon vesting of restricted stock	(107)	(1,777)	(1,807)
Proceeds from issuance of common stock, net	1	1,012	1,012
Net cash provided by (used in) financing activities	(5,204)	2,709	(12,336)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	21	329	336
Net increase (decrease) in cash, cash equivalents and restricted cash	(4,249)	1,134	(10,549)
Cash, cash equivalents and restricted cash at the beginning of period	35,912	35,912	35,912
Cash, cash equivalents and restricted cash at the end of period	$ 31,663	$ 37,046	$ 25,363
Supplemental disclosure of cash flow information			
Purchases of property and equipment included in accounts payable	$ 17	$ 287	$ 88
Transfer of inventory to property and equipment	$ 407	$ 919	$ 934
Cash Paid For			
Interest	$ 1,561	$ 4,515	$ 7,118
Taxes, net of refund	$ 508	$ 914	$ 1,179

The following table provides a reconciliation of cash, cash equivalents, and restricted cash reported within the statement of financial position that sum to the total of the same such amounts shown in the statement of cash flows.

Cash and cash equivalents	$ 8,661	$ 13,983	$ 10,309
Restricted cash	3,002	3,063	3,054
Restricted cash, long-term	20,000	20,000	12,000
Total cash, cash equivalents and restricted cash at the end of period	$ 31,663	$ 37,046	$ 25,363

QUANTUM CORPORATION
CONSOLIDATED STATEMENT OF CASH FLOWS
(in thousands)

	Three Months Ended June 30, 2018	Six Months Ended September 30, 2018	Nine Months Ended December 31, 2018
Cash flows from operating activities:			
Net loss	$ (7,485)	$ (29,102)	$ (33,387)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:			
Depreciation	1,105	2,129	3,150
Amortization of intangible assets	26	52	78
Amortization of debt issuance costs	171	842	2,211
Provision for product and service parts	3,871	5,859	7,385
Stock based compensation	427	1,718	2,818
Non-cash interest expense, net	632	1,103	1,670
Non-cash loss on debt extinguishment	—	12,425	17,459
Pension expense	287	514	787
Bad debt expense	(895)	(383)	167
Deferred income taxes, net	(376)	603	903
Loss on asset disposal	1	3	31
Unrealized foreign exchange (gain) loss	(238)	(286)	(382)
Change in fair value of warrants	(108)	164	(942)
(Gain) loss on investment	(16)	(43)	(2,861)
Changes in assets and liabilities:			
Accounts receivable	15,017	19,434	15,677
Manufacturing inventories	3,170	11,677	16,475
Service parts inventories	(860)	(1,122)	(2,050)
Accounts payable	(11,048)	(17,520)	(24,031)
Accrued warranty			
Accrued restructuring charges	(706)	(1,382)	(1,872)
Accrued compensation	(4,564)	(4,415)	(5,542)
Deferred revenue	(4,433)	(11,426)	(15,783)
Other assets and liabilities	8,576	11,826	7,744
Net cash provided by (used in) operating activities	2,554	2,670	(10,295)
Cash flows from investing activities:			
Purchases of property and equipment	(695)	(1,331)	(1,755)
Proceeds from sale of assets	—	—	50
Cash distributions from investments	322	41	2,892
Net cash provided by (used in) investing activities	(373)	(1,290)	1,187
Cash flows from financing activities:			
Borrowings of long-term debt and convertible debt, net	77,806	164,968	397,088
Repayments on debt	(80,674)	(171,584)	(388,074)
Proceeds from issuance of common stock, net	(6)	(6)	(6)
Net cash provided by (used in) financing activities	(2,874)	(6,622)	9,008
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(67)	(137)	(84)
Net increase (decrease) in cash, cash equivalents and restricted cash	(760)	(5,379)	(184)
Cash, cash equivalents and restricted cash at the beginning of period	17,207	17,207	17,207
Cash, cash equivalents and restricted cash at the end of period	$ 16,447	$ 11,828	$ 17,023
Supplemental disclosure of cash flow information			
Purchases of Property and Equipment included in Accounts Payable	$ 2	$ 104	$ 159
Transfer of Inventory to Property and Equipment	$ 72	$ 176	$ 393
Cash Paid For			
Interest	$ 4,399	$ 9,938	$ 12,140
Taxes, net of refund	$ (58)	$ 4,458	$ 64

The following table provides a reconciliation of cash, cash equivalents, and restricted cash reported within the statement of financial position that sum to the total of the same such amounts shown in the statement of cash flows.

Cash and cash equivalents	$ 10,227	$ 5,704	$ 10,927
Restricted cash	1,220	6,124	1,096
Restricted cash, long-term	5,000	—	5,000
Total cash, cash equivalents and restricted cash at the end of period	$ 16,447	$ 11,828	$ 17,023

Consolidated Financial Statement Adjustments Tables

The following tables present the restatement adjustments to previously issued consolidated financial statements, including the previously reported consolidated balance sheet as of June 30, 2017 and September 30, 2017 and the consolidated statements of operations, comprehensive loss and cash flows for the three month periods ended June 30, 2017 and September 30, 2017 and the six month period ended September 30, 2017.

The categories of restatement adjustments are described below:

(a) *Investigation Related Revenue* – As disclosed in Note 2 – *Restatement, the Company prematurely recognized product revenue sold to certain distributors, resellers and end-user customers. The associated product cost of revenue for each product revenue sales order was also recognized in the incorrect period. Additionally, for all transactions where product revenue was recognized prematurely, a reclassification is recorded at sell-in to reflect the movement of inventory at Quantum's warehouse to inventory at its distributor's warehouse. For the transactions where revenue was recognized prematurely, the Company restated the consolidated financial statements to reflect the revenue in the period in which the criteria for revenue recognition under U.S. GAAP have been satisfied. For revenue transactions where the criteria for revenue recognition under U.S. GAAP have not yet been satisfied, we deferred revenue recognition until all criteria are satisfied.*

(b) *Service Revenue Amortization Convention* – The Company inappropriately recognized service revenue on a monthly convention at the beginning of the initial month of service regardless of the service period start date resulting in an acceleration of revenue recognition. Additionally, certain annual service contracts were inappropriately recognized over a 13-month period resulting in a deceleration of revenue recognition.

(c) *Cash Consideration Paid to Customers* – The Company inappropriately recorded cash consideration paid to customers as expenses rather than as a reduction of revenue as such payments did not meet the identifiable benefit criteria within the Accounting Standards Codification ("ASC") 605, *Revenue Recognition* ("Topic 605") guidance. We have reclassified these expenses from sales and marketing expense to product revenue.

(d) *Accrued Warranty* – The Company reviewed its warranty accrual methodology and determined that previous estimates did not appropriately reflect the Company's historical experience. The Company changed its method in calculating the warranty accrual and applied the adjustments retroactively.

(e) *Commissions Accrual* – Relating to misstatement (a), when the Company prematurely recognized revenue, the associated commission expense was also prematurely recognized. The Company restated commission expense to match the timing of associated revenue recognition

(f) *Short Term Disability Plan* – The Company inappropriately accounted for its employee funded disability plan and did not reflect employee contributions within restricted cash and did not recognize the obligation to fund disability claims as incurred.

(g) *Third Party Maintenance Contracts* – The Company changed its method to appropriately accounting for capitalized third party maintenance contracts.

(h) *Debt Issuance Costs* – The Company reclassified capitalized debt issuance costs on its revolver loan from long term debt to a current asset. There was no cumulative impact to pre-tax earnings for the fiscal year ended March 31, 2017.

(i) *Restructuring* – The Company did not properly calculate expenses related to its restructuring activities, including failure to apply appropriate discount rates and omitting certain facilities in calculating the restructuring liabilities.

(j) *Performance Based Stock Units* – The Company previously accrued stock-based compensation expense on performance based stock units ("PSUs") assuming the shares would be earned. The Company determined the likelihood of meeting the required conditions at the time was remote and therefore should not have recognized stock-based compensation expense for the related PSUs.

(k) *Debt* – The Company incorrectly accounted for multiple amendments to the term loan and revolving credit agreements described in Note 5:*Long-Term Debt,* resulting in errors in the treatment of debt extinguishment and issuance costs.

(I) Certain activities in the statement of cash flows and consolidated balance sheets have been reclassified to conform with current fiscal year's presentation.

(m) *Australian Deferred Tax Assets and Valuation Allowance* – The Company failed to record deferred tax assets for certain book-tax differences at an Australian affiliate and to further establish a valuation allowance against certain of the tax assets.

(n) *Deferred Tax Liability Related to Unrealized Swiss Currency Gains* – The Company misclassified and under accrued Swiss income tax on unrealized currency gains attributable to a dollar-denominated intercompany note receivable.

(o) *Reserves for Uncertain Tax Positions on Transfer Pricing* – The Company did not accrue a reserve for foreign taxes payable due to uncertain tax positions relating to its transfer pricing for services and interest income on intercompany notes and payables.

(p) *Valuation Allowance for State Net Operating Losses* – The Company failed to analyze all evidence, both positive and negative, when considering the future realization of its Texas state net operating loss carryforward and inappropriately established a 100% valuation allowance against the related deferred tax asset. The Company reevaluated the evidence and partially removed this valuation allowance.

(q) *Tax Accounting* – The Company recalculated its income tax expense on an annual and quarterly basis to account for certain errors in the previous calculations of its federal income tax receivable and state income tax payable. Restatements impacting book income and various asset and liability accounts had no net effect on deferred taxes or tax expense due to the Company's position of losses and a full valuation allowance.

(r) Other Adjustments – There are other restatement matters otherwise not described in items (a) through (m) of this Note. The related adjustments are individually insignificant in the fiscal year ended March 31, 2017 but in aggregate are material to the consolidated financial statements. These misstatements include:

- Unrecognized gain (loss) of cumulative translation adjustments upon the liquidation of certain foreign entities
- Unrecognized asset retirement obligations
- Incorrect accounting for a cost method investment
- Accruals recorded in the incorrect accounting period

QUANTUM CORPORATION
CONSOLIDATED STATEMENT OF OPERATIONS
(in thousands, except per share amounts)

	Three Months Ended June 30, 2017			
	As Previously Reported	Restatement Adjustments	Restatement Reference	As Restated
Revenue				
Product Revenue	$ 71,618	$ (2,135)	a, c	$ 69,483
Service Revenue	35,246	(129)	b	35,117
Royalty revenue	9,995	—		9,995
Total Revenue	116,859	(2,264)		114,595
Costs and expenses:				
Product cost of revenue	50,949	(269)	a	50,680
Service cost of revenue	15,090	(13)	d	15,077
Total cost of revenue	66,039	(282)		65,757
Gross profit	50,820	(1,982)		48,838
Operating expense				
Research and development	10,605	—		10,605
Sales and marketing	27,824	(746)	c, e	27,078
General and administrative	12,509	(85)	r	12,424
Restructuring charges	2,335	(704)	i	1,631
Total operating expenses	53,273	(1,535)		51,738
Loss from operations	(2,453)	(447)		(2,900)
Other expenses and losses, net:				
Interest (income) expense	2,558	21	r	2,579
Other income	(98)	—		(98)
Loss before income taxes	(4,913)	(468)		(5,381)
Income tax benefit	(1,240)	(22)	m, o-q	(1,262)
Net loss	$ (3,673)	$ (446)		$ (4,119)
Loss per share:				
Basic	$ (0.11)			$ (0.12)
Diluted	$ (0.11)			$ (0.12)
Weighted average common shares outstanding - basic	34,093			34,093
Weighted average common shares outstanding - diluted	34,093			34,093

QUANTUM CORPORATION
CONSOLIDATED BALANCE SHEET
(in thousands, except per share amounts)

	June 30, 2017			
	As Previously Reported	Restatement Adjustments	Restatement Reference	As Restated
ASSETS				
Current assets:				
Cash and cash equivalents	$ 8,661	$ —		$ 8,661
Accounts receivable, net of allowance for doubtful accounts of $5,145 as of June 30, 2017	109,418	(11,910)	a	97,508
Manufacturing inventories	—			—
Service part inventories	27,821	8,865	a	36,686
Other current assets	19,788	—		19,788
Restricted cash	10,005	(245)	g, q	9,760
Total current assets	1,891	1,111	f	3,002
Property and equipment, less accumulated depreciation	177,584	(2,179)		175,405
Intangible assets, less accumulated amortization	10,455	(318)	r	10,137
Restricted cash, long-term	240	—		240
Other long term assets	20,000	—		20,000
Total Assets	4,753	1,552	h, m, p, r	6,305
LIABILITIES AND STOCKHOLDERS' DEFICIT	$ 213,032	$ (945)		$ 212,087
Liabilities:				
Current liabilities				
Accounts payable	$ 45,007	$ (513)	g	$ 44,494
Accrued warranty	3,161	(3,161)	l	—
Deferred revenue, current	79,996	10,460	a, b	90,456
Accrued restructuring charges, current	2,249	629	i	2,878
Convertible subordinated debt, current	62,926	—		62,926
Accrued compensation	22,186	(968)	e, f	21,218
Other accrued liabilities	13,309	4,035	a, d, l, n, q, r	17,344
Total current liabilities	228,834	10,482		239,316
Deferred revenue, long-term	36,697	1,452	b	38,149
Accrued restructuring charges, long-term	544	3,501	i	4,045
Long-term debt, net of current portion	60,219	1,515	h	61,734
Other long-term liabilities	4,736	5,666	n, p, q	10,402
Total liabilities	331,030	22,616		353,646
Commitment and contingencies (Note 11)				
Stockholders' deficit				
Preferred stock:				
Preferred stock 20,000 shares authorized; no shares issued as of June 30, 2017	—	—		—
Common stock:				
Common stock, $0.01 par value; 1,000,000 shares authorized; 34,101 shares issued and outstanding at June 30, 2017	341	—		341
Additional paid-in capital	475,357	—		475,357
Accumulated deficit	(596,969)	(18,961)	a-b, d-e, m, o-q, r	(615,930)
Accumulated other comprehensive income	3,273	(4,600)	n, r	(1,327)
Total Stockholders' deficit	(117,998)	(23,561)		(141,559)
Total liabilities and stockholders' deficit	$ 213,032	$ (945)		$ 212,087

QUANTUM CORPORATION
CONSOLIDATED STATEMENT OF OPERATIONS
(in thousands except per share amounts)

	Three Months Ended September 30, 2017			
	As Previously Reported	Restatement Adjustments	Restatement Reference	As Restated
Revenue:				
Product revenue	$ 63,606	$ 3,990	a, c	$ 67,596
Service revenue	34,165	745	b	34,910
Royalty revenue	9,280	—		9,280
Total revenue	107,051	4,735		111,786
Costs and expenses:				
Product cost of revenue	48,561	3,041	a	51,602
Service cost of revenue	14,717	148	d	14,865
Total cost of revenue	63,278	3,189		66,467
Gross profit	43,773	1,546		45,319
Operating expense				
Research and development	10,190	—		10,190
Sales and marketing	26,179	(355)	c, e	25,824
General and administrative	12,158	(652)	j, r	11,506
Restructuring charges	31	39	i	70
Total operating expenses	48,558	(968)		47,590
Total costs and expenses	111,836	2,221		114,057
Income (loss) from operations	(4,785)	2,514		(2,271)
Other (income) expenses:				
Interest expense, net	2,617	21	r	2,638
Loss on debt extinguishment	39	—		39
Other income	(77)	—		(77)
Net income loss before income taxes	(7,364)	2,493		(4,871)
Income tax expense (benefit)	499	(271)	m, o-q	228
Net income (loss)	$ (7,863)	$ 2,764		$ (5,099)
Loss per share:				
Basic	$ (0.23)			$ (0.15)
Diluted	$ (0.23)			$ (0.15)
Weighted average common shares outstanding - basic	34,580			34,580
Weighted average common shares outstanding - diluted	34,580			34,580

QUANTUM CORPORATION
Consolidated Statement of Operations
(in thousands, except per share amounts)

	Six Months Ended September 30, 2017			
	As Previously Reported	Restatement Adjustments	Restatement Reference	As Restated
Revenue				
Product revenue	$ 135,224	$ 1,855	a, c	$ 137,079
Service revenue	69,410	617	b	70,027
Royalty revenue	19,275	—		19,275
Total Revenue	223,909	2,472		226,381
Costs and expenses:				
Product cost of revenue	99,510	2,772	a	102,282
Service cost of revenue	29,807	135	d	29,942
Total cost of revenue	129,317	2,907		132,224
Gross profit	94,592	(435)		94,157
Operating expense				
Research and development	20,795	—		20,795
Sales and marketing	54,003	(1,101)	c, e	52,902
General and administrative	24,667	(737)	j, r	23,930
Restructuring charges	2,366	(665)	i	1,701
Goodwill impairment	—	—		—
Total operating expenses	101,831	(2,503)		99,328
Loss from operations	(7,239)	2,068		(5,171)
Other (income) expense, net:				
Interest expense, net	5,175	42	r	5,217
(Gain) loss on debt extinguishment	39	—		39
Other expenses (income)	(175)	—		(175)
Net loss before income taxes	(12,278)	2,026		(10,252)
Income tax benefit	(741)	(293)	m, o-q	(1,034)
Net income (net loss)	$ (11,537)	$ 2,319		$ (9,218)
Net loss per share:				
Basic	$ (0.34)			$ (0.27)
Diluted	$ (0.34)			$ (0.27)
Weighted average common shares outstanding - basic	34,338			34,338
Weighted average common shares outstanding - diluted	34,338			34,338

QUANTUM CORPORATION
CONSOLIDATED BALANCE SHEET
(in thousands, except per share amounts)

	September 30, 2017			
	As Reported	Restatement Adjustments	Restatement Reference	As Restated
ASSETS				
Current Assets				
Cash and cash equivalents	$ 9,504	$ 4,479	k	$ 13,983
Accounts receivable, net of allowance for doubtful accounts of $6,214 as of September 30, 2017	105,771	(6,545)	a	99,226
Manufacturing inventories	—	—		—
Service part inventories	29,119	5,593	a	34,712
Other current assets	19,915	—		19,915
Restricted cash	8,795	786	g, q	9,581
Total current assets	1,969	1,094	f	3,063
Property and equipment, less accumulated depreciation	175,073	5,407		180,480
Intangible assets, less accumulated amortization	10,745	(325)	r	10,420
Restricted cash, long-term	204	—		204
Other long term assets	20,000	—		20,000
Goodwill	5,127	1,419	h, m, p, r	6,546
Total Assets	—	—		—
	$ 211,149	$ 6,501		$ 217,650
LIABILITIES AND STOCKHOLDERS' DEFICIT				
Liabilities				
Current liabilities:				
Accounts payable	$ 48,488	—		$ 48,488
Accrued warranty	2,950	(2,950)	l	—
Deferred revenue, current	77,090	11,415	a, b	88,505
Accrued restructuring charges, current	1,743	627	i	2,370
Long-term debt current portion	—	—		—
Convertible subordinated debt, current	57,034	—		57,034
Accrued compensation	23,179	(924)	e, f	22,255
Other accrued liabilities	12,927	3,634	a, d, l, n, q, r	16,561
Total current liabilities	223,411	11,802		235,213
Deferred revenue, long-term	35,906	868	b	36,774
Accrued restructuring charges, long-term	423	3,192	i	3,615
Long-term debt, net of current portion	70,631	5,860	h, m	76,491
Convertible subordinated debt, long-term	—	—		—
Other long-term liabilities	5,112	5,924	n, p, q	11,036
Total liabilities	335,483	27,646		363,129
Commitment and contingencies (Note 11)				
Stockholders' deficit				
Preferred stock:				
Preferred stock 20,000 shares authorized; no shares issued as of September 30, 2017	—	—		—
Common stock:				
Common stock, $0.01 par value; 1,000,000 shares authorized; 34,663 shares issued and outstanding at September 30, 2017	347	—		347
Additional paid-in capital	476,409	(316)	j	476,093
Accumulated deficit	(604,832)	(20,481)	a-b, d-e, m, o-q, r	(625,313)
Accumulated other comprehensive income (expense)	3,742	(4,633)	n, r	(891)
Total Stockholders' deficit	(124,334)	21,145		145,479
Total liabilities and stockholders' deficit	$ 211,149	$ 6,501		$ 217,650

QUANTUM CORPORATION
CONSOLIDATED STATEMENT OF CASH FLOWS
FOR THE THREE MONTHS ENDED JUNE 30, 2017
(in thousands)

	For the Three Months Ended June 30, 2017			
	As Reported	Restatement Adjustments	Restatement Reference	As Restated
Cash flows from operating activities:				
Net loss	$ (3,674)	$ (444)	a, b, e, f, g-i, m, n, p, q	$ (4,119)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:				
Depreciation and amortization	1,268	45	l, r	1,313
Amortization of debt issuance costs	427	—		427
Provision for product and service inventories	1,257	964	l	2,221
Tax benefit from settlement	(1,656)	1,656	l	—
Stock based compensation expense	1,613	—		1,613
Non-cash interest expense	277	(277)	l	—
Bad debt expense	—	11	l	11
Deferred income taxes, net	120	(22)	m, l, o-q	98
Unrealized foreign exchange (gain)/loss	—	1,679	l	1,679
(Gain)/loss on investments	—	35	o	35
Changes in assets and liabilities:				
Accounts receivable	6,638	(2,042)	a, l	4,596
Manufacturing inventories	(709)	(1,072)	a, l	(1,781)
Service parts inventories	(1,034)	(161)	l	(1,195)
Accounts payable	3,318	332	g, l	3,650
Accrued warranty	(102)	102	l	—
Accrued restructuring charges	1,444	(803)	e, f, l	641
Accrued compensation	(2,047)	(525)	i, l	(2,572)
Deferred revenue	(5,633)	3,012	a, b, l	(2,621)
Other assets and liabilities	(489)	(2,739)	a, d, g, h, l, n, m, p, q,	(3,227)
Net cash provided by operating activities	1,018	(249)		769
Cash flows from investing activities:				
Purchases of property and equipment	(123)	(55)	l	(178)
Proceeds from sale of assets	—	65	l	65
Cash distributions from investments	278	—		278
Net cash provided by investing activities	155	10		165
Cash flows from financing activities:				
Borrowings of long-term debt and subordinated convertible debt, net of debt issuance costs	71,800	277	h, l	72,077
Repayments on long-term debt	(77,175)	—		(77,175)
Payment of tax withholding due upon vesting of restricted stock	(111)	4	l	(107)
Proceeds from issuance of common stock, net	5	(4)	l	1
Net cash used in financing activities	(5,481)	277		(5,204)
Effect of exchange rate changes on cash and cash equivalents and restricted cash	13	8	l	21
Net decrease in cash, cash equivalents and restricted cash	(4,297)	48		(4,249)
Cash, cash equivalents and restricted cash at the beginning of period	36,658	(746)		35,912
Cash, cash equivalents and restricted cash at the end of period	$ 32,361	$ (698)		$ 31,663
Supplemental disclosure of cash flow information:				
Purchases of property and equipment included in accounts payable	$ 78	$ (61)	l	$ 17
Transfer of inventory to property and equipment	$ —	$ 407	l	$ 407
Cash Paid For:				
Interest	$ —	$ 1,561	l	$ 1,561
Taxes, net of refunds	$ —	$ 508	l	$ 508

QUANTUM CORPORATION
CONSOLIDATED STATEMENT OF CASH FLOWS
FOR THE SIX MONTHS ENDED SEPTEMBER 30, 2017
(in thousands)

	For the Six Months Ended September 30, 2017			
	As Reported	Restatement Adjustments	Restatement Reference	As Restated
Cash flows from operating activities:				
Net loss	$ (11,537)	$ 2,321	a, b, e, f, g-i, l, m, n, p, q	$ (9,218)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:				
Depreciation and amortization	2,525	85	l, r	2,610
Amortization of debt issuance costs	855	—		855
Provision for product and services inventories	2,319	1,844	l	4,163
Tax benefit from settlement	(1,656)	1,656	l	—
Stock based compensation expense	3,330	(317)	j	3,013
Non-cash interest expense	621	(621)	l	—
Non-cash loss on debt extinguishment	9	30	l	39
Bad debt expense	—	292	l	292
Deferred income taxes, net	144	(463)	m, l, o-q	(319)
Loss on disposal of property and equipment	—	2	l	2
Unrealized foreign exchange (gain) loss	—	1,019	l	1,019
Loss on investments	—	72	l	72
Changes in assets and liabilities:				
Accounts receivable	10,284	(7,219)	a, l	3,065
Manufacturing inventories	(1,752)	553	a, l	(1,199)
Service parts inventories	(2,737)	353	l	(2,384)
Accounts payable	6,537	838	g, l	7,375
Accrued warranty	(313)	313	l	—
Accrued restructuring charges	817	(1,114)	e, f, l	(297)
Accrued compensation	(1,236)	(298)	i, l	(1,534)
Deferred revenue	(9,329)	3,382	a, b, l	(5,947)
Other assets and liabilities	815	(3,730)	a, d, g, h, l, n, m, p, q,	(2,913)
Net cash used in operating activities	(304)	(1,002)		(1,306)
Cash flows from investing activities:				
Purchases of property and equipment	(1,156)	5	l	(1,151)
Proceeds from sale of assets	—	275	l	275
Cash distributions from investments	278	—		278
Net cash provided by (used in) investing activities	(878)	280		(598)
Cash flows from financing activities:				
Borrowings of long-term debt and subordinated convertible debt, net of debt issuance costs	164,650	620	k	165,270
Repayments on long-term debt	(160,245)	4,479	k	(155,766)
Repayment of convertible subordinated debt	(6,000)	(30)	l	(6,030)
Payment of tax withholding due upon vesting of restricted stock	(1,775)	(2)	l	(1,777)
Proceeds from issuance of common stock, net	1,010	2	l	1,012
Net cash provided by (used in) financing activities	(2,360)	5,069		2,709
Effect of exchange rate changes on cash, cash equivalents and restricted cash	82	247	l	329
Net increase (decrease) in cash, cash equivalents and restricted cash	(3,454)	4,588		1,134
Cash, cash equivalents and restricted cash at the beginning of period	36,658	(746)		35,912
Cash, cash equivalents and restricted cash at the end of period	$ 33,204	$ 3,842		$ 37,046
Supplemental disclosure of cash flow information:				
Purchases of property and equipment included in accounts payable	$ 335	$ —	l	$ 287
Transfer of inventory to property and equipment	—	919	l	919
Cash Paid For:				
Interest	$ —	$ 4,515	l	$ 4,515
Taxes, net of refunds	—	914	l	914

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

As described in more detail in the Company's Current Report on Form 8-K filed with the SEC on September 14, 2018, upon the substantial completion of the internal investigation by a special committee of the Board of Directors of Quantum Corporation (the "Board") and upon the recommendation of the Audit Committee of the Board, after consultation with management, the Board concluded that the Company's previously issued consolidated financial statements for fiscal years ended March 31, 2015, March 31, 2016 and March 31, 2017 and consolidated financial statements for quarters and the year-to-date periods ended June 30, 2015, September 30, 2015, December 31, 2015, June 30, 2016, September 30, 2016, December 31, 2016, June 30, 2017 and September 30, 2017 (collectively, the "Non-Reliance Periods") should no longer be relied upon as a result of material misstatements and need to be restated. The Board also determined that the Company's disclosures related to such financial statements and related communications issued by or on behalf of the Company with respect to the Non-Reliance Periods, including management's assessment of internal control over financial reporting and disclosure controls and procedures, should no longer be relied upon.

a) Previous independent registered public accounting firm

On January 21, 2019, Quantum Corporation's (the "Company") dismissed PricewaterhouseCoopers LLP ("PwC") as its independent registered public accounting firm. The decision to change independent registered public accounting firms was approved by the Audit Committee of the Board (the "Audit Committee") and by the Board.

PwC has not issued a report on the Company's consolidated financial statements for the fiscal year ended March 31, 2018. PwC's audit report on the Company's consolidated financial statements for the three fiscal years ended March 31, 2017, as previously filed, did not contain any adverse opinion or disclaimer of opinion, nor was it qualified or modified as to uncertainty, audit scope, or accounting principles. However, as noted above, the Company's financial statements for the fiscal years ended March 31, 2017, 2016, and 2015, including the related auditor's report, should no longer be relied upon. Additionally, the auditor's report on the effectiveness of the Company's internal control over financial reporting as of March 31, 2017, should no longer be relied upon.

During the Company's fiscal years ended March 31, 2018 and March 31, 2017, and the subsequent interim period through January 21, 2019, there were no disagreements between the Company and PwC on any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedures, which disagreements, if not resolved to PwC's satisfaction, would have caused PwC to make reference to the subject matter of the disagreement in their reports on the Company's consolidated financial statements.

During the Company's fiscal years ended March 31, 2018 and March 31, 2017, and the subsequent interim period through January 21, 2019, there were no reportable events (as defined by S-K 304(a)(1)(v)), except that:

- As disclosed in the Company's Current Report on Form 8-K filed with the SEC on September 14, 2018, the Board concluded that the Company's previously issued financial statements for the Non-Reliance Periods should no longer be relied upon as a result of material misstatements and need to be restated. At the time of PwC's dismissal, the Company's financial statements for the fiscal years ended March 31, 2017, 2016, and 2015 had not yet been refiled or reissued.
- As disclosed in the Company's Current Report on Form 8-K filed with the SEC on September 14, 2018, as a result of the Company's conclusions about the Non-Reliance Periods and the substantial completion of the internal investigation, PwC informed the Company that the scope of their audit and reviews for the Non-Reliance Periods would have to be expanded. At the time of PwC's dismissal, these audit and review procedures had not been completed.
- At the time of PWC's dismissal, the Company expected to report one or more material weaknesses in internal control over financial reporting and to report that its internal control over financial reporting and its disclosure controls and procedures were not effective during the Non-Reliance Periods. At the time of PwC's dismissal, the Company and PwC had not concluded on the number or nature of the material weaknesses related to the Company's internal control over financial reporting.
- As disclosed in the Company's Current Report on Form 8-K filed with the SEC on September 14, 2018, the Company indicated that substantial doubt existed about its ability to continue as a going concern. At the time of

PwC's dismissal, it had not completed its procedures related to its assessment of the Company's ability to continue as a going concern. As disclosed in the Company's Current Report on Form 8-K filed with the SEC on December 28, 2018, the Company refinanced its debt obligations and line of credit, which alleviated the substantial doubt about its ability to continue as a going concern.

b) New independent registered public accounting firm

On January 21, 2019, the Company engaged Armanino LLP ("Armanino") as its independent registered public accounting firm to audit the Company's consolidated financial statements for the fiscal years ended March 31, 2019, March 31, 2018 and March 31, 2017 and to review all other periods as necessary.

During the Company's fiscal years ended March 31, 2018 and 2017 and the subsequent interim period through January 21, 2019, neither the Company nor anyone on its behalf consulted with Armanino with respect to: (i) the application of accounting principles to a specified transaction, either completed or proposed, or the type of audit opinion that might be rendered on the Company's consolidated financial statements, and no written or oral advice of Armanino was provided to the Company that was an important factor considered by the Company in reaching a decision as to the accounting, auditing, or financial reporting issue; or (ii) any matter that was either the subject of a "disagreement" (as defined in Item 304(a)(1) (iv) of Regulation S-K ("Regulation S-K") under the Securities Act of 1933, as amended, and the related instructions related thereto), or any "reportable event" (as defined in Item 304(a)(1)(v) of Regulation S-K).

The Company has brought the reportable events referred to under a) above to the attention of Armanino and requested that they be evaluated by Armanino.

The dismissal and appointment reflect the Audit Committee's and the Board's belief that this approach is in the best interest of the Company and its shareholders and was the most effective way to complete the restatement of the relevant financial statements within the Non-Reliance Periods and the audits or reviews of the consolidated financial statement of the three fiscal years ended March 31, 2019 in the most timely, efficient and cost-effective manner.

As part of the dismissal of PwC, the Company provided PwC and Armanino with a copy of the disclosures it made in its Current Report on Form 8-K filed with the SEC on September 14, 2018 and requested that PwC furnish a letter addressed to the Securities and Exchange Commission stating whether or not it agrees with the statements made therein. A copy of PwC's letter, dated January 25, 2019, is filed as an exhibit to this Annual Report on Form 10-K.

ITEM 9A. CONTROLS AND PROCEDURES

(i) Restatement of Previously Issued Consolidated Financial Statements

As described in the Explanatory Note and in Note 2:*Restatement* in the Notes to the consolidated financial statements, both included in this Annual Report on Form 10-K, in February 2018, the Audit Committee ("Audit Committee") of our Board of Directors ("Board"), and subsequently a special committee of the Board (the "Special Committee") consisting of two members of the Audit Committee, began conducting an internal investigation, with the assistance of independent accounting and legal advisors, into matters related to the Company's accounting practices and internal control over financial reporting related to revenue recognition for transactions occurring between January 1, 2016 and March 31, 2018. Upon the recommendation of the Audit Committee and as a result of the investigation by the Special Committee and after consultation with our management, on September 14, 2018, the Board concluded that the Company's previously issued consolidated financial statements and other financial data for the fiscal years ended March 31, 2015, March 31, 2016 and March 31, 2017 contained in its Annual Reports on Form 10-K, and its condensed consolidated financial statements for each of the quarterly and year-to-date periods ended June 30, 2015, September 30, 2015, December 31, 2015, June 30, 2016, September 30, 2016, December 31, 2016, June 30, 2017 and September 30, 2017 (collectively, the "Non-Reliance Periods") should not be relied upon and required restatement (the "Restatement"). The Board also determined that the Company's disclosures related to such financial statements and related communications issued by or on behalf of the Company with respect to the Non-Reliance Periods, including management's assessment of internal control over financial reporting and disclosure controls and procedures, should not be relied upon.

(ii) Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of March 31, 2019. The term "disclosure controls and procedures," as defined in Rule 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), means controls and other procedures of a company "that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms." Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives. Based on this evaluation, management, including our Chief Executive Officer and our Chief Financial Officer, concluded as of March 31, 2019 that our disclosure controls and procedures were not effective because of material weaknesses in our internal control over financial reporting, described below in Management's Report on Internal Control Over Financial Reporting.

Notwithstanding the ineffectiveness of our disclosure controls and procedures as of March 31, 2019 and the material weaknesses in our internal control over financial reporting that existed as of that date as described below, management believes, based on a number of factors, including, but not limited to, (a) the substantial completion of the investigation by the Special Committee and the substantial resources expended by the Company (including the use of external independent accounting and legal advisors) in response to the findings of the Special Committee, (b) our internal review that identified certain accounting errors, leading to the adjustment of our previously issued financial statements, and (c) commencement of certain remediation actions, as discussed further below, the consolidated financial statements and unaudited interim financial information, as included in this Annual Report on Form 10-K, fairly represent in all material respects our financial condition, results of operations and cash flows as of and for the periods presented.

Our independent external auditors have issued an unqualified opinion on our consolidated balance sheets as of March 31, 2019 and March 31, 2018 and the related consolidated statements of operations, comprehensive income (loss), cash flows, and stockholders' deficit for each of the three fiscal years in the period ended March 31, 2019 and the related notes.

(iii) Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is defined in Rules 13a-15(f) or 15d-15(f) promulgated under the Exchange Act as a process designed by, or under the supervision of, our principal executive and principal financial officers, and effected by our Board of Directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP") and includes those policies and procedures that:

- Pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets;
- Provide reasonable assurance that transactions are recorded as necessary to permit preparation of consolidated financial statements in accordance with U.S. GAAP, and that our receipts and expenditures are being made only in accordance with appropriate authorization of management and the Board of Directors; and
- Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

All systems of internal control, no matter how well designed, have inherent limitations. Therefore, even those systems deemed to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation. Because of inherent limitations, our internal controls that govern financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that the controls may become inadequate because of changes in conditions or that the degree of compliance with the policies or procedures may deteriorate.

A material weakness is a deficiency, or a combination of deficiencies, in internal controls over financial reporting such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected in a timely basis.

Our management has assessed the effectiveness of our internal controls over financial reporting as of March 31, 2019. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in Internal Control-Integrated Framework (2013). Based on this assessment, our management concluded that due to material weaknesses in our internal controls over financial reporting as described below, our internal controls over financial reporting was not effective as of March 31, 2019.

Control Environment

The control environment, which is the responsibility of senior management, helps set the tone of the organization, influences the control consciousness of its officers and employees, and is an important component affecting how the organization performs financial analysis, accounting and financial reporting. A proper organizational tone can be promoted through a variety of means, such as well documented and communicated policies and code of ethics, a commitment to hiring competent employees, the manner and content of oral and written communications, strong internal controls, effective governance and ethical behavior.

We did not maintain an effective control environment primarily attributable to the following identified material weaknesses:

- Under the then-existing senior management, we had an inconsistent and sometimes inappropriate tone at the top during the period covered by the restatement and as a consequence sometimes did not adhere to U.S. GAAP and our accounting policies and procedures;
- We did not design and maintain an effective control environment for certain accounting estimates;
- We did not have sufficient personnel with an appropriate level of knowledge, experience and training commensurate with our financial reporting requirements to ensure proper selection and application of U.S. GAAP in certain circumstances;
- We did not establish clear reporting structures, reporting lines, and decisional authority responsibilities in the organization.

Financial Reporting Process

We did not effectively design controls in response to the risks of material misstatement. This control deficiency contributed to the following additional material weakness:

- We did not design effective controls over certain business processes including ourperiod-end financial reporting process. This included the identification and execution of controls over revenue recognition and the preparation, analysis, and review of significant account reconciliations and closing adjustments required to assess the appropriateness of revenue recognition and certain other account balances at period end.

One or more of these material weaknesses contributed to the restatement of our consolidated financial statements, including misstatements related to revenue prematurely recognized from certain sales to certain distributors as well as other errors described in the Explanatory Note and Note 2, *Restatement*, to the notes to our consolidated financial statements included in this Annual Report on Form10-K.

(iv) Remediation Plan and Status

We have identified and implemented actions to improve the effectiveness of our internal controls over financial reporting and disclosure controls and procedures. We intend to continue these remediation activities, including ongoing efforts to enhance our resources and train our employees on financial reporting and disclosure responsibilities, and the periodic review of such actions with the Audit Committee.

During fiscal 2018 and 2019, we have hired personnel with the appropriate experience, certification, education, and training for all key positions in the financial reporting and accounting function and in some cases have created new positions. Additionally, the employees involved in the accounting and financial reporting functions in which misstatements were identified have left the Company.

In addition, we have taken, and continue to take, the actions described below to remediate the identified material weaknesses. As we continue to evaluate and work to improve our internal controls over financial reporting, our senior management may take additional measures to address control deficiencies or modify the remediation efforts described in this section. While the Audit Committee and senior management are closely monitoring the changes and improvements to our system of internal controls, until the remediation efforts discussed in this section, including any additional remediation efforts that our senior management identifies as necessary, are completed, tested and determined effective, the material weaknesses described above will continue to exist.

Control Environment

Our Board of Directors has directed senior management to ensure that a proper, consistent tone is communicated throughout the organization, which emphasizes the expectation that previously existing deficiencies will be rectified through implementation of processes and controls to ensure strict compliance with U.S. GAAP and regulatory requirements. We also have taken steps to create a proper tone through changes in our personnel and policies, which include updates made to our code of business conduct and ethics.

In June 2018 we hired a new Chief Financial Officer and in July 2018 we hired a new Chief Executive Officer. In addition, we have hired the following additional key employees into the following positions, and in some cases, created new positions to reflect our commitment to addressing our material weaknesses:

- Chief Accounting Officer (new position)
- Chief Legal Counsel (interim)
- Chief Information Officer
- Chief Revenue Officer (new position)
- VP Global Operations and Supply Chain

In addition to these management changes, in order to ensure that we have a sufficient complement of personnel with an appropriate level of knowledge, experience and training with our financial reporting requirements, during 2018 and 2019 we have hired personnel for key positions in the financial reporting and accounting function and in some cases have created new positions, including:

- Corporate Controller
- Assistant Corporate Controller (new position)
- Senior Director of Internal Audit
- Director of Tax
- Senior Manager of Revenue Accounting (new position)
- Manager of Revenue Accounting (new position)
- Manager – General Ledger and Consolidations (new position)

In consideration of these staffing increases, the finance department was reorganized to maximize reporting efficiency and increase focus on material weakness areas.

To assist in the restatement, we augmented our personnel with qualified external consultants which we will continue to utilize as necessary.

Financial Reporting Process

We are improving mechanisms to identify, evaluate and monitor risks to financial reporting throughout the organization. We are updating our global risk assessment process, evaluation, and mitigation strategies. In addition, we have updated our internal audit plan to include internal audit monitoring activities responsive to the issues identified in the independent investigation and review of our financial records. In addition, we have implemented new procedures and enhanced controls governing our internal management-led Disclosure Committee and strengthened our sub-certification and external reporting processes associated with the review and approval of the content of our SEC filings and other public disclosures.

We have designed and where appropriate enhanced controls over the preparation, analysis and review of revenue recognition and significant account reconciliations. In addition, we have reinforced existing policies and procedures and enacted policy and procedures changes, where necessary, to better define requirements for effective and timely reconciliations of balance sheet and significant accounts, including independent review.

(v) Changes in Internal Control over Financial Reporting

Other than the changes described above in "(iv) Remediation Plan and Status", there were no changes in our internal control over financial reporting (as such term is defined in the Exchange Act) during the quarter ended March 31, 2019 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS OF THE REGISTRANT AND CORPORATE GOVERNANCE

BOARD OF DIRECTORS AND COMMITTEES

Over the past two fiscal years, the Board has been fundamental in establishing and managing a new set of strategies to transform our direction including (i) working with an external consulting firm to identify cost savings opportunities, (ii) launching an executive search firm, Korn/Ferry International to assist in the recruitment and appointment of new independent directors and to attract new leadership talent specifically for the selection of a President & Chief Executive Officer, (iii) partnering with management to successfully complete internal and external audits through the Company's restatement process, (iv) oversee on-going efforts to file late reports to get back in compliance with the Securities and Exchange Commission (the "SEC"), (v) reviewing and approving the CEO's objectives; (vi) approving acquisitions, divestitures and other significant corporate actions; (vii) advising the CEO on the performance of senior management, and significant organizational changes, including succession planning; and (viii) approving the annual operating financial plan.

Throughout this time, we experienced changes in our directors starting in fiscal 2018. The following summary identifies the directors who served on our Board during the past two completed fiscal years beginning with fiscal 2019 (our most recent completed fiscal year), the committees they served on, the methodology used when assessing director compensation, and the decisions made to help build a strategic Board that contributes to long-term shareholder value.

The names of our directors and certain information about them as of August 6, 2019, are set forth below. There are no family relationships between any directors or executive officers of the Company.

Name of Director	Age	Director Since	Principal Occupation
John A. Fichthorn(2)	46	2019(4)	Head of Alternative Investments for B. Riley Capital Management, LLC
James J. Lerner	49	2018	President & Chief Executive Officer of Quantum
Clifford Press(1)(3)	65	2016	Managing Member, Oliver Press Partners, LLC
Raghavendra Rau(1)	70	2017	Management Consultant
Marc E. Rothman(1)(2)	54	2017	Executive Vice President and Chief Financial Officer, VeriFone Inc.
Eric B. Singer(2)(3)	45	2017	Founder and Managing Member of VIEX Capital Advisors, LLC

(1) Member of the Audit Committee.
(2) Member of the Leadership and Compensation Committee.
(3) Member of the Corporate Governance and Nominating Committee.
(4) Mr. Fichthorn was appointed to the Board on April 4, 2019, the start of the Company's fiscal 2020.

Directors

Mr. John A. Fichthorn, 46, has served since April 2017 as Head of Alternative Investments for B. Riley Capital Management, LLC, which is an SEC-registered investment advisor and wholly-owned subsidiary of B. Riley Financial, Inc. ("B. Riley"). Prior to joining B. Riley, Mr. Fichthorn was a Co-Founder of Dialectic Capital Management, LLC, an investment management firm, and has been a portfolio manager of the firm since 2003. Mr. Fichthorn served as a Director of California Micro Devices from September 2009 until its sale in February 2010. From 2000 to 2003, Mr. Fichthorn was employed by Maverick Capital, most recently as Managing Director of the technology group. From 1999 to 2000, Mr. Fichthorn was an analyst at Alliance Capital working across multiple hedge fund products and as a member of the technology team. From 1997 to 1999, Mr. Fichthorn was an Analyst at Quilcap Corporation, a hedge fund where he covered all sectors, with a focus on technology. From 1995 to 1997, Mr. Fichthorn worked at Ganek & Orwicz Partners where his responsibilities included small cap research, international closed-end fund arbitrage and operations. Mr. Fichthorn has served on the board of directors of Health Insurance Innovations, Inc., a publicly traded health insurance and technology platform company, since December 2017, and theMaven, a publicly traded online media company, since September 2018, where he also serves as chairman of the board. Mr. Fichthorn has significant experience in accounting and financial matters, the unique perspective of representing the interests of a major stockholder, and experience serving on other public company boards.

Mr. James J. Lerner, 49, was appointed as President and CEO of the Company, effective July 1, 2018. He also serves as the Chairman of the Company's Board of Directors. Mr. Lerner has previously served as Vice President and Chief Operating Officer at Pivot3 Inc. from March 2017 to June 2018, and Chief Revenue Officer from November 2016 to March 2017. Prior to Pivot3, from March 2014 to August 2015, Mr. Lerner served as President of Cloud Systems and Solutions at Seagate Technology Public Limited Company. Prior to Seagate, Mr. Lerner served in various executive roles at Cisco Systems, Inc., including most recently as Senior Vice President and General Manager of the Cloud & Systems Management Technology Group. Before beginning his career as a technology company executive, Mr. Lerner was a Senior Consultant at Andersen Consulting. Mr. Lerner earned a Bachelor of Arts in Quantitative Economics and Decision Sciences from U.C. San Diego. We believe Mr. Lerner's extensive experience in our industry combined with his executive-level experience at large, well-established companies contributes significantly to our Board.

Mr. Clifford Press, 65*,* has served as a member of our Board since April 2016. Mr. Press has been a Managing Member of OPP, LLC, and its predecessor firm, Oliver Press Partners, LLC, an investment advisory firm, since March 2005. He is currently a Director of Acacia Research Corporation (NYSE: ACTG) a patent licensing firm. From October 2016 to June 2018, Mr. Press served as a Director of Stewart Information Services Corporation (NYSE: STC) a provider of title insurance and related real estate services. He previously served on the Board of Directors of numerous public and private companies in title insurance and real estate services, workers' compensation insurance, digital currency services, and laser-based photonics. He received his undergraduate degree from Oxford University in England and in 1983 received an MBA from the Harvard Business School. We believe Mr. Press' prior executive and board-level experience and his perspective as a stockholder enables him to contribute significantly to our Board.

Mr. Raghavendra Rau, 70, has served as a member of our Board since March 2017 currently serves as a member of the Board of Directors and Vice Chairman of TiVo Corporation, a creator of personalized and data-driven ways for viewers to discover the right entertainment and for providers to discover the right audiences, a position he has held since May 2015. He also served as Interim President and CEO of Tivo from July 5, 2018 to May 30, 2019. From November 2011 until October 2014, Mr. Rau served as the Chief Executive Officer of SeaChange International Inc., a provider of digital video systems, software and related services to cable, telecommunications and broadcast television companies worldwide, where he also served as a director from July 2010 until October 2014 and as a member of the Compensation Committee. From November 2010 until December 2014, Mr. Rau served as a director of Aviat Networks, Inc., a global supplier of microwave networking solutions, backed by an extensive suite of professional services and support, where he also served as a member of the Audit Committee. Mr. Rau also previously served as a director of Microtune, Inc., a global leader in RF integrated circuits and subsystem modules, from May 2010 until its acquisition by Zoran Corporation in December 2010, where he also served as a member of the Audit Committee. Mr. Rau served as Senior Vice President of the Mobile TV Solutions Business of Motorola, Inc. from May 2007 until January 2008, and as Senior Vice President of Strategy and Business Development, Networks & Enterprise of Motorola from March 2006 to May 2007. Mr. Rau served as Corporate Vice President of Global Marketing and Strategy for Motorola from 2005 to 2006, and as Corporate Vice President, Marketing and Professional Services, from 2001 to 2005. From October 1992 to 2001, Mr. Rau served in various positions within Motorola, including as Vice President of Strategic Business Planning and Vice President of Sales and Operations and held positions in Asia and Europe. Mr. Rau is a former Chairman of the QuEST Forum, a collaboration of service providers and suppliers dedicated to telecom supply chain quality and performance, and was

a director of the Center for Telecom Management at the University of Southern California. Mr. Rau also served on the Marketing Advisory Board of Cleversafe Inc. which was acquired by IBM. Mr. Rau holds a Bachelor's degree in Engineering from the National Institute of Technology (India) and an MBA from the Indian Institute of Management. Mr. Rau joined the Board on March 31, 2017. He serves as a member of the Audit Committee and the Leadership and Compensation Committee. We believe that Mr. Rau possesses specific attributes that qualify him to serve as a member of the Board, including his executive and board experience.

Mr. Marc E. Rothman, 54, has served as a member of our Board since May 2017. He is currently Executive Vice President and Chief Financial Officer at VeriFone Systems Inc., which designs, markets and services electronic payment systems for consumers, merchants and financial institutions, a position he has held since February 2013. Before joining VeriFone, Mr. Rothman served as Senior Vice President and Chief Financial Officer of Motorola Mobility Inc. from 2010 to 2012, and also played a central role in Motorola Mobility's spinoff from its former parent company, Motorola Inc., as well as its sale to Google in 2012. Mr. Rothman also served in a number of executive finance positions at Motorola throughout his tenure, beginning in January 2000, including its Chief Financial Officer of its Broadband Communications, Public Safety, Networks and Enterprise and Mobile Devices global business segments, as well as Motorola's Senior Vice President, Corporate Controller and Chief Accounting Officer. From 1995 to 2000, Mr. Rothman served in a number of leadership finance roles at General Instrument, which developed integrated and interactive broadband access solutions, including its Vice President and Corporate Controller. Prior to that, Mr. Rothman was employed eight years at Deloitte & Touche, Audit Advisory Services. He graduated with a Bachelor's degree in Business from Stockton University (formerly Richard Stockton College) with Distinction, and is a Certified Public Accountant in California (inactive). We believe that Mr. Rothman possesses specific attributes that qualify him to serve as a member of the Board, including his executive experience and his deep financial expertise, including corporate finance, accounting, restructuring, mergers and acquisitions and capital markets.

Mr. Eric B. Singer, 45, has served as a member of our Board since November 2017. Mr. Singer has served as the managing member of each of VIEX GP and VIEX Capital since May 2014. He served as chairman of the board of RhythmOne PLC from February 2018 (after its acquisition of YuMe, Inc. (NYSE: YUME), a provider of brand video advertising software and audience data) until the sale of RhythmOne in April 2019. Mr. Singer was a director of YuMe, Inc. from June 2016 to February 2018, including as chairman of its board since November 2016. Mr. Singer served on the board of Support.com (Nasdaq:SPRT), a leading provider of tech support and turnkey support center services, from June 2016 to March 2019. From March 2012 until September 2014, Mr. Singer served as co-managing member of Potomac Capital Management III, L.L.C., the general partner of Potomac Capital Partners III, L.P. ("PCP III"), and Potomac Capital Management II, L.L.C., the general partner of Potomac Capital Partners II, L.P. ("PCP II") and served as an advisor to Potomac Capital Management, L.L.C. and its related entities from May 2009 until September 2014. The principal business of PCP III and PCP II is investing in securities. Mr. Singer previously served as a director of Numerex Corp. (Nasdaq: NMRX), a provider of managed machine-to-machine (M2M) enterprise solutions enabling the Internet of Things (IoT), from March 2016 until its sale in December 2017; TigerLogic Corporation (Nasdaq: TIGR), a global provider in engagement solutions, including Postano social media aggregation, display and fan engagement platform; IEC Electronics from February 2015 to August 2017; Meru Networks, Inc. (Nasdaq:MERU), a Wi-Fi network solutions company, from January 2014 until January 2015; PLX Technology, Inc. (Nasdaq:PLXT), a semiconductor company, from December 2013 until its sale in August 2014; Sigma Designs, Inc. (Nasdaq:SIGM), a semiconductor company, from August 2012 until December 2013, including as its Chairman of the Board from January 2013 until December 2013. Mr. Singer holds a B.A. from Brandeis University. We believe Mr. Singer's extensive public company board experience and his perspective as one of our largest stockholders enables him to contribute significantly to our Board.

Additional Information about the Independent Directors who served on the Board for Fiscal 2019 and 2018

Fiscal 2019 and 2018 Directors

Name of Director or Nominee	Dates of Service
Auvil III, Paul R.(1)	August 23, 2007 - November 8, 2017
Mutch, John(2)	March 31, 2017 - May 1, 2017
Pinchev, Alex(3)	May 31, 2017 - April 11, 2019
Powers, Gregg J.(4)	August 7, 2013 - August 9, 2017
Press, Clifford	April 1, 2016 - Present
Rau, Raghavendra(5)	March 31, 2017 - Present
Roberson, David E.(6)	May 6, 2011 - May 31, 2017
Rothman, Marc E.(7)	May 4, 2017 - Present
Sanchez, Adalio T.(3)(7)	May 4, 2017 - April 11, 2019
Singer, Eric B.	November 9, 2017 - Present

(1) Mr. Auvil served on the Board from August 23, 2007, until his resignation on November 8, 2017.

(2) Mr. Mutch was appointed to the Board following the Annual Meeting of Stockholders on March 31, 2017, and as part of the settlement agreement with Viex Capital Advisors, LLC, Mr. Mutch executed his letter of resignation following the appointment of the first of three new directors to be appointed. Mr. Mutch resigned from the Board on May 1, 2017.

(3) Mr. Pinchev and Mr. Sanchez who joined the Company's Board of Directors in May 2017 resigned from their positions on the Board on April 11, 2019 to pursue other interests. Mr. Sanchez served as Quantum's Interim President and Chief Executive Officer from November 7, 2017 until January 16, 2018.

(4) Mr. Powers was appointed to the Board following the Annual Meeting of Stockholders on August 7, 2013, which he served until his resignation on August 9, 2017.

(5) Mr. Rau was appointed to the Board following the Annual Meeting of Stockholders on March 31, 2017 pursuant to a settlement agreement with Viex Capital Advisors, LLC. Effective September 1, 2017, Mr. Rau became an employee of the Company serving as Executive Chair on a temporary basis to exercise more active strategic oversight on behalf of the Board. Mr. Rau ended his service as Executive Chair on November 7, 2017 and resumed his position on the Board.

(6) Mr. Roberson was appointed to the Board May 6, 2011 which he served until his resignation on May 31, 2017, as part of the settlement agreement with Viex Capital Advisors, LLC, following the appointment of three new directors.

(7) Mr. Rothman and Mr. Sanchez were appointed to the Board effective May 4, 2017 as part of the term of the settlement agreement with Viex Capital Advisors, LLC as of March 2, 2017.

Board Composition

Our board of directors (the "Board") currently consists of six directors. The authorized number of directors may be changed by resolution of our Board. Vacancies on our Board can be filled by resolution of our Board. Our Board met a total of 22 times and took action by unanimous written consent nine times in fiscal 2018 and met a total of 31 times and took action by unanimous written consent six times in fiscal 2019. During fiscal 2018 and fiscal 2019, all of our directors attended at least 75% of the meetings of our Board held during their tenure and at least 75% of the meetings, if any, of the Board committees upon which they served and held during their tenure. All of our directors are expected to attend each meeting of the Board and the committees on which they serve and in fiscal 2020 will be expected to attend our annual stockholder meeting absent extraordinary circumstances. An annual stockholder meeting was not held in fiscal 2019.

Mr. Lerner, our current President and Chief Executive Officer currently presides as Chairman of the Board. Prior to Mr. Lerner's appointment as Chairman of the Board, Mr. Rau served as our Chairman of the Board in fiscal 2019. We currently do not have a lead independent director, but intend to appoint a lead independent director in the near future.

Director Independence

We determined that Messrs. John Fichthorn, Clifford Press, Raghu Rau, Marc Rothman and Eric Singer are "independent directors" as defined under the rules of the New York Stock Exchange ("NYSE"). Although we are not currently listed on the NYSE, we continue to adhere to the governance standards set by the NYSE. We may apply for listing on the Nasdaq in the future. If we do, we may be subject to different corporate governance standards, and we will evaluate whether any additional corporate governance changes will be required in order to comply with Nasdaq listing standards or any other national securities exchange on which we may list in the future. Beyond the listing standards and the SEC's independence requirements, each of our directors going forward will be deemed independent only if he or she has met certain additional criteria as set forth in the Stipulation of Settlement, or Settlement Agreement, dated April 11, 2019 that we entered into in the settlement of the stockholder derivative action captioned *In re Quantum Corp. Derivative Litigation*, Lead Case No. 18CV328139, which settlement remains subject to final court approval, including that:

- he or she has neither been employed by us or by any of our direct or indirect subsidiaries in any capacity within the last five (5) calendar years, other than in an interim capacity as an officer;
- he or she has not received, during the current calendar year or any of the three (3) immediately preceding calendar years, remuneration, directly or indirectly, other than de minimis remuneration (less than $5,000) as a result of service as: (i) an advisor, consultant, or legal counsel to us or to a member of the our senior management; (ii) a significant supplier of us; or (iii) a significant customer of us; and
- he or she is not employed by a private or public company at which an executive officer of ours serves as a director.

The listing rules of NYSE provide that a majority of the Board shall consist of independent directors, but we require that approximately three-fourths of the Board be independent directors. Currently, five of our six directors are independent.

Fiscal 2019 Board Committees

The Company's standing committees of the Board in fiscal 2019 include an Audit Committee, a Leadership and Compensation Committee, and a Corporate Governance and Nominating Committee. From time to time, the Board may form committees for other purposes.

Audit Committee - Fiscal 2019

The Company has a standing Audit Committee which currently consists of Mr. Rothman, Chair of the committee, Mr. Rau, and Mr. Press, all of whom are independent directors, including all applicable enhanced independence requirements for audit committee members under NYSE listing standards and SEC rules, and are financially literate, as defined in the applicable NYSE listing standards and SEC rules and regulations. Our Board has determined that Mr. Rothman is an audit committee financial expert as defined by SEC rules. During fiscal 2019, the members of the Audit Committee were Mr. Rothman, Chair of the committee, Mr. Rau and Mr. Sanchez, who resigned from his position on the Board on April 11, 2019. Mr. Press was appointed to the Audit Committee effective April 30, 2019. The Audit Committee appoints our independent registered public accounting firm and is responsible for approving the services performed by our independent registered public accounting firm and for reviewing and evaluating our accounting principles and its systems of internal accounting controls.

In addition to meetings at which our management is present, the Audit Committee regularly meets separately with our independent registered public accounting firm outside the presence of management, as well as with our management and with our Internal Audit department. The Audit Committee held a total of 17 meetings during fiscal 2019.

Leadership and Compensation Committee - Fiscal 2019

The Leadership and Compensation Committee of the Board is currently composed of Mr. Singer, Chair of the committee, Mr. Rothman and Mr. Fichthorn, all of whom are independent directors, including all applicable enhanced independence requirements for compensation committee members under NYSE listing standards. During fiscal 2019, the members of the Leadership and Compensation Committee were Mr. Sanchez, Chair of the committee, Mr. Singer, Mr. Pinchev and Mr. Rothman. Messrs. Sanchez and Pinchev resigned from their positions on the Board on April 11, 2019. Messrs. Sanchez, Singer, Pinchev and Rothman were independent directors, including all applicable enhanced independence requirements for compensation committee members under NYSE listing standards during the period that they served on the Leadership and Compensation Committee. The Leadership and Compensation Committee's primary mission is to ensure the Company provides

appropriate leadership and compensation programs to enable the successful execution of our corporate strategy and objectives and to ensure our programs and practices are market competitive and consistent with corporate governance best practices. The Leadership and Compensation Committee's primary objectives are to (i) review and approve our compensation philosophy, strategy and practices, (ii) review and approve executive compensation for all executive officers (other than for the CEO) and make recommendations to the Board regarding CEO and non-employee director compensation, (ii) review our strategy and practices relating to the attraction, retention, development, performance and succession of our leadership team, and (iv) develop guidelines to be used by our management for establishing and adjusting the compensation of all non-executive vice presidents. The Leadership and Compensation Committee held a total of eight meetings during fiscal 2019.

The Leadership and Compensation Committee has the power to delegate its authority to our management or to a subcommittee (subject to limitations of applicable law and provided that the Leadership and Compensation Committee may not delegate its authority as it relates to the compensation of the CEO and the other executive officers), but did not do so during fiscal 2019. The Leadership and Compensation Committee is also empowered to hire outside advisors in connection with performing its duties.

Corporate Governance and Nominating Committee - Fiscal 2019

The Corporate Governance and Nominating Committee is currently composed of Mr. Press, Chair of the committee, Mr. Singer and Mr. Fichthorn, all of whom are independent directors, as defined in the applicable NYSE listing standards. During fiscal 2019, the members of the Corporate Governance and Nominating Committee were Messrs. Press, Singer and Rothman. The Corporate Governance and Nominating Committee assists the Board by identifying and recommending prospective director nominees, develops corporate governance principles for Quantum, advises the Board on corporate governance matters, including Board and committee composition, roles and procedures, recommends to the Board a Chair of the Board and lead director, oversees the evaluation of the Board, considers questions of possible conflicts of interest of Board members and of senior executives, and oversees and reviews the process for succession planning of our Chief Executive Officer. The Corporate Governance and Nominating Committee will consider nominees recommended by stockholders pursuant to the procedures outlined in our Bylaws. The Corporate Governance and Nominating Committee held four meetings during fiscal 2019.

Each of our standing committees is governed by a written charter, copies of which are posted on our website. The Internet address for our website is http://www.quantum.com, where the charters may be found by clicking "About Us" from the home page, selecting "Investor Relations" and then "Governance Documents." A free printed copy of the charters also is available to any stockholder who requests it from Quantum's Investor Relations Department at the address stated on the cover page to this Annual Report on Form 10-K. In addition, we have committed to implementing a number of corporate governance related changes in connection with the Settlement Agreement, including instituting director term limits, requiring a lead independent director when the Chairman of the Board is not an independent director, adopting additional independent director criteria, and creating a disclosure and controls committee. The Settlement Agreement containing these corporate governance commitments is also available on our website.

Fiscal 2018 Board Committees

For fiscal 2018, the Company's standing committees of the Board include an Audit Committee, a Leadership and Compensation Committee, and a Corporate Governance and Nominating Committee. From time to time, the Board may form committees for other purposes. During fiscal 2018, Mr. Auvil served as the Chairman of the Board until August 13, 2017, when Mr. Rau was appointed Chairman of the Board. At that time, Mr. Auvil remained on the Board.

Audit Committee - Fiscal 2018

For fiscal 2018, the Company's Audit Committee consisted of Mr. Roberson, Chair of the committee, Mr. Auvil and Mr. Rau, all of whom were independent directors. Following the resignation from the Board of Mr. Roberson on May 31, 2017, Mr. Rothman was appointed Chair of the committee, with Mr. Auvil and Mr. Rau remaining as Audit Committee members. Effective August 31, 2017, Mr. Rau became a temporary employee of the Company in the role of Executive Chairman, and as a result resigned from the Audit Committee. Mr. Sanchez replaced Mr. Rau, joining Mr. Auvil and Mr. Rothman on the Audit Committee until Mr. Sanchez became Interim President and Chief Executive Officer on November 7, 2017, and Mr. Rau stepped down as Executive Chairman. Mr. Auvil resigned from the Board and the Audit Committee on November 8, 2017, creating two open seats on the Audit Committee. Mr. Rau replaced Mr. Sanchez, and Mr. Pinchev replaced Mr. Auvil. Finally, on January 16, 2018, following the appointment of Mr. Dennis, President and Chief Executive Officer, Mr. Sanchez stepped down as Interim President and Chief Executive Officer, and rejoined the Audit committee, where he joined Mr. Rothman and Mr. Rau whom all remained on the Audit Committee until conclusion of fiscal 2018 and for all of fiscal 2019. The Audit Committee held a total of 13 meetings in fiscal 2018. The responsibilities of the Audit Committee are described in the fiscal 2019 Board Meeting Committees section above.

Leadership and Compensation Committee - Fiscal 2018

The Leadership and Compensation Committee of the Board consisted of Mr. Roberson, Chair of the committee, Mr. Auvil, and Mr. Rau, at the beginning of fiscal 2018, all of whom were independent directors. Mr. Sanchez was appointed Chair of the Committee following Mr. Roberson's resignation from the Board, and Mr. Pinchev replaced Mr. Auvil on the committee. Messrs. Sanchez, Rau, and Pinchev continued to serve on the committee until November 7, 2017, when Mr. Sanchez became Interim President and Chief Executive Officer. During this time, Mr. Rothman was appointed Chair of the committee, with Messrs. Rau and Pinchev continuing to serve as members. Mr. Sanchez resumed his position as Chair of the Compensation Committee on January 16, 2018, following the appointment of Mr. Dennis, President and Chief Executive Officer. Mr. Rothman and Mr. Pinchev continued as members of the Committee, and Mr. Singer was appointed to replace Mr. Rau. Messrs. Sanchez, Pinchev, Rothman and Singer continued to serve on the Leadership and Compensation Committee of the Board for the duration of fiscal 2018 and for all of fiscal 2019. The Leadership and Compensation Committee held a total of 11 meetings in fiscal 2018. The responsibilities of the committee are described in the Fiscal 2019 Board Meeting Committees section above.

Corporate Governance and Nominating Committee - Fiscal 2018

The Corporate Governance and Nominating Committee was composed of Mr. Powers, Chair of the committee, Mr. Auvil, and Mr. Press, all of whom were independent directors and the members of the committee remained constant until Mr. Powers resigned from his position on the Board on August 9, 2017. Mr. Press succeeded Mr. Powers as Chair of the committee, and Mr. Pinchev and Mr. Rau replaced Mr. Auvil and filled the vacancy created by Mr. Powers' resignation. Following Mr. Rau's temporary assignment as an employee of the Company in the role of Executive Chairman effective August 31, 2017, Mr. Rothman replaced Mr. Rau on the committee. Upon the appointment of Mr. Singer to the Board on November 9, 2017, Mr. Pinchev resigned from the committee, and Mr. Singer was appointed to the committee. Messrs. Press, Rothman and Singer continued to serve on the Corporate Governance and Nominating Committee of the Board for the duration of fiscal 2018 and for all of fiscal 2019. The Corporate Governance and Nominating Committee held a total of three meetings in fiscal 2018. The responsibilities of the committee are described in the Fiscal 2019 Board Meeting Committees section above.

Code of Ethics and Business Conduct - The High Road

We have adopted a code of business conduct and ethics that applies to each of our directors, officers, employees, consultants and agents. We refer to this code as "The High Road - Quantum's Code of Business Conduct and Ethics," which we adopted in March 2019 to replace our prior code of business conduct and ethics. The code addresses various topics, including:

- compliance with laws, rules and regulations, including the Foreign Corrupt Practices Act;
- conflicts of interest;
- insider trading;
- antitrust and fair competition;
- record keeping;
- confidentiality;
- giving and accepting gifts;
- compensation or reimbursement to customers;
- protection and proper use of company assets; and
- payment to government personnel and political contributions.

We have formed an Ethics Committee, comprised of leadership from our finance, HR and legal organizations. Our Ethics Committee is available to address any questions about our code of business conduct and ethics policy as well as to review, investigate and respond to reported concerns.

The code of business conduct and ethics is posted on our website. The code of business conduct and code of ethics can only be amended by the approval of a majority of our Board. Any waiver to the code of business conduct and ethics may only be granted by our Board or our Corporate Governance and Nominating Committee and must be timely disclosed as required by applicable law. We intend to satisfy the disclosure requirement under Item 5.05 of Form 8-K regarding an amendment to, or waiver from, a provision of this code of ethics by posting such information on our website. The Internet address for our website is: http://www.quantum.com, and the code of ethics may be found by clicking on "About Us" from the home page and then choosing "Investor Relations" and then "Corporate Governance." Copies of the code are available free upon request by a stockholder.

We also have implemented whistleblower procedures that establish formal protocols for receiving and handling complaints from employees. We maintain an email box for reporting complaints and also contract with a third-party service that allows for confidential and anonymous reporting of ethics or compliance concerns. Any concerns regarding accounting or auditing matters reported under these procedures are communicated promptly to our Audit Committee.

Board's Role in Risk Oversight

The Company faces a wide spectrum of risks, including financial, strategic, operational and regulatory exposures. On behalf of the Board, our Audit Committee has primary responsibility for the oversight of those risks. In accordance with its charter, the Audit Committee oversees our policies and processes for risk assessment and management, including discussions of our major risk exposures, the associated risk mitigation activities, and the practices under which risk management is implemented throughout the Company. The Board's other committees also oversee risks associated with their respective areas of responsibility, such as the Leadership and Compensation Committee's review of risks arising from compensation practices. The full Board is updated regarding its committees' risk oversight and other activities through its regular reporting and discussion practices.

While the Board is responsible for risk oversight, risk management accountability lies with our management team. Our interim general counsel, who also serves as our Chief Compliance Officer, has executive responsibility for the majority of our risk management practices, including maintenance of our enterprise risk management practices, completion of the annual risk assessment, and management and promotion of our ethics and compliance program. Formal risk management reports are provided by the general counsel to the Audit Committee on a periodic basis, with ongoing updates and discussions occurring as appropriate at Board meetings. In addition, other appropriate risk assessment and mitigation techniques are implemented and applied throughout our operations and functional teams, with the involved management representatives providing updates to the Board as needed.

Leadership Structure

The Board is committed to strong, independent Board leadership and oversight of management's performance. In addition to having substantially all of its members be independent under applicable listing standards and SEC standards, our current Board includes affiliates of our two largest stockholders as of July 31, 2019. The Board believes that whether to have the same person occupy the offices of Chairman of the Board and Chief Executive Officer should be decided by the Board, from time to time, in its business judgment after considering relevant factors, including the specific needs of the business and what is in the best interests of our stockholders. The Board has evaluated whether the positions of Chair and Chief Executive Officer should be held by two individuals, and has determined that Mr. Lerner, our current Chief Executive Officer, should also serve as the Chair. However, if the Chair is an employee, the Board may appoint a lead independent director to help ensure robust independent leadership on the Board. If there is no lead independent director, the Chair performs the duties of the lead independent director as well. We currently do not have a lead independent director; however, the Board intends to appoint a lead independent director who can provide additional independent oversight of the Board and our management team. In addition, the Settlement Agreement requires us to appoint a lead independent director if our Chair is not an independent director.

Throughout fiscal 2019, our independent directors met in executive session, outside the presence of management, including Mr. Lerner, on a regular basis. In the future and pursuant to the terms of the Settlement Agreement, the independent directors of the Board are required to meet in executive session at each regularly scheduled meeting of the Board, with a minimum requirement to meet at least four times annually outside the presence of any director who serves as an officer of Company. The independent directors have the power to call for reporting from any business unit at the executive session, including without limitation, from audit and compliance personnel.

The Chair focuses on the leadership, management and effective functioning of the Board. The Chair's specific roles and responsibilities, which are described in the Company's Corporate Governance Principles, include:

- The Chair plans and organizes the activities of the Board, including the agenda for, frequency of, preparation for, and the conduct of, the Board meetings. If there is a lead independent director, the Chair works with the lead independent director on these matters.
- The Chair may call meetings of the Board or of thenon-management directors. The Chair leads Board meetings and, if not an employee of the Company, generally presides at sessions of the independent directors.
- The Chair ensures, in conjunction with the Corporate Governance and Nominating Committee, that processes that govern the Board's work are effective to enable the Board to exercise oversight and due diligence in the fulfillment of its mandate, including its oversight responsibilities in Company strategy and risk.
- The Chair promotes effective communication among the directors on developments occurring between Board meetings.
- Where Board functions have been delegated to committees, the Chair works with the respective committee chairs to ensure that each committee functions effectively and keeps the Board apprised of actions taken.
- The Chair helps ensure that action items established by the Board are tracked and appropriatefollow-up action is taken as necessary.
- The Chair should promote an environment that encourages all directors to express their views on key Board matters.

- The Chair provides advice to the Chief Executive Officer and senior management on important issues.

The role of lead independent director is also outlined in our Corporate Governance Guidelines. The lead independent director assists in optimizing the effectiveness of the Board, including:

- The lead independent director presides at any Board meeting when the Chair is not present, including meetings or executive sessions of the non-management directors.
- The lead independent director calls meetings of the non-management directors, as appropriate, and provides feedback from executive sessions of the non-management directors to our Chief Executive Officer and members of senior management, as appropriate.
- The lead independent director serves as a liaison and facilitator between the non-management directors and the Chief Executive Officer.
- The lead independent director advises the Chair regarding Board meeting agenda items and the Board's calendar, including the number and frequency of Board meetings, to ensure that there is sufficient time for discussion of all agenda items.
- The lead independent director collaborates with Board committee, including the Corporate Governance and Nominating Committee on the appointment of committee chairs and members for Board committees

Consideration of Director Nominees

The Corporate Governance and Nominating Committee is responsible for identifying, evaluating, recruiting and recommending qualified candidates to our Board for nomination or election. The Board nominates directors for election at each annual meeting of stockholders and elects new directors to fill vacancies if they occur.

Stockholder Recommendations and Nominations

Recommendations

It is the policy of the Corporate Governance and Nominating Committee to consider recommendations for candidates to the Board from stockholders. A stockholder that desires to recommend a candidate for election to the Board must direct the recommendation in writing to Quantum Corporation, attention: Company Secretary, 224 Airport Parkway, Suite 550, San Jose, CA 95110. The letter must include the candidate's name, contact information, detailed biographical data, relevant qualifications, information regarding any relationships between the candidate and the Company, a statement from the recommending stockholder in support of the candidate, references and a written indication by the candidate of her or his willingness to serve, if elected.

Nominations

Stockholders also have a right to nominate director candidates for election to the Board. A stockholder that desires to nominate a person directly for election to the Board must meet the deadlines and other requirements set forth in Section 2.5 of our Bylaws, and the rules and regulations of the Securities and Exchange Commission. Our Bylaws can be found at the corporate governance section of our website.

The Corporate Governance and Nominating Committee may require any prospective nominee recommended by a stockholder to furnish such other information as the Corporate Governance and Nominating Committee reasonably may require to determine the person's eligibility to serve as an independent director or that could be material to a stockholder's understanding of the person's independence or lack thereof.

Identifying and Evaluating Nominees for Director

The Corporate Governance and Nominating Committee uses the following procedures to identify and evaluate individuals recommended or offered for nomination to the Board:

- The committee regularly reviews the current composition and size of the Board.

- The committee annually evaluates the performance of the Board as a whole and the performance and qualifications of individual members of the Board eligible for reelection at the annual meeting of stockholders.
- In evaluating and identifying candidates, the committee has the authority to retain and terminate any third-party search firm that is used to identify director candidates and has the authority to approve the fees and retention terms of any search firm.
- The committee reviews the qualifications of any candidate who has been properly recommended or nominated by a stockholder, as well as any candidate who has been identified by management, individual members of the Board or, if the committee determines, a search firm. Such review may, in the committee's discretion, include a review solely of information provided to the committee or may also include discussions with persons familiar with the candidate, an interview with the candidate or other actions that the committee deems proper, including the retention of third parties to review potential candidates.
- The committee evaluates each candidate in light of the general and specific considerations that follow.
- After reviewing and considering all candidates presented to the committee, the committee will recommend a slate of director nominees to be approved by the full Board.
- The committee endeavors to promptly notify, or cause to be notified, all director candidates of its decision as to whether to nominate such individual for election to the Board.

General Considerations

A candidate will be considered in the context of the current perceived needs of the Board as a whole. Generally, the Corporate Governance and Nominating Committee believes that the Board should be comprised of directors who (i) are predominantly independent, (ii) are of high integrity, (iii) have qualifications that will increase overall Board effectiveness and (iv) meet other requirements as may be required by applicable rules, such as financial literacy or financial expertise with respect to audit committee members. No person is permitted to serve on the Board for more than ten (10) years.

Specific Considerations

Specific considerations include the following:

- The current size and composition of the Board and the needs of the Board and its committees.
- Previous experience serving on a public company board or as a member of the senior management of a public company.
- Whether the candidate would be an independent director as defined under all applicable regulations, including the rules of the NYSE and the SEC.
- The possession of such knowledge, experience, skills, expertise and diversity so as to enhance the Board's ability to manage and direct the affairs and business of the Company.
- Key personal characteristics such as strategic thinking, objectivity, independent judgment, integrity, intellect and the courage to speak out and actively participate in meetings.
- Knowledge of, and familiarity with, information technology.
- The absence of conflicts of interest with the Company's business.
- A willingness to devote a sufficient amount of time to carry out his or her duties and responsibilities effectively, including, at a minimum, a commitment to attend at least six Board meetings per year and to serve on a committee.
- Commitment to serve on the Board for an extended period of time.
- Diversity of thinking or background.
- Such other factors as the Corporate Governance and Nominating Committee may consider appropriate

The Board has not historically maintained a formal diversity policy for its members. However, in evaluating the overall composition of the Board, the Board and the Nominating and Corporate Governance Committee consider diversity of knowledge, experience, cultural background, race, gender, and age. The Board believes that a Board comprising directors with a diverse range of perspectives, skills and experiences enables the Board to more effectively oversee all aspects of the Company's business. For future nominations, the Company will consider underrepresented populations when seeking candidates for

nomination to the Board and ensure each pool of candidates considered for nomination to the Board includes at least one (1) woman and one (1) member of an underrepresented group, thereby ensuring that members of the populations underrepresented on the Board are considered for nomination to the Board with appropriate consistency.

Majority Voting Policy

The Board believes a majority voting policy with respect to uncontested elections of directors is in the best interest of the Company and its stockholders. This provides additional accountability of directors to our stockholders. In an uncontested election, a nominee for director shall only be elected to the Board if the votes cast for such nominee's election exceed the votes cast against such nominee's election; provided, however, that directors shall be elected by a plurality votes cast at any meeting of stockholders for which (i) the secretary of the corporation receives notice that a stockholder has nominated a person for election to the Board in compliance with our Bylaws and (ii) such nomination has not been withdrawn by such stockholder on or prior to the date that is ten calendar days in advance of the date we file our definitive proxy statement for such meeting with the Securities and Exchange Commission. "Votes cast" shall include votes to withhold authority in each case but shall exclude abstentions with respect to that director's election.

Stock Ownership Guidelines

We have adopted stock ownership guidelines for our Chief Executive Officer and each of our directors. We believe this more closely aligns the interest of our Chief Executive Officer and Board with those of our stockholders. Our Chief Executive Officer and each director is expected to hold our common stock in an amount equal to at least three-times annual base salary for our Chief Executive Officer and three times annual Board cash retainer for each director. Share ownership includes stock purchased on the open market, stock acquired through exercise of stock options, stock acquired through purchases under our Employee Stock Purchase Plan, vested restricted stock and restricted stock units, stock beneficially owned in a trust and stock held by a spouse and/or minor children. However, outstanding stock options (vested and unvested), unvested restricted stock and restricted stock units and unearned performance shares and performance share units do not count for purposes of share ownership under our policy. Our Chief Executive Officer and each director have a period of time in which they are to comply with these stock ownership guidelines, which is five years from the date a director or Chief Executive Officer first becomes subject to these stock ownership guidelines. If the dollar value requirement increases due to base salary or director cash compensation increases, the incremental value increase must be met within five years of the date of such increase. The compliance with these guidelines is measured at the end of each fiscal year.

Evaluation of the Board

In accordance with our corporate governance principles and the rules of the NYSE, a self-evaluation of our Board, its committees, and individual directors are performed annually. The purpose of the self-assessment is to help build a strategic Board that contributes to long-term shareholder value. In connection with the evaluation process, the Board and selected executive staff members held ongoing discussions related to the Board and Committee composition, effectiveness, decision making and individual director performance.

Communications to the Board

Stockholders, employees and other interested parties may contact the Board, the Chairman of the Board, the independent directors as a group or any of our directors by writing to them c/o Quantum Corporation, attention: Company Secretary, 224 Airport Parkway, Suite 550, San Jose, CA 95110, or by email to BoardofDirectors@Quantum.com. Communications that are intended specifically for the Chairman or the independent directors should be sent to the email address or street address noted above, to the attention of the Chairman. If any such interested party wishes to contact the Board, a member of the Audit Committee, the Chairman of the Board, our independent directors as a group or any of our directors to report a concern about Quantum's conduct or about questionable accounting, internal accounting controls or auditing matters, such party may do so anonymously by using the address above and designating the communication as "confidential." Alternatively, concerns may be reported anonymously by phone or via the Internet to the following toll-free phone number or Internet address 1-866-ETHICSP (1-866-384-4277); www.ethicspoint.com. These resources are operated by Ethicspoint, an external third-party vendor that has trained professionals to take calls in confidence, and to report concerns to the appropriate persons for proper handling. Communications raising safety, security or privacy concerns, or that otherwise relate to improper activities will be addressed in an appropriate manner.

Director Compensation

The Leadership and Compensation Committee, together with the full Board, are responsible for determining the amount and form of compensation for the Company's non-employee directors. The Company's management team provides information, analysis and recommendations to the Leadership and Compensation Committee on matters such as competitive market practices, target compensation levels and non-employee director compensation program design. In addition, the Leadership and Compensation Committee's compensation consultant, as identified in the Compensation Discussion & Analysis, also provides analysis and advice on the market competitiveness of our non-employee directors' compensation program (both in relation to the Company's peer group and to the broader technology industry), as well as on current trends and developments, and specific non-employee director compensation program design recommendations. While the Leadership and Compensation Committee carefully considers all of the information and recommendations made by members of management and its compensation consultant, ultimate authority for all decisions relating to the non-employee director compensation program rests with the Board.

The Leadership and Compensation Committee conducts a comprehensive review of the compensation program for the Company's non-employee directors every two years. This formal review was completed in fiscal 2018 with the start of our new directors. The committee engaged Compensia to complete an independent review of the Company's non-employee director compensation program. The guidance provided to the committee compared the Company's current compensation program, design and practices to those of peer companies similar in industry and organizational revenue size. The Committee recommended to and the Board approved of the following changes in fiscal 2018:

Compensation Element	Quantum's Board Compensation Program
Annual Retainer	$50,000 paid on a quarterly basis
Committee Chair Fees	Audit Committee Chair: $25,000 Leadership & Compensation Committee Chair: $17,500 Corporate Governance & Nominating Committee Chair: $15,000
Committee Member Fees	Audit Committee Member: $12,500 Leadership & Compensation Committee Member: $10,000 Corporate Governance & Nominating Committee Member: $7,500
Chairman of the Board (non-employee Director)	$40,000 per year
Newly Appointed Director	Shares valued at $125,000 pro-rated from the time of appointment to the next regular annual stockholder meeting 100% cliff vests on the date of the next regular annual Stockholder meeting.
Existing Director	Annual equity grant of shares valued at $125,000 100% cliff vests on the earlier of 1 year following the date of grant or the next regular annual stockholder meeting

We also maintain a non-qualified deferred compensation plan which allows our non-employee directors to contribute some or all of their cash fees to an irrevocable trust for the purpose of deferring federal and state income taxes. Participants direct the deemed investment of their deferred accounts among a pre-selected group of investment funds, which does not include shares of the Company's Common Stock. The deemed investment accounts mirror the investment options available under the Company's 401(k) Savings Plan. Participants' deferred accounts are credited with interest based on their deemed investment selections. During fiscal 2017, none of our non-employee directors elected to defer any of their cash fees to the non-qualified deferred compensation plan.

Non-employee directors are also subject to stock ownership guidelines which require them to acquire and hold shares of the Company's Common Stock with a value at least equal to three times the directors' annual retainer. The measurement date for compliance with the stock ownership guidelines is the last day of each fiscal year. The stock ownership guidelines are required to be met by the later of five years from (i) the date the guidelines were adopted or (ii) the date an individual first becomes subject to the guidelines. All directors are on track to comply with the stock ownership guidelines in the relevant time frame.

Generally, the Board, in its discretion, but subject to the terms of the applicable equity compensation plan, determines the time or times at which equity awards may be granted, the form in which such awards are granted, the number of shares of the Company's stock subject to each award and, in the case of stock options, the period over which such stock options become exercisable.

Employee directors receive no additional compensation for their service on the Board or on committees of the Board. Mr. Lerner, Chairman of the Board, is the only employee of the Company on the Board and he receives no additional compensation for his service.

Fiscal 2019 Director Compensation

For their services on the Company's Board in fiscal 2019, the directors received annual cash retainers, fees for any committees they served, and Chair retainers. The Company does not pay meeting fees to our board members. During fiscal 2019, the Company continued to work through an on-going SEC investigation and during this time was prevented from trading or granting equity. The Board also aligns with the Company's pay-for-performance philosophy and as the Company has not been performing, no equity grants were made to the directors including any grants to be made effective as of the first business day on which the Company becomes current in its filings under the Exchange Act, therefore, no equity grants of any kind were made during fiscal 2019.

Compensation paid to the non-employee directors during fiscal 2019 is set forth in the following table and include Messrs. Pinchev, Press, Rau, Rothman, Sanchez, and Singer. Mr. Fichthorn was appointed to the Board on April 4, 2019, the Company's fiscal 2020 and was not a director during fiscal 2019.

Fiscal 2019 Director Compensation Table

Name	Fees Earned or Paid in Cash(1)	Stock Awards(2)(4)	Option Awards(3)(4)	Non Equity Incentive Plan Compensation	Change in Pension Value and Nonqualified Deferred Compensation Earnings	All Other Compensation	Total
Pinchev, Alex	$60,000	$ 0	$ 0	$ 0	$ 0	$ 0	$60,000
Press, Clifford	$65,000	$ 0	$ 0	$ 0	$ 0	$ 0	$65,000
Rau, Raghavendra	$76,722	$ 0	$ 0	$ 0	$ 0	$ 0	$76,722
Rothman, Marc E.	$92,500	$ 0	$ 0	$ 0	$ 0	$ 0	$92,500
Sanchez, Adalio T.	$80,000	$ 0	$ 0	$ 0	$ 0	$ 0	$80,000
Singer, Eric B.	$67,500	$ 0	$ 0	$ 0	$ 0	$ 0	$67,500

(1) Amounts reflect compensation earned by each director during fiscal 2019. Fees earned or paid in cash include the following:

Name	Board Retainer	Committee Membership Retainer	Committee Chair Retainer	Chairman Retainer	Total Fees Paid in Cash
Pinchev, Alex	$50,000	$ 10,000	$ 0	$ 0	$ 60,000
Press, Clifford	$50,000	$ 0	$ 15,000	$ 0	$ 65,000
Rau, Raghavendra	$50,000	$ 12,500	$ 0	$ 14,222	$ 76,722
Rothman, Marc E.	$50,000	$ 17,500	$ 25,000	$ 0	$ 92,500
Sanchez, Adalio T.	$50,000	$ 12,500	$ 17,500	$ 0	$ 80,000
Singer, Eric B.	$50,000	$ 17,500	$ 0	$ 0	$ 67,500

(2) Due to the Company's inability to grant or trade stock during the Company's on-going SEC investigation and later de-listing status on the NYSE, no equity grants were made to the Directors.

(3) No stock options were granted to the non-employee directors in fiscal 2019.

(4) Outstanding and unvested equity awards held by each of the non-employee directors as of March 31, 2019 were as follows:

Name	Restricted Stock Units Outstanding	Options Outstanding	Total Equity Awards Outstanding
Pinchev, Alex	1,840	0	1,840
Press, Clifford	0	0	0
Rau, Raghavendra	0	0	0
Rothman, Marc E.	1,905	0	1,905
Sanchez, Adalio T.	1,905	0	1,905
Singer, Eric B.	0	0	0

Fiscal 2018 Director Compensation

The Company agreed that non-employee directors elected at the March Annual Meeting including Messrs. Auvil, Mutch, Rau, Powers, Press and Roberson were granted 6,250 restricted stock units of the Company's Common Stock on April 1, 2017, which restricted stock units shall vest in full upon the election of directors at the Annual Meeting. Notwithstanding the foregoing, in accordance with the Settlement Agreement, vesting for the grants to Messrs. Mutch and Roberson were accelerated to vest in full immediately upon the effectiveness of their resignations from the Board, which occurred on May 1, 2017 for Mr. Mutch, when he was replaced by Mr. Rothman and on May 31, 2017 for Mr. Roberson, when he was replaced by Mr. Pinchev.

Mr. Rothman and Mr. Sanchez were appointed to the Board on May 4, 2017, and each received a new hire grant on May 4, 2017, for 4,065 scheduled to vest at the anticipated August 2017 Annual Stockholders Meeting. Mr. Pinchev, appointed to the Board on May 31, 2017, was granted 14,723 shares vesting over two years as follows: 50% will vest one year after the vest begin date and the remainder will vest quarterly in equal installments. The committee approved a supplemental grant to Mr. Rothman and Mr. Sanchez to put them in an equivalent position to the grant received by Mr. Pinchev. The stock price was $8.20 on May 1, 2017, so equivalent grants at that time would have been 15,244 shares each with 50% vesting on May 1, 2019 and the remaining 50% vesting over the subsequent year. The committee approved the following: i) the vesting of the 4,065 shares granted on May 1, 2017, should be extended to vest on May 1, 2018, and ii) an additional grant of 11,179 shares each with 3,557 shares vesting on May 1, 2018, so that a total 7,622 shares or 50% of the 15,244 total shares vest after year one and the remaining 7,622 shares vest over the course of the following year from May 1, 2018 to May 1, 2019.

As part of the annual equity board grant following the Annual Stockholders Meeting on September 1, 2017, Mr. Auvil and Mr. Press received 22,482 shares equivalent to $125,000 in value. Messrs. Sanchez, Rothman, and Pinchev, having already received an annual grant equivalent to approximately $125,000 in value, received shares in the amounts of 7,404, 7,404, and 5,621, respectively, as pro-rated from the date of their hire to the date of the annual grant. The restricted stock units granted on September 1, 2017, cliff vest 100% on the earlier to occur i) the next annual shareholders meeting; and ii) the one-year anniversary of the grant (September 1, 2018). In addition, Mr. Rau received an annual grant of 80,935 restricted stock units as compensation for his additional responsibilities as Executive Chair. These shares were granted on September 1, 2017, in accordance with the annual equity board grant, however the vesting of these restricted stock units is as follows: cliff vest 100% on the earlier to occur of: i) the next annual shareholders meeting; and ii) the one-year anniversary of the grant (September 1, 2018). Mr. Singer was appointed to the Board on November 9, 2017 and was granted 16,681 time-based RSUs that cliff vest 100% on the earlier to occur of: i) the date of the 2018 Annual Stockholder Meeting; ii) September 1, 2018.

Effective October 2015 and continuing through fiscal 2017, Mr. Auvil declined to receive any cash fees in connection with his service on the Company's Board and this forgone compensation will not be made up to Mr. Auvil in any other form. Effective April 1, 2017, Mr. Auvil requested that his cash fee for his service to the Board be reinstated for fiscal 2018.

Compensation paid to the non-employee directors during fiscal 2018 is set forth in the following table.

Fiscal 2018 Director Compensation Table

Name	Fees Earned or Paid in Cash(1)	Stock Awards(2)(4)	Option Awards(3)(4)	Non Equity Incentive Plan Compensation	Change in Pension Value and Nonqualified Deferred Compensation Earnings	All Other Compensation	Total
Auvil III, Paul R.	$54,260	$ 168,500	$ 0	$ 0	$ 0	$ 0	$222,760
Mutch, John	$ 4,167	$ 43,500	$ 0	$ 0	$ 0	$ 0	$ 47,667
Pinchev, Alex	$62,839	$ 156,251	$ 0	$ 0	$ 0	$ 0	$219,090
Powers, Gregg J.	$24,375	$ 43,500	$ 0	$ 0	$ 0	$ 0	$ 67,875
Press, Clifford	$62,167	$ 168,500	$ 0	$ 0	$ 0	$ 0	$230,667
Rau, Raghavendra(5)	$78,305	$ 493,499	$ 0	$ 0	$ 0	$ 0	$571,804
Roberson, David E.	$23,125	$ 43,500	$ 0	$ 0	$ 0	$ 0	$ 66,625
Rothman, Marc E.	$79,899	$ 171,767	$ 0	$ 0	$ 0	$ 0	$251,665
Sanchez, Adalio T.	$56,777	$ 171,767	$ 0	$ 0	$ 0	$ 0	$228,544
Singer, Eric B.	$24,848	$ 93,747	$ 0	$ 0	$ 0	$ 0	$118,595

(1) Amounts reflect compensation earned by each director during fiscal 2018. Fees earned or paid in cash include the following:

Name	Board Retainer	Committee Membership Retainer	Committee Chair Retainer	Chairman Retainer	Total Fees Paid in Cash
Auvil III, Paul R.	$30,299	$ 14,722		$ 9,239	$ 54,260
Mutch, John	$ 4,167				$ 4,167
Pinchev, Alex	$41,667	$ 12,449	$ 8,723		$ 62,839
Powers, Gregg J.	$12,500		$ 11,875		$ 24,375
Press, Clifford	$50,000	$ 2,833	$ 9,334		$ 62,167
Rau, Raghavendra	$40,897	$ 19,731		$ 17,677	$ 78,305
Roberson, David E.	$12,500		$ 10,625		$ 23,125
Rothman, Marc E.	$45,833	$ 7,804	$ 26,262		$ 79,899
Sanchez, Adalio T.	$36,274	$ 7,807	$ 12,696		$ 56,777
Singer, Eric B.	$19,837	$ 5,011			$ 24,848

(2) The amounts reported were computed in accordance with ASC 718, excluding the effect of estimated forfeitures. See Note 7,*Stock Incentive Plans and Stock-Based Compensation* in the Company's Annual Report on Form 10-K filed on August 6, 2019, regarding assumptions underlying the valuation of equity awards.

(3) No stock options were granted to thenon-employee directors in fiscal 2018.

(4) Outstanding and unvested equity awards held by each of thenon-employee directors as of March 31, 2018 were as follows:

Name	Restricted Stock Units Outstanding	Options Outstanding	Total Equity Awards Outstanding
Auvil III, Paul R.	0	0	0
Mutch, John	0	0	0
Pinchev, Alex	20,344	0	20,344
Powers, Gregg J.	0	0	0
Press, Clifford	24,435	0	24,435
Rau, Raghavendra	80,935	0	80,935
Roberson, David E.	0	0	0
Rothman, Marc E.	18,583	0	18,583
Sanchez, Adalio T.	18,583	0	18,583
Singer, Eric B.	16,681	0	16,681

(5) The stock awards to Mr. Rau include 80,935 restricted stock units as compensation for his additional responsibilities as Executive Chair.

Leadership and Compensation Committee Interlocks and Insider Participation in Compensation Decisions

The members of the Company's Leadership and Compensation Committee are Mr. Singer, Chair of the committee, Mr. Rothman and Mr. Fichthorn. No member of the Leadership and Compensation Committee is currently, nor has any been at any time since the formation of the Company, an officer or employee of the Company or any of its subsidiaries. Likewise, no member of the Leadership and Compensation Committee has entered into a transaction, or series of similar transactions, in which they will have a direct or indirect material interest adverse to the Company. No interlocking relationships exist between any member of the Board or Leadership and Compensation Committee and any member of the board of directors or compensation committee of any other company, nor has any such interlocking relationship existed in the past.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires the Company's Section 16 officers, directors and persons who own more than ten percent (10%) of a registered class of the Company's equity securities to file reports of ownership and changes in ownership with the SEC. Such executive officers, directors and greater than ten-percent stockholders are also required by SEC rules to furnish the Company with copies of all forms that they file pursuant to Section 16(a). Based solely on its review of the copies of such reports received by the Company and on written representations from certain reporting persons, the Company believes that all required filings were timely made during the fiscal year ended March 31, 2018 and fiscal year ended March 31, 2019.

ITEM 11. EXECUTIVE COMPENSATION

COMPENSATION DISCUSSION AND ANALYSIS

The Compensation Discussion and Analysis ("CD&A") describes the Company's overall philosophy and criteria used to determine the executive compensation practices provided to the executive officers of the Company. Over the last two fiscal years, we experienced radical transformation to the executive leadership team including multiple changes at the chief executive and chief financial officer roles; however, the founding principles used to guide executive compensation decisions such as the overall philosophy, governance practices, and decision-making processes remained constant year over year. As illustrated in the following CD&A, the compensation disclosures are combined for our two most recent completed fiscal years, 2019 and 2018, for the principal executive officers, principal financial officers, and the three most highly-compensated executive officers for each fiscal year and includes combined descriptions of our executive compensation principles that have remained constant over the last two fiscal years.

Our named executive officers for fiscal 2019 are:

James J. Lerner	President & Chief Executive Officer
J. Michael Dodson	Chief Financial Officer, Former Interim Chief Executive Officer;
Patrick J. Dennis	Former President & Chief Executive Officer
Fuad Ahmad	Former Senior Vice President & Chief Financial Officer
Donald E. Martella Jr.	Senior Vice President Engineering
Shawn D. Hall	Senior Vice President & General Counsel
Lewis W. Moorehead	Chief Accounting Officer
William C. Britts	Former Senior Vice President WW Sales & Marketing

The stabilization of our leadership team continued from fiscal 2018 throughout fiscal 2019. We experienced the following changes to our leadership team during fiscal 2019:

- May 25, 2018, Mr. Dennis, our President & Chief Executive Officer since January 16, 2018, separated from the Company.
- May 30, 2018, Mr. Ahmad, our Senior Vice President & Chief Financial Officer separated from the Company.
- May 31, 2018, Mr. Dodson, joined the Company as Interim Chief Executive Officer and Senior Vice President & Chief Financial Officer.
- July 1, 2018, Mr. Lerner joined the Company as President and Chief Executive Officer.

Our named executive officers for fiscal 2018 were:

Patrick J. Dennis	President & Chief Executive Officer
Adalio T. Sanchez	Former Interim President & Chief Executive Officer
Jon W. Gacek	Former President & Chief Executive Officer
Fuad Ahmad	Senior Vice President & Chief Financial Officer
William C. Britts	Senior Vice President WW Sales and Marketing
Robert S. Clark	Senior Vice President Product Operations
Donald E. Martella Jr.	Senior Vice President Engineering

Our Company's strategic transformation plan began in fiscal 2018, as we experienced changes to our leadership team that included turnover with some of our principal officers. The following time-line of events outlines the changes that occurred in fiscal 2018:

- November 7, 2017, Mr. Gacek, our Former President & Chief Executive Officer, separated from the Company.
- Mr. Sanchez, a current Board of Director, served as our Interim President & Chief Executive Officer from November 7, 2017, through January 16, 2018.

- January 16, 2018, Mr. Dennis joined the Company as President & Chief Executive Officer.
- May 11, 2018, Mr. Clark, our Senior Vice President, Product Operations, separated from the Company.

Executive Compensation Highlights for Fiscal 2019 and 2018

Our executive compensation program aims to (i) enhance stockholder value by designing appropriate leadership and compensation programs to enable the successful execution of the Company's corporate strategy and objectives, (ii) facilitate market competitiveness by attracting and retaining the best talent and (iii) promote meritocracy by recognizing individual contributions. While we kept these founding principles applied to our executive compensation practices, many changes occurred to our business over our last two fiscal years. The following summarizes the business developments that impacted our compensation programs and the actions we took for our named executive officers for our two most recent and completed fiscal years beginning most recently with changes occurring fiscal 2019:

Fiscal 2019

- Following an SEC investigation that was initiated during our fiscal 2018, the Company made transformational changes internally including an overhaul of executive leadership. Throughout fiscal 2019, the Company made significant efforts to stabilize operations and work with auditors during a long and thorough investigation. In order to complete this due diligence, the Company was unable to comply with completing its filings with the SEC, the Company was de-listed from the NYSE on January 15, 2019 and began trading on the OTC Pink operated by OTC Market Group Inc., under the symbol "QMCO".
- The Company was prohibited from trading or issuing equity grants including awarding grants to new hires. In order to recruit a new leadership team, the Company made promises with the intent to grant stock once the Company was current with the SEC filings. The Committee reviewed and approved every new hire's promise with the intent to grant equity awards and continued to apply strong governance and market competitive practices to these decisions as in the past. In addition, the Committee continued to govern executive compensation practices during fiscal 2019 such as the annual policy, committee charter, peer group review, and stock administration guidelines.
- For fiscal 2019, a slight change was recommended on the current severance plan not in connection with a Change of Control, and the Committee approved, that any Officers would be provided six (6) months base severance and six (6) months COBRA premium payments outside any agreement in place for Mr. Lerner.
- The business objectives throughout fiscal 2019 included stabilizing the leadership team, completing internal and external audit requests, getting the Company back in compliance with our SEC filings, strengthening our cash and profitability position, increase our products and service offerings to our customers, and increase stockholder value. To accomplish these objectives, the Company kept operating expenses flat which includes suspending cash compensation programs such as the Quantum Incentive Program. No formal bonus program was established with defined and approved goals in fiscal 2019 and no cash bonuses were earned or paid.
- Mr. Lerner and Mr. Dodson continued to execute on the Company's transformational strategy that included establishing a new leadership team and executive management. To establish the new executive leadership team for fiscal 2019, Mr. Lerner and Mr. Dodson used a mix of tactics that includes promoting top talent from within the Company and recruiting top talent from outside the Company.
- Mr. Dodson joined the Company as Senior Vice President, Chief Financial Officer on May 31, 2018, and served as our Interim Chief Executive Officer from the time of his hire until July 1, 2018, when Mr. Lerner joined as our President & Chief Executive Officer.
- May 25, 2018, Mr. Dennis, our President and Chief Executive Officer separated from the Company followed by the separation of Fuad Ahmad, our Senior Vice President and Chief Financial Officer on May 30, 2019.

Fiscal 2018

- Prior to fiscal 2018, the Company's most recent practice for granting equity consisted of a mix between time-based restricted stock units and performance-based restricted stock units for our executive officers. This practice continued throughout fiscal 2018 with the exception of reintroducing non-qualified stock options upon the hire of Mr. Dennis. For the performance-based restricted stock grants and based on actual fiscal 2018 results, the Company did not satisfy the established Earnings Per Share ("EPS") or Revenue goals and no performance shares were earned with the exception of Mr. Gacek, whose performance-based equity was satisfied at the target levels in accordance with his CoC agreement.

- The Company did not satisfy the operating income plan for the year; therefore, the bonus pool was not funded and no bonuses were allocated in fiscal 2018, with the exception of Mr. Gacek, who was paid $1.2 million in accordance with his CoC agreement. Mr. Gacek's payment was subject to Section 409A of the Internal Revenue Code of 1986, and actual payment was made six (6) months and one (1) day following the date of Mr. Gacek's separation date. Mr. Sanchez also received a pro-rated bonus for his service as Interim President & Chief Executive Officer in the amount of $57,903 for satisfying his financial savings target as established by the Board.
- The Company was unable to file the Form 10-Q by February 9, 2018, for the quarterly period that ended December 31, 2017, as a result from an investigation initiated by the Securities and Exchanges Commission ("SEC") on January 11, 2018. The Company has not been able to grant stock to employees as of February 9, 2018, including any collection of funds for the Employee Stock Purchase Plan ("ESPP"). Any stock vesting following this date has been deferred until the Company is once again current with regular filings and in compliance with the SEC.
- To align with market practices and upon the recommendation of both management and Compensia, the Board approved two additional changes impacting our executive compensation programs, (i) the Company's severance plan was modified effective immediately to reduce the number of weeks paid to executives following an involuntary termination and (ii) the Company's CoC policy, effective for fiscal 2019, was modified to reduce the number of positions eligible, align the compensation paid upon termination with market and peer group norms, and provide further clarification on what defines the first event under this policy.
- As part of the Company's transformational efforts to reduce costs, a temporary 15% pay reduction was implemented to all our executives and officers, including Mr. Dennis, during our fourth quarter and reinstated at the beginning of our new fiscal year.
- Mr. Dennis joined the Company as our President & Chief Executive Officer on January 16, 2018. Upon his hire, the Company once again began using non-qualified stock options (in combination with time-based and performance-based full value shares) as an equity vehicle for attracting executive talent.
- Our CEO transition took place on November 7, 2017, with the separation of Mr. Gacek whose departure occurred in connection with the Company's Change of Control agreement. As a result, Mr. Sanchez temporarily resigned from his current position on the Board to serve as Interim President & Chief Executive Officer. As a result, Mr. Rau's service as Executive Chair ended and he resumed to his prior position as Chairman of the Board.
- Effective September 1, 2017, Mr. Rau, Chairman of the Board, temporarily resigned from his position on the Board to serve as an employee of the Company in the role of Executive Chairman. Mr. Rau's responsibilities included a more active operational and strategic oversight of the Company on behalf of the Board, participation in investor meetings and engagement of key company stakeholders.
- The Board engaged Alix Partners, an external consulting company, to evaluate the Company's current structure and assist in developing a transformational plan that focused on cost reductions (including headcount), third party spend, restructuring, and make recommendations to stabilize operations.
- The Board engaged the Company's external Executive Compensation Consultant ("Compensia"), to address concerns about the existing peer group. Compensia reviewed and made recommendations to the current peer group that was approved by the Board on August 9, 2017. This revised peer group was used for any executive or board compensation decisions going forward for the remainder of our fiscal 2018.
- Effective May 31, 2017, Mr. Pinchev was appointed to the Company's Board of Directors per the terms of the Settlement Agreement and Mr. Roberson resigned from the Board in connection with the appointment of Mr. Pinchev.
- Effective May 4, 2017, Mr. Rothman and Mr. Sanchez were appointed to the Company's Board of Directors and pursuant to the terms of the Settlement Agreement between VIEX Capital Advisors, LLC and the Company dated as of March 2, 2017, Directors Mr. Mutch and Mr. Gacek resigned from the Board effective May 1, 2017. As a result of this change in composition to the Board of Directors, the first event under the Company's Change of Control ("CoC") policy was satisfied. Per the conditions of this policy and for those who have these agreements in place, any involuntary terminations occurring within 12 months of May 4, 2017, would satisfy the second event resulting in severance payments in connection with a CoC.
- We continue to maintain responsible compensation programs guided by strong governance practices.

Governance Practices for Fiscal 2019 and 2018

We are committed to implementing compensation programs that are attractive to executive talent while maintaining effective governance practices that support our business strategies and serve our stockholders' long-term interests. The Committee seeks the guidance of varying levels of management within Human Resources, Finance, and Legal as well as engages with external Legal counsel and other outside advisors to ensure proper governance protocols are in place and being executed. Our governance practices have remained consistent over our fiscal 2019 and 2018 years and include:

Independent Consultant	The Committee regularly engages with an Independent Executive Compensation Consultant that reports directly to the Committee.
Clawback Policy	In April 2015, the Committee approved, and the Company adopted a clawback policy for cash incentive/bonus compensation to executive officers if the Company is required to provide a material restatement of its financial statements for any of the prior three fiscal years due to fraud or misconduct by an executive officer. This policy entitles the Company to recover excess compensation paid to an Executive Officer as determined by the Board. This policy will be reviewed and modified, if necessary, once the SEC adopts final rules implementing the requirement of Section 954 of the Dodd-Frank Act.
Stock Ownership Guidelines	We maintain stock ownership guidelines for our CEO and for ournon-employee directors. For our President and CEO, these stock ownership guidelines require him to acquire and hold shares of the Company's Common Stock with a value at least equal to three times his annual base salary. For our non-employee directors, these stock ownership guidelines require them to acquire and hold shares of the Company's Common Stock with a value at least equal to three times the directors' annual retainer. The measurement date for compliance with the stock ownership guidelines is the last day of each fiscal year. The stock ownership guidelines are required to be met by the later of five years from (i) the date the guidelines were adopted or (ii) the date an individual first becomes subject to the guidelines.
Anti-Hedging and Anti-Pledging Policy	We maintain an insider trading policy which expressly prohibits buying Company shares on margin or using or pledging owned shares as collateral for loans and engaging in transactions in publicly-traded options, such as puts and calls, and other derivative securities with respect to the Company's securities. This extends to any hedging or similar transaction designed to decrease the risks associated with holding Company securities.
Insider Trading Policy	Our insider trading policy prohibits any transactions involving a purchase or sale of the Company's securities, including any offer to purchase or offer to sell, during any period commencing with the date that he or she possess inside information and ending at the beginning of the third full trading day following public disclosure of the information. All employees (including our executive officers) and members of the Board of Directors are subject to the Company's insider trading policy.
No Single Trigger Change of Control	Our change of control policy maintains that a double trigger event must occur before an executive is entitled to specified compensation and benefits.
Annual Risk Assessment	Led by the efforts of our external Executive Compensation Consultant, the Committee annually reviews the Company's Risk Assessment of our pay programs.
Pay Mix	We maintain pay programs that strike a balance between time-based and performance-based achievement.
Perquisites	We grant very few perquisites to our officers.

Executive Compensation Philosophy for Fiscal 2019 and 2018

Pay for Performance Compensation Philosophy and Objectives

The executive total compensation program is intended to encourage and reward the executives for significant contributions to the Company's success and for the creation of stockholder value. The Company has established and maintains a competitive pay-for-performance executive total compensation program. The objectives of the Company's total compensation program remained unchanged over fiscal years 2019 and 2018 and are aimed to:

- provide a strong link between pay and performance on both an individual and Company level and encourage and reward executives for significant contributions to the Company's success;
- ensure that the interests of all executives are aligned with the success of the Company and the interests of the Company's stockholders;

- promote the achievement of the Company's short-term and long-term strategic objectives;
- provide compensation opportunities that will attract, motivate and retain the most qualified executive talent to accomplish these objectives;
- provide executives with a total compensation package that strikes an appropriate balance between fixed and variable pay and between short-term and long-term incentives;
- take into account relevant economic and market considerations;
- and ensure that the total compensation levels of executives are externally competitive and internally consistent and fair.

Our executive total compensation program is designed to offer target cash and equity compensation opportunities at market-competitive levels and to reward superior Company and individual performance. Company performance, as measured by pre-established corporate performance metrics and share price, together with individual performance, as measured through the Company's annual performance evaluation process, greatly affect annual and long-term compensation levels. Actual compensation is expected to be, and will be, below targeted market median levels if the Company and/or the executive officer does not achieve the designated Company and individual performance objectives. The Committee believes that this program aligns the interests of our executive officers with those of our stockholders in promoting the creation of long-term stockholder value.

Competitive Positioning

Market competitiveness is an important element of our executive compensation program. The Committee has established that market competitiveness for this purpose generally means the market median and has determined to generally target the market median with respect to each component of our executive compensation program. In assessing the market competitiveness of our executive compensation program, the individual elements, as well as the aggregate total compensation of each executive officer (which includes base salary, target annual incentive opportunity and annual equity awards), are compared to the corresponding market median for executive officers holding similar positions or who have similar levels of responsibility in technology companies of similar size. While our compensation philosophy is to generally target the market median for competitiveness purposes, the actual compensation paid to our executive officers may be above or below the competitive market based on individual and Company performance.

As its sources of data for identifying and establishing market median compensation levels, the Committee utilizes applicable compensation data from the Company's Peer Group (as defined and discussed below), as well as from the Radford Global Technology and Radford Global Sales surveys (the "Radford Surveys") of technology companies with annual revenue between $500M and $999.9M (collectively, the "Market Data").

Peer Group

The Committee conducts an annual evaluation of the Peer Group for the purposes of identifying companies that are similar to ours in financial scope, size and industry that guide compensation decisions made for our executives. The peer group is reviewed and approved annually by the Committee typically in the third quarter of our current fiscal year. Once approved, this peer group is then used for our next fiscal year when we begin our executive compensation assessments and making recommendations to the Committee to address performance and any potential pay gaps.

For fiscal 2019, our peer group remained unchanged from the adjustments made in fiscal 2018 with the exception of one addition. The Committee approved the addition of Tintri, Inc., on April 30, 2018, but the peer was automatically removed following the Company's announcement of Chapter 11 bankruptcy and therefore the fiscal 2019 peer group remained consistent with the previously amended group of Peer revised during fiscal 2018. For fiscal 2018, two peer groups were used to influence our executive compensation decisions throughout our performance year, however; the peers were not used simultaneously but rather one replaced the former peer group.

The first peer group ("Peer Group 1") was established prior to the start of our fiscal 2018 as recommended by Compensia and the Committee approved as part of the annual peer group review and approval process. Peer Group 1 was the comparator group that was intended to support all compensation decisions made for our executives during fiscal 2018. This peer group was used for compensation decisions made for our executives at the beginning of our fiscal 2018, including those for our former President & Chief Executive Officer, Mr. Gacek. Peer Group 1 included the following companies:

Fiscal 2018 Peer Companies (Peer Group 1)

Avid Technology, Inc.	Electronics for Imaging, Inc.	Nimble Storage, Inc.
Barracuda Networks, Inc.	Extreme Networks, Inc.	ShoreTel, Inc.
Black Box Corporation	GlassBridge Enterprises, Inc.	Silicon Graphics International Corp.
Calix, Inc.	Harmonic, Inc.	Sonus Networks, Inc.
Cray, Inc.	Infinera Corporation	
Datalink Corporation	Integrated Device Technology, Inc.	

The second Peer Group ("Peer Group 2") was established during our fiscal 2018, following the changes to our Board and Committee members. The new members of the Committee requested a reevaluation of the peer group to ensure the peer companies used were closely aligned with the Company's new strategic direction. The following criteria were used:

- Three Industry Sectors including: Technology hardware and storage companies, Communication Equipment and Software;
- Companies that focused on data security and storage, hybrid software/appliance development, and network infrastructure software, hardware and services;
- Comparability to the Company in terms of revenue (~0.5x - 3.0x) and market capitalization (~0.5x - 5.0x); and
- Other factors, including, geography, revenue growth, profitability, valuation, number of employees and enterprise value.

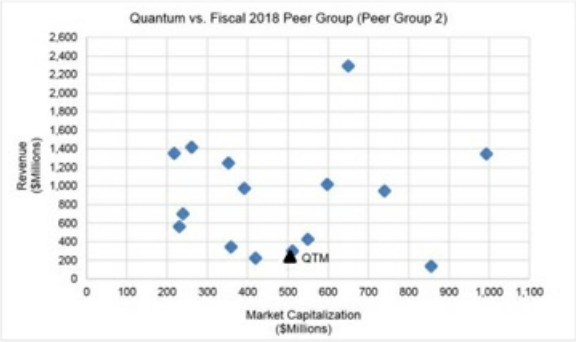
Based on the above criteria, Compensia recommended and the Committee approved Peer Group 2 for compensation decisions being made throughout the remainder of fiscal 2018, superseding the former approved Peer Group 1. Compensation decisions including Director compensation and new executive hires including our President & Chief Executive Officer, Mr. Dennis, were based on the comparisons of the companies in Peer Group 2 which included:

Fiscal 2019 and 2018 Peer Companies (Peer Group 2)

A10 Networks, Inc.	Commvault Systems, Inc.	Hortonworks, Inc.
Avid Technology, Inc.	Comtech Telecommunications Corp.	Infinera Corporation
Barracuda Networks, Inc.	Cray, Inc.	Sonus Networks, Inc.
Black Box Corporation	Electronics for Imaging, Inc.	Varonis Systems, Inc.
Calix, Inc.	Extreme Networks, Inc.	
Carbonite, Inc.	Harmonic Inc.	

The three main objectives for selecting this peer group was to help address previous historical challenges including (i) identifying a group of peers that were a stronger fit in both revenue size and market cap (ii) identifying more peers expanding into the software technology industry and (iii) select peers that accounts for potential competitors where we compete with for talent.

At the time when Peer Group 2 was approved, the Company's $505 million revenue and $269 million market capitalization was at the 49th percentile and the 22nd percentile, respectively. The following chart displays the Company's position relative to Peer Group 2 with annual revenue and market capitalization shown based on the latest available public filings with the SEC at the time the Peer Group 2 was approved.



Executive Compensation Process and Decision-Making

Role of the Leadership and Compensation Committee and the Board of Directors - The Committee oversees and approves all compensation and benefit arrangements for our executive officers, other than for our CEO. In the case of the compensation of our CEO, the independent members of the Board of Directors, based on the recommendations of the Committee, review and approve his compensation. A substantial portion of the Committee's work involves an annual review of our executive compensation program, including determining total compensation levels for our executive officers and evaluating Company and individual executive officer performance. The Committee considers a variety of factors when determining our executive compensation program and total compensation levels. These factors include the Company's financial performance for the most recent fiscal year, the executive officers compensation in relation to the approved Peer Group, the recommendations from our CEO for all executive officers (other than for himself), the input from Compensia, and the results of competitive studies and analyses prepared by Compensia and Company management, the outcome of our annual say-on-pay vote, input we receive from stockholders and the individual performance of each executive. The Committee also considers shareholder dilution, burn rate, and other Company restrictions such as a limited share pool when examining executive officer compensation.

Role of the Executive Compensation Consultant - Through both fiscal 2019 and 2018, the Committee consulted with Compensia on a range of topics relating to executive compensation and engaged Compensia to review the results of executive compensation studies and analyses conducted by Company management. Compensia serves at the discretion of the Committee and provides services only to the Committee. Compensia regularly meets with the Committee both with and without management present. The Committee regularly reviews its advisers' independence status against the specific independence factors contained in the rules of the Securities and Exchange Commission and the related New York Stock Exchange corporate governance listing standards and has determined that no relationship or conflict of interest exists that would preclude Compensia from independently advising the Committee.

Role of Management - The Committee reviews recommendations made by the CEO on various executive compensation matters, including executive compensation program design, annual corporate performance metrics, bonus funding target levels, and evaluations of corporate and executive officer performance. Other members of the Company's management team provide the Committee with the market data as well as data and information relating to various executive compensation matters. In addition, our CEO makes individual compensation recommendations to the Committee for our executive officers (other than for himself). While the Committee considers all recommendations made by the CEO, ultimate authority for all compensation decisions regarding our executive officers (other than for our CEO), rests with the Committee and, in the case of our CEO, rests with the independent members of the Board of Directors. Certain members of the Company's executive management team, including our CEO and CFO, attend Committee meetings and participate in the Committee's discussions and deliberations. However, these individuals are not present when the Committee or the independent members of the Board of Directors discusses and determines their compensation. At each meeting, the Committee also may choose to meet in an executive session without members of management present and may meet without any members of management present at any time.

Role of the Peer Group - The Peer Group is reviewed and modified as needed on an annual basis. The purpose of the Peer Group is to establish a group of companies that are similar in size, industry, revenue, and market capitalization that serve as a benchmark for evaluating internal pay levels and comparing pay practices. The Committee examines the pay practices and programs of the Peer Group and how the total target compensation for our CEO and Officers compares to similar roles of these companies as market reference points. While it is the goal of the Committee to ensure our compensation practices are competitive and aligned with the Peer Group, the Committee must take into consideration other factors such as the financial position of the Company, budgetary guidelines, restrictions on the size of the equity pool, burn-rate and dilution, shareholder return, and the strategic goals of the Company. As such, the Committee relies on their own experience and judgment, recommendations from management, consultation from Compensia, as well as Peer Group benchmark data to make final decisions about the Company's compensation practices.

Say on Pay - The Company held two Annual Meeting of Stockholders in 2017 with the first one on March 31, 2017; the Company's 2016 Annual Meeting of Stockholders that was delayed until the last day of fiscal 2017. The second meeting was the Company's official 2017 Annual Meeting of Stockholders held on August 23, 2017. At this meeting, approximately 88.4% of the vote cast on the non-binding advisory vote on our executive compensation program supported the compensation of our named executive officers.

Performance Evaluation Process

Our executive compensation program is guided by and reflects a"pay-for-performance" philosophy. While our normal practice for performance evaluation includes a formal review of our CEO and the Officers against pre-established and annual performance objectives, for fiscal 2019 and 2018, our goals were to establish and build a new leadership team that had performance-driven compensation packages.

Executive Compensation Review and Approval Process

In a typical fiscal year, the Committee evaluates in making recommendations of our CEO for our executive officers, including base salary adjustments, incentive awards and equity awards. In making these recommendations, our CEO would take into account the following factors:

- The median target compensation levels from the market data for each element of total direct compensation (i.e., salary, short-term incentives and equity awards) for each of our executive officers;
- The annual performance of each executive officer based on our CEO's assessment of his or her contributions to our overall performance, including the ability of the executive officer to successfully lead his or her functional organization and to work effectively across the entire organization;
- Internal compensation equity among our executive officers;
- Our Company performance against the performance goals and objectives established by the Committee and the Board of Directors for the fiscal year; and
- Our Company performance for the fiscal year against the Peer Group.

In making compensation recommendations to the Committee, our CEO considers each of the above factors and no single factor is determinative.

CEO Performance Evaluation

With respect to the performance evaluation and compensation for our CEO, the independent members of the Board of Directors conduct a review of our CEO's performance against set objectives for the fiscal year that were previously reviewed and approved by the Committee and the independent members of the Board. The CEO generally provides a summary of results against objectives and the Committee is also provided with data regarding the Company's performance as compared to the performance of the Peer Group. The Committee and the independent members of the Board of Directors then review the CEO's performance results against his objectives and consider the CEO's compensation in light of that performance evaluation. For fiscal 2019 and 2018, high attrition and turnover occurred on our leadership team including in the Chief Executive Officer role. The Committee in partnership with the Board worked to establish the appropriate total compensation targets for on-going and new hire Chief Executive Officers.

Compensation of the Chief Executive Officers for Fiscal 2019 and 2018

The Committee recognizes that special scrutiny is applied to the compensation of the Chief Executive Officer, as the most highly compensated of the named executive officers and the primary leader of the Company. For our two most recent completed fiscal years the Committee, in partnership with our Board of Directors, worked to stabilize our leadership team and drive a stronger alignment between our executive compensation practices and the Company's performance.

Mr. Lerner, our current President & Chief Executive Officer joined the Company on July 1, 2018, at the start of the second quarter in fiscal 2019 and his total compensation opportunity was structured as follows (i) an annual base salary of $475,000, (ii) a bonus target equivalent to 100% of base salary starting for fiscal 2020 but is ineligible for a potential bonus payment in fiscal 2019, (iii) a promise of intent to grant equity the day the Company becomes current on the filings with the SEC in the form of 400,000 time-based restricted stock units vesting in equal installments over three years subject to Mr. Learner's continued employment, (iv) a new hire grant in recognition for joining the Company with the promise of intent to grant 150,000 time-based restricted stock units that will vest in full on the first year anniversary date subject to Mr. Lerner's continued employment, (v) a promise of intent to grant 400,000 performance-based restricted stock units vesting based on the achievement specified level of the 60-Day Average Share Price for the Company's Common Stock between July 1, 2018, and June 30, 2022.

Mr. Dodson, our current Senior Vice President and & Chief Financial Officer joined the Company on May 31, 2018 and served as Interim Chief Executive Officer until Mr. Lerner joined the Company. Mr. Dodson's total compensation opportunity was structured as follows: (i) an annual base salary of $400,000, (ii) a bonus target equivalent to 50% of base salary, (iii) a promise of intent to grant equity the day the Company becomes current on the filing with the SEC in the form of 125,000 time-based restricted stock units vesting in equal installments over three years subject to Mr. Dodson's continued employment, (iv) a one-time grant in recognition of $50,000 worth of stock of his role as Interim Chief Executive Officer, (v) a promise of intent to grant 125,000 performance-based restricted stock units vesting based on the achievement specified level of the 60-Day Average Share Price for the Company's Common Stock between June 1, 2018, and June 30, 2022.

Mr. Dennis served as our President & Chief Executive Officer from January 16, 2018, through the end of our fiscal 2018, and separated from the Company on May 25, 2018, at the start of our fiscal 2019. Mr. Dennis joined the Company during the fourth quarter of our fiscal 2018 and his target total compensation opportunity was structured as follows (i) an annual base salary of $475,000, (ii) a bonus target equivalent to 100% of his annual base salary beginning with the Company's fiscal year ending March 31, 2019 ("FY 2019"), (iii) an opportunity to purchase 250,000 stock options of the Company's Common Stock that vest in equal installments over four years subject to Mr. Dennis' continued service with the Company, (iv) an equity grant covering 125,000 shares of time-based restricted stock units vesting in equal installments over three years subject to Mr. Dennis' continued service with the Company, (v) an equity grant of 500,000 shares of performance-based restricted stock units vesting based on the achievement of specified levels of the average of the closing prices for the Company's Common Stock as reported on the New York Stock Exchange during the highest of the four quarterly periods ended June 30, 2021 (the "Average Price"), and subject to Mr. Dennis' continued service with the Company. Mr. Dennis was not eligible to participate in the Company's Fiscal 2018 Short-term Incentive Plan. The Committee believes that the target total compensation structure established for Mr. Dennis accomplishes the following (i) is competitive with our peer group (ii) aligns with our pay-for-performance compensation philosophy and (iii) aligned with the interests of our stockholders.

Mr. Sanchez, one of our board members during fiscal 2019 and 2018, served as our Interim President & Chief Executive Officer from November 7, 2017, through January 16, 2018. In his role, Mr. Sanchez led the efforts in executing against goals that aligned with Company's strategic transformational plan that included cost reductions (headcount and products), the reduction of 3rd party spend, and optimizing a plan to stabilize the business. Mr. Sanchez was actively involved with other members of the Board in the search for a permanent President & Chief Executive Officer. For his responsibilities as Interim President & Chief Executive Officer, Mr. Sanchez was compensated on a monthly basis and pro-rated for any partial months of service completed as follows (i) a base salary of $50,000 per month, (ii) a short-term cash incentive opportunity of $50,000 per month that may be earned for achievement of equally weighted performance goals relating to the Company's EBITDA and cost reduction goals as of March 31, 2018, the last day of the Company's fiscal year and (iii) 40,000 shares of time-based restricted stock units granted per month cliff vesting on November 30 2018. For fiscal 2018, in addition to his monthly salary, Mr. Sanchez satisfied one of two performance incentive goals and earned $57,903 in cash compensation. Specifically, Mr. Sanchez had 50% of his pro-rated bonus target on EBITDA with a goal of $28.6M and the other 50% weighted on organizational restructure cost savings of $9.8M. For both EBITDA and cost saving goals, no bonus is paid unless 100% of the financial goal has been met of which he satisfied the cost savings goal. No threshold or upside potential could be earned on the bonus payout. In addition, Mr. Sanchez was granted a total of 92,645 time-based restricted stock units for serving as Interim Chief Executive Officer. The Board believed the total compensation package set for Mr. Sanchez was competitive and appropriately rewarded him for serving in this role on short notice and for his achievement in satisfying aggressive goals.

Mr. Gacek served as our President & Chief Executive Officer until his separation from the Company on November 7, 2017. For fiscal 2018, Mr. Gacek's total compensation opportunity was structured as follows (i) an annual base salary of $600,000, (ii) a bonus target equivalent to 100% of his annual base salary with a maximum payout at 200% of his target, (iii) an equity grant covering 51,975 time-based restricted stock units vesting in equal installments over three years subject to continued service with the Company, and (iv) an equity grant covering 63,525 shares of performance-based restricted stock units vesting over three years following the achievement of specified Company performance metrics. Mr. Gacek's separation occurred in connection with the Company's Change of Control Agreement dated December 3, 2015. Per this agreement, all of Mr. Gacek's unvested and outstanding (i.e. unexpired) time-based and performance-based shares were accelerated including any awards granted in fiscal 2018. Including his fiscal 2018 grant, Mr. Gacek had a total of 210,191 shares outstanding (before taxes) subject to release six months and one day after his separation date in accordance with Section 409A of the Internal Revenue Code of 1986. In addition to his equity grant acceleration, Mr. Gacek was also paid a cash lump sum award in the amount of $1.2 million as stated on the Summary Compensation Table.

Elements of Compensation

Consistent with our compensation philosophy and objectives, the Company provides a mix of compensation elements that emphasizes annual cash incentives and long-term equity incentives. Our executive compensation program consists of base salary, an annual incentive opportunity, equity awards with both time and performance-based vesting, minimal perquisites and certain other benefits including health and welfare benefits, change of control, and severance protection.

Base Salary Overview - Base salaries are set competitively to attract and retain executive talent while compensating our named executive officers for their day-to-day responsibilities. The base salaries are typically reviewed annually in June and may be adjusted in accordance with individual performance, market alignment, Company performance, promotions or an increased level of responsibility. As in previous years, the Committee continues to generally position the base salaries of our Chief Executive Officer and other executive officers at market median based on the Peer Group data and other benchmark data from other compensation surveys.

Quantum's Executive Officer Incentive Plan Overview - All our executive officers participate in the Company's Executive Officer Incentive Plan ("the Incentive Plan"). The Incentive Plan is structured to support our strategic business plan and reflects the Company's underlying business conditions. It is intended to provide competitive annual incentive compensation opportunities to our executive officers while supporting our pay-for-performance philosophy by directly linking annual cash incentive compensation levels to both corporate and individual performance. Each Executive Officer has a target annual incentive award opportunity that is expressed as a percentage of his or her base salary. Target annual incentive awards are reviewed, set, and approved annually as part of our executive compensation review. Annual incentive targets are compared to our Peer Group pay levels in combination with other market data and set approximately at the market median.

The Incentive Plan provides for the funding of an annual incentive pool based upon the achievement of one or morepre-established financial or operational performance objectives. If the minimum level of performance is achieved, the Incentive Plan's pool is funded with a pre-determined amount. As company performance levels increase over the minimum level, the pool's funding increases incrementally until the maximum performance threshold is attained. Payouts are calculated based on the actual results of the Company performance measured as of the last day of our fiscal year and the threshold, target, and maximum achieved. The Committee may, in its discretion, reduce or prohibit the actual payout of the annual incentive plan.

Equity Awards Program Overview - Historically, the cash compensation of our executive officers has been supplemented with equity awards under the Company's long-term incentive plan that tie their overall compensation to the performance of the Company's Common Stock over a period of time. Equity awards are granted to our executive officers to (i) provide at-risk equity compensation consistent with ourpay-for-performance philosophy and (ii) align the interests of our executive officers with those of our stockholders by providing them with significant equity stakes in the Company. The Committee determines, on a discretionary basis, whether an equity award should be granted, the form of any equity award and the number of shares of the Company's Common Stock subject to the equity award.

Establishment of Stock Pool for Annual Equity Awards

Each fiscal year, as part of the development and approval of the Company's annual compensation program, management recommends, and the Committee evaluates and approves, a stock pool for the purpose of granting annual equity awards to our executive officers and other eligible employees. In establishing the size of this stock pool, the following factors are considered:

- The market data regarding the size of competitive equity pools;

- The market data regarding the competitive size and fair value of equity awards provided to similar executive officers and other employees;
- The resulting impact the stock pool would have on our annual and three-year average burn rates ("burn rate" is defined as the number of shares of the Company's Common Stock subject to stock options granted during the fiscal year plus the number of shares of the Company's Common Stock subject to restricted stock unit awards granted during the fiscal year, with the number of restricted stock units multiplied by the appropriate ISS burn-rate multiplier, divided by the average number of shares of the Company's Common Stock outstanding during the fiscal year); and
- The impact of the stock pool on the remaining shares of stock available for grant under the Company's stockholder-approved long-term incentive plan.

Form of Annual Equity Awards

Prior to fiscal 2018, the use of stock options had been declining as part of our equity compensation program. Following the changes to our executive leaders and our Board members, the Committee believed the use of non-qualified stock options is an appropriate equity vehicle that served the following purposes (i) was attractive to new hires as a portion of their equity mix, (ii) is consistent with the equity practices of our Peer Group 2 that was established in the later part of our fiscal year, (iii) aligned our executive leaders with the strategic objectives of the company, (iv) aligned executive performance to the interests and values of our Shareholders. For fiscal 2018, the use of stock options was once again used as part of our equity compensation programs with the hire of Mr. Dennis. With recommendations from Management and our Executive Compensation Consultant, the Committee approves new hire and annual grants that consist of a strong mix of options, time-based restricted stock units and performance-based restricted stock units. The Committee continues to monitor the Company's efforts to reduce the dilution, burn rate, overhang and financial accounting compensation expense resulting from the use of various equity awards. The Committee believes the strategic use of restricted stock units both in the forms of time-based and performance-based provides an additional incentive for our executives with some financial value regardless of stock price performance.

- Time-Based RSUs: The Committee believes the use of time-based RSUs allows the Company to attract new executive talent, offer total compensation packages that are competitive, provide long-term retention interests to our current executive team, and align with our Shareholders' values of maintaining a stable leadership team through retention.
- Performance-Based RSUs: The industry-wide best practices among our peers and other technology companies has increased in the use of performance-based equity grants to strengthen the alignment between Executive compensation and Company performance. Starting in fiscal 2014, we used performance-based RSUs for our CEO and expanded this equity model to our senior leaders in fiscal 2015. The use of performance-based RSUs remains highly prevalent in fiscal 2018 among our vice presidents and executive officers.
- Non-Qualified Stock Options: In fiscal 2018 and with the hire of our CEO, Mr. Dennis, the Committee believed that the use of stock options was not only attractive to new hires, the equity grants directly aligned the long-term compensation opportunity of our executives to the interests of our Shareholders. Mr. Dennis was the only executive during fiscal 2018 to receive an equity grant in the form of non-qualified stock options.

Vesting

Due to the low performance of the stock and in an effort to attract and retain executive talent, the Committee maintains three-year vesting schedules for both our time-based RSUs and performance-based RSUs but with the performance-based RSUs earned contingent upon the Company satisfying pre-established performance goals. Our non-qualified stock options, granted only to Mr. Dennis in fiscal 2018, vest on the anniversary date of the grant in equal installments over a four-year period and subject to continued employment.

Size/Value of Annual Equity Awards

In determining the size of the annual equity awards to be granted individually to our executive officers, the Committee does not establish specific target equity award levels for them. Instead, the Company develops annual equity award grant guidelines for the individual grants. The equity award grant guidelines are developed based on the number of shares of the Company's Common Stock that are available for the granting of equity awards to our executive officers and incorporate a range that permits variation in the individual grants based on different levels of individual performance. Using these guidelines, the Committee reviews the recommendations by the CEO regarding the size of the equity award to be granted to each of our executive officers (other than with respect to his own award). The recommendations regarding the size of the equity award for each individual executive officer may vary within the established guidelines based on the following factors:

- Individual performance of each executive officer for the prior fiscal year;
- Company financial performance for the prior fiscal year;
- The grant date fair value of equity awards granted to executive officers in similar positions in technology companies of similar size (the "grant date fair value" is equal to the number of restricted stock unit awards multiplied by the market price of the Company's Common Stock on the date of grant);
- Internal consistency and comparability in terms of the size of the equity awards among the executive officers; and
- The number, type and current retentive value of the outstanding equity awards held individually by each of the executive officers.

Although our philosophy is to generally target the market median equity award value for our annual equity awards, based on the market data, when making equity awards to our executive officers, the value of the resulting equity awards may be above or below the market median award value depending upon the factors noted above as well as the Company's stock price at the time the awards are granted.

The Committee reviews the recommendations of our CEO, including the application of the aforementioned factors to each of our executive officers and ultimately approves the equity awards for the executive officers. The independent members of the Board of Directors apply the same factors in determining the size and form of the equity award for our CEO.

Compensation for Fiscal 2019

Annual Base Salary Fiscal 2019

For the newly hired Officers in fiscal 2019, the Committee partnered with an external executive search firm and our compensation consultant, Compensia, to determine the appropriate market based annual salary amounts.

Named Executive Officer	Title	Fiscal 2018 Salary	Fiscal 2019 Salary
James J. Lerner(1)	President & Chief Executive Officer	—	$475,000
J. Michael Dodson(2)	Chief Financial Officer, Former Interim Chief Executive Officer	—	$400,000
Patrick J. Dennis(3)	Former President & Chief Executive Officer	$475,000	$475,000
Fuad Ahmad(4)	Former Senior Vice President & Chief Financial Officer	$375,000	$375,000
Donald E. Martella Jr.	Senior Vice President Engineering	$355,000	$355,000
Lewis W. Moorehead(5)	Chief Accounting Officer	—	$300,000
Shawn D. Hall	Senior Vice President & General Counsel	$337,608	$337,608
William C. Britts(6)	Former Senior Vice President WW Sales & Marketing	$370,004	$370,004

(1) Mr. Lerner joined the Company as President & Chief Executive Officer on July 1, 2018 and was not a Named Executive Officer in fiscal 2018.
(2) Mr. Dodson was hired as the Chief Financial Officer and Interim Chief Executive Officer as which he served from May 31, 2018, to July 1, 2018, when Mr. Lerner joined the Company. Mr. Dodson was not a named executive officer in fiscal 2018.

(3) Mr. Dennis joined the company as President and Chief Executive Officer on January 16, 2018, and separated from the Company on May 25, 2018.
(4) Mr. Ahmad separated from the Company on May 30, 2018.
(5) Mr. Moorehead was not a named executive officer in fiscal 2018.
(6) Mr. Britts separated from the Company on October 22, 2018.

Quantum Incentive Plan Fiscal 2019

While the objective of our short-term incentive plan is to reward senior leadership with cash incentives based on Company performance, fiscal 2019 continued to present challenges following increased expenses incurred as a result of the on-going SEC investigation and increased efforts on the transformational work to rationalize the Company's cost structure. Because the Company was trying to stabilize and was not financially performing, no formal incentive program for fiscal 2019 was created or approved by the Committee to include set financial performance metrics.

Equity Awards Fiscal 2019

The Company's inability to file the quarterly report ending December 31, 2017, due to a subpoena received by the SEC, resulted in Quantum's inability to be compliant with our filings as of February 9, 2018, the end of our fiscal 2018. As a result of and per the guidance of our external legal advisors, WSGR, the Company could no longer grant or issue stock ("black out period") until all filings were current and in compliance with the SEC. This blackout period of granting equity awards continued throughout our fiscal 2019 performance year.

In order to attract and recruit a new leadership team including a new President & Chief Executive Officer as well as a Chief Financial Officer, equity awards were approved to be made effective as of the first business day on which the Company becomes current with respect to its filings under the Exchange Act.

The Committee approved the following equity awards:

Executive Officer	Title	Restricted Stock Units	Performance-based Restricted Stock Units
James J. Lerner(1)	President & Chief Executive Officer	550,000	450,000
J. Michael Dodson(2)	Senior Vice President & Chief Financial Officer, Former Interim Chief Executive Officer	139,577	125,000
Patrick J. Dennis	Former President & Chief Executive Officer	—	—
Fuad Ahmad	Former Senior Vice President & Chief Financial Officer	—	—
Donald E. Martella Jr.	Senior Vice President Engineering	—	—
Lewis W. Moorehead(3)	Chief Accounting Officer	50,000	50,000
Shawn D. Hall	Senior Vice President & General Counsel	—	—
William C. Britts(4)	Former Senior Vice President WW Sales & Marketing	30,000	—

(1) For Mr. Lerner, the Committee approved an award of 400,000 time-based restricted stock units supplemented with a separate award of 150,000 time-based restricted stock units. In addition, the Committee approved an award of 450,000 performance-based restricted stock units as part of his new hire employment offer letter.
(2) For Mr. Dodson, the Committee approved an award of 125,000 time-based restricted stock units supplemented with a separate award of time-based restricted stock units with a value of $50,000 based on the closing price of May 30, 2018. In addition, the Committee approved an award of 125,000 performance-based restricted stock units as part of his new hire employment offer letter.
(3) For Mr. Moorehead, the Committee approved an award of 50,000 time-based restricted stock units and 50,000 performance-based restricted stock units as part of his new hire employment offer letter.
(4) For Mr. Britts, the Committee approved an award of 30,000 time-based restricted stock units.

Compensation for Fiscal 2018

Annual Base Salary Fiscal 2018

Named Executive Officer	Title	Fiscal 2017 Salary	Increase %	Fiscal 2018 Salary
Patrick J. Dennis(1)	President & Chief Executive Officer	—	—	$475,000
Adalio T. Sanchez(2)	Former Interim President & Chief Executive Officer	—	—	$600,000
Jon W. Gacek(3)	Former President & Chief Executive Officer	$600,000	—	$600,000
Fuad Ahmad(4)	Senior Vice President & Chief Financial Officer	$360,000	4.17%	$375,000
William C. Britts	Senior Vice President, WW Sales & Marketing	$370,004	—	$370,004
Robert S. Clark(5)	Senior Vice President, Product Operations	$400,000	—	$400,000
Donald E. Martella Jr.(6)	Senior Vice President, Engineering	$355,000	—	$355,000

(1) Mr. Dennis joined the Company as President & Chief Executive Officer on January 16, 2018, and separated from the Company on May 25, 2018.

(2) Mr. Sanchez served as Former Interim President & Chief Executive Officer from November 7, 2017, through January 16, 2018. He was compensated $50,000 base salary for each full month of service and on a prorated, basis for any partial months of service. The annualized salary is displayed in the table above had Mr. Sanchez served in the interim role for 12 months.

(3) Mr. Gacek served as President & Chief Executive Officer until his separation on November 7, 2017.

(4) Per Mr. Ahmad's employment agreement with the Company, Mr. Ahmad's annual salary was structured as follows: For the first year of employment, his salary was a percentage of the "Total Fee Basis" of $400,000 subject to a 15% placement fee paid to FLG Partners, LLC, a leading CFO consulting and board advisory firm where Mr. Ahmad has been a partner since 2013. The Company paid this fee on behalf of Mr. Ahmad directly to FLG Partners, LLC. This placement fee was reduced to 10% of the "Total Fee Basis" for his second year of employment and further reduced to 5% of the "Total Fee Basis" where it would remain for his third year of employment and any continuing years of service thereafter. For fiscal 2018, Mr. Ahmad's received an annual salary increase of 4.17% increasing his salary to $375,000, however, the Company only paid 10% of the $400,000 "Total Fee Basis" per the agreement.

(5) Mr. Clark separated from the Company on May 11, 2018.

(6) Mr. Martella was not a named executive officer in fiscal 2017.

For fiscal 2018, the Committee agreed that Mr. Gacek's base salary was aligned with the median base salary of the Company's Peer Group 1 (which was the only peer group that had been established at the time of this review and decision) and therefore Mr. Gacek did not receive a base salary increase. Mr. Gacek separated from the Company on November 7, 2017, and Mr. Sanchez served as our Interim President & Chief Executive Officer following Mr. Gacek's departure. Mr. Sanchez was paid a monthly base salary of $50,000 for any full months of service and paid on a pro-rated basis for any partial months of service. Mr. Dennis joined the Company on January 16, 2018, as our President & Chief Executive Officer. The Committee partnered with our external Executive Compensation Consultant, Compensia, to determine a median base salary that was competitive and aligned to the Company's Peer Group 2 (established and approved throughout our fiscal 2018).

Prior to his departure and as part of the annual review process, Mr. Gacek reviewed the salaries for his staff and made salary increase recommendations to the Committee based on the following considerations: (i) base salaries for each of these named executive officers is approximately at the market median for comparable executive officer positions within the Peer Group (Peer Group 1 used), (ii) is reflective of the role and contribution of each officer within the Company, (iii) provides each officer with a competitive base salary that will assist the Company in retaining executive talent, and (iv) maintains internal equity for comparable executive positions. As a result of this annual evaluation, Mr. Gacek recommended, and the Committee approved a 4.17% increase for Mr. Ahmad.

In the fourth quarter of fiscal 2018, in an effort to reduce expenses, Management recommended and implemented a temporary 15% salary reduction to all Vice Presidents and above including Mr. Dennis. The reduction in salaries were effected for nearly the entire fourth quarter and the amounts were reinstated on April 1, 2018, the start of fiscal 2019.

Quantum Incentive Plan Fiscal 2018

Named Executive Officer	Title	Fiscal 2018 Target
Patrick J. Dennis(1)	President & Chief Executive Officer	0%
Adalio T. Sanchez(2)	Former Interim President & Chief Executive Officer	100%
Jon W. Gacek(3)	Former President & Chief Executive Officer	100%
Fuad Ahmad	Senior Vice President & Chief Financial Officer	50%
William C. Britts	Senior Vice President WW Sales & Marketing	50%
Robert S. Clark	Senior Vice President Product Operations	50%
Donald E. Martella Jr.	Senior Vice President Engineering	50%

(1) Mr. Dennis started with the Company in Q4 fiscal 2018 on January 16, 2018. Per his offer letter, Mr. Dennis was not eligible to participate in the Fiscal 2018 bonus program but would have a bonus target equal to 100% his base salary for the fiscal 2019 performance year.

(2) Mr. Sanchez, the Former Interim President & Chief Executive Officer, was offered a $50,000 bonus target for every month of service and pro-rated for every partial month he served. If calculated on an annual basis, this equates to 100% target of his annual salary.

(3) Mr. Ahmad's annual incentive target is 50% of his "Total Fee Basis" of $416,667 inclusive of a 4.17% salary increases in fiscal 2018 and subject to a 10% placement fee based on the prior "Total Basis Fee" of $400,000 paid to FLG Partners, LLC.

The Committee determined that the target annual incentive award opportunities for all of the named executive officers were generally aligned with the market median. Although each named executive officer has an annual incentive target opportunity, actual incentive awards for our executive officers under The Incentive Plan may be above or below the established target opportunities and may be eliminated entirely, depending on actual Company and individual performance. For the CEO, Officers and direct reports to the CEO, the maximum payout opportunity remains 200% of the target opportunity.

Performance Metrics and Targets of The Executive Officer Incentive Plan for Fiscal 2018

For fiscal 2018, the Committee approved the use of one financial performance metric includingnon-U.S. GAAP Operating Income. While the Incentive Plan has a single metric, the focus on operating income is a critical measure of success for the fiscal year and is balanced by a focus on revenue growth in the long-term incentive plan. The Committee continues to believe that non-U.S. GAAP operating income is an appropriate measure of our financial performance, as it reflects the level of growth resulting from the successful execution of our annual operating plan consistent with producing an appropriate return for our stockholders and satisfying our obligations to our debt holders. (For purposes of the Incentive Plan, "non-U.S. GAAP operating income" is defined as operating income reduced by acquisition expenses, amortization of intangibles, Crossroads patent litigation costs, goodwill impairment, outsourcing transition costs, proxy contest and related costs, restructuring charges, share-based compensation charges and Symform expenses, net.)

The Incentive Plan provides for the funding of a single pool for all employees based upon the over-achievement ofpre-established non-U.S. GAAP operating income target performance levels. The target performance levels for fiscal 2018 were set at the beginning of the fiscal year in conjunction with the approval of our annual operating plan. The annual operating plan is considered and discussed extensively by our Board and senior management before it is approved by the Board. The annual operating plan non-U.S. GAAP operating income target for fiscal 2018 was $28.0 million.

Funding of Executive Officer Incentive Plan

For fiscal 2018, following management recommendations, the Committee agreed to fund the Incentive Plan based on the over-achievement of certain levels of non-U.S. GAAP operating income performance. The incentive pool would not be funded until the threshold performance fornon-U.S. GAAP operating income of $37.2 million or 133% annual operating plan had been achieved. If satisfied, the pool would fund $4.5 million with actual incentives earned at 27.8% of target. Provided the threshold performance is satisfied and an incentive pool is funded, an additional $5.5 million would fund following non-U.S. GAAP operating income performance of $47.2 million resulting in actual incentives earned at 62.5% of target. From there, the incentive pool would fund up to an additional $6.5 million for non-U.S. GAAP operating income performance of $57.2 million with actual incentives earned at 100% of target. While all incentives are capped at 150% of target for bonus eligible employees and 200% for our CEO, Officers and the CEO's direct reports, this requires significant overachievement of company performance. For fiscal 2018, performance achievement of 204% annual operating plan on non-U.S. GAAP operating income must be satisfied to achieve 100% bonus target.

It is the responsibility of our CEO to recommend incentive awards for our executive officers (other than himself or herself) under the Incentive Plan, based on the total level of incentive funding, the individual target annual incentive award opportunities and based on the assessment of each individual performance for the fiscal year. The Committee ultimately approves all incentive awards to our executive officers under the Executive Officer Incentive Plan and is not bound by the recommendations of our CEO. The independent members of the Board of Directors determine the incentive award, if any, payable to our CEO under the Executive Officer Incentive Plan from the funded incentive pool.

Following the completion of fiscal 2018, the Committee compared our actualnon-U.S. GAAP operating income results to the annual target performance levels. Since our reported fiscal 2018 non-U.S. GAAP operating income did not exceed the minimum performance levels necessary to begin funding the incentive pool, the Committee concluded that an incentive pool would not be funded for fiscal 2018. As a result, no annual incentives were paid to our CEO, executives, or any other employees under the Incentive Plan.

Given the special events that occurred in fiscal 2018 with the changes in leadership, Mr. Gacek and Mr. Sanchez received cash incentives as disclosed on the Summary Compensation Table. Specifically, Mr. Gacek who separated from the Company on November 7, 2017, was paid $1.2 million in accordance with the terms of his Change of Control agreement. Mr. Gacek's payment was subject to Section 409A of the Internal Revenue Code of 1986 and the actual payment was made six (6) months and one (1) day following the date of Mr. Gacek's separation date.

For Mr. Sanchez, our Former Interim President & Chief Executive Officer from November 7, 2017, until January 16, 2018, the Board approved a $50,000 per month bonus target pro-rated for any partial months of service. The Board set and approved two equally weighted financial goals for Mr. Sanchez structured as follows (i) 50% of his bonus target on EBITDA based on the achievement of $28.6 million as of March 31, 2018, the Company's last day of the fiscal year (ii) 50% of his bonus target on organizational restructure cost savings goal of $9.8 million. No bonus is earned for partial attainment of the set goals and there is no upside opportunity for over achievement of these goals. For fiscal 2018, our reported EBITDA did not meet or exceed the performance target necessary for funding. Mr. Sanchez did exceed the restructuring cost savings goal and therefore earned $57,903 of his $115,806 incentive target.

Sales Compensation Plan for Fiscal 2018

Mr. Britts also participates in the Company's Sales Compensation Plan. The Sales Compensation Plan is a standard commission plan in which all of the Company's commissioned employees participate and provides commission payments based upon sales of the Company's products and the attainment of specified individual quotas. For fiscal 2018, Mr. Britts' quota was $484.1 million based on the sale of the Company's branded products and services. During fiscal 2018, Mr. Britts earned total commissions of $73,445 which was below his annual commission target of $200,000. Commission targets for Mr. Britts were based on weightings between various strategic product groups and other revenue.

Equity Awards Fiscal 2018

The Committee approved the following annual equity awards to the named executive officers in fiscal 2018 (with the number of performance-based restricted stock units shown at target levels) using the factors described above for purposes of determining the size of the individual equity awards.

Executive Officer	Title	Non-Qualified Stock Options	Restricted Stock Units	Performance-based Restricted Stock Units
Patrick J. Dennis(1)	President & Chief Executive Officer	250,000	125,000	500,000
Adalio T. Sanchez(2)	Former Interim President & Chief Executive Officer		92,645	
Jon W. Gacek(3)	Former President & Chief Executive Officer		51,975	63,525
Fuad Ahmad(4)	Senior Vice President & Chief Financial Officer		45,000	30,000
William C. Britts	Senior Vice President, WW Sales & Marketing		25,000	30,000
Robert S. Clark	Senior Vice President, Product Operations		20,000	25,000
Donald E. Martella Jr.	Senior Vice President, Engineering		20,000	25,000

(1) Mr. Dennis was granted 125,000 time-based restricted stock units and 500,000 performance-based restricted stock units as part of his new agreement. In addition, Mr. Dennis was awarded 250,000 non-qualified stock options.

(2) Mr. Sanchez was granted 40,000 shares per month and pro-rated for any partial months of service during his time as Former Interim President & Chief Executive Officer from November 7, 2017, until January 16, 2018.

(3) Mr. Gacek was granted 51,975 time-based restricted stock units and 63,525 performance-based restricted stock units as part of the Company's annual grant cycle as approved by the Board. Mr. Gacek separated from the Company on November 7, 2017, under the Company's Restated Change of Control Agreement dated December 3, 2015. Per this Agreement, Mr. Gacek's fiscal 2018 grant was fully accelerated along with any unvested and outstanding (i.e. unexpired) shares. Mr. Gacek had a total of 210,191 shares outstanding including his fiscal 2018 grant. These shares were subject to release to Mr. Gacek six months and one day after his separation date following the terms of the Agreement and in accordance with Section 409A of the Internal Revenue Code of 1986.

(4) Mr. Ahmad was awarded 20,000 time-based restricted stock units on December 1, 2017, in addition to his annual grant as recognition for his accomplishments on restructuring the Company's debt.

Fiscal 2018 Equity Program Evaluation

When evaluating the equity program for fiscal 2018, the Committee took into consideration a number of factors when approving recommendations for the annual grant process including: the strategic direction for fiscal 2018, the size of the equity pool and the number of shares available in the 2012 Plan, impacts on burn rate and equity dilution, the appropriate pay mix on time-based awards vs. performance-based awards, and the value of the equity awards for our named executive officers in comparison to our Peer Group.

In the early part of our fiscal 2018, the Committee believed that to manage a competitive equity program that attracted, rewarded and retained executive talent while operating within the above factors, the Company should continue to offer a combination of time-based and performance-based RSUs. In the later part of our fiscal 2018 and following a steady decline in our stock price, the Committee believed that the use of non-qualified stock options was a preferred use equity tool to attract executive talent while strengthening the alignment between pay and performance. To that end, no changes were made to the time-based equity program from our prior fiscal year.

The performance-based RSUs for fiscal 2017 were aligned to one financial performance metric; an internal revenue target. Senior management and the Committee wanted to further the alignment between Company performance and the performance-based equity program for our executive officers. For fiscal 2018, the Committee approved the following performance-based RSU construct per the recommendations from senior management (i) an operating gate that no performance-based RSUs will be earned unless the actual fiscal 2018 Earnings Per Share ("EPS") performance was greater than the actual fiscal 2017 EPS performance (ii) achievement of specific performance goals for an internal revenue metric. Once the EPS operating gate has been achieved, then 50% of the target performance-based RSUs are earned once the threshold revenue target has been satisfied. From there, additional performance-based RSUs are earned scaling linearly as the achievement of internal revenue performance increases until a maximum achievement of 150% of the target performance-based RSUs have been achieved. All of our executive officers were granted a 55/45 mix of performance-based and time-based equity awards with the same financial performance metrics except for Mr. Martella, who had an additional goal tied to a broad engineering project.

As our company performance and stock price continued to decline throughout our fiscal 2018, and with changes to our leadership team, the Committee felt it was important to consider the use of non-qualified stock options as seen with Mr. Dennis' employment agreement.

Mr. Gacek

In determining the equity award for Mr. Gacek for fiscal 2018, the Committee reviewed the median grant date fair value of equity awards and mix of performance-based and non-performance-based based equity from the Company's Peer Group (for comparison purposes, Peer Group 1 was used as this was the only Peer Group established at the time and prior to our Peer Group revisions during the fiscal year). The Committee decided that a 55/45 mix consisting of 63,525 performance-based RSUs and 51,975 time-based RSUs was appropriate and consistent with market. At the time the Committee reviewed and recommended the equity awards for Mr. Gacek and our other named executive officers, the stock price was $6.96 as of the last day of our fiscal 2017, after adjusting for a 1-for-8 reverse stock split on April 18, 2017, the start of our fiscal 2018. Using this stock price value as reference, the size of Mr. Gacek's target equity grant was less than the 25th percentile of the Peer Group and the Committee believed the size of this grant was appropriate given the Company's financial performance and constraints with the number of available shares in the equity pool.

The time-based RSUs and performance-based RSUs vest in equal installments over three years on the anniversary of the grant date of July 1, 2017, subject to continued employment and the achievement of the fiscal 2018 EPS and revenue performance goals. Because Mr. Gacek's departure from the Company on November 7, 2017, occurred in accordance with his Change of Control agreement, the time-based and equity awards granted in fiscal 2018 were accelerated and the performance-based awards deemed satisfied. In combination with Mr. Gacek's fiscal 2018 grant, any outstanding equity was also accelerated for a total of 210,191 shares outstanding (before taxes) subject to release six months and one day after his separation date in accordance with Section 409A of the Internal Revenue Code of 1986.

Mr. Sanchez

Following the departure of Mr. Gacek on November 7, 2017, Mr. Sanchez stepped down from his position on the Board to fill in as Interim President & Chief Executive Officer until a full-time replacement was found. With guidance from Compensia, the Board approved a monthly grant of 40,000 time-based restricted stock units for any full months of service completed and pro-rated for any partial months of service vesting on November 30, 2018, subject to continued service as employee or member of the Board. If for any reason Mr. Sanchez's employment was terminated prior to the next annual meeting for any reason other than voluntary separation, the shares fully vest upon termination. For fiscal 2018, and for the duration of time as Interim President & Chief Executive Officer, Mr. Sanchez was granted a total of 92,645 time-based RSUs.

Mr. Dennis

In the search for a permanent Chief Executive Officer, the Committee partnered with Compensia for advisement on an executive new hire offer that was properly structured to attract top talent executives, was strongly aligned to Company performance, and targeted approximately the 50th percentile of our revised Fiscal 2018 Peer Group (Peer Group 2). As discussed in the Peer Group section of this analysis, Peer Group 2 was approved during fiscal 2018 replacing the prior Peer Group and was used for executive pay benchmarking comparisons beginning August 2017. Mr. Dennis joined the company on January 16, 2018, succeeding Mr. Sanchez as our President & Chief Executive Officer. For fiscal 2018 and per his offer letter agreement, Mr. Dennis' equity compensation was structured as follows:

(1) Stock Options: Mr. Dennis was granted 250,000 non-qualified stock options vesting in equal installments over four years on the first, second, third, and fourth anniversary date of the grant and subject to Mr. Dennis' continued services with the Company.

(2) Time-based RSUs: Mr. Dennis was granted 125,000 vesting in equal installments over three years on the first, second, and third anniversary date of the grant and subject to Mr. Dennis' continued services with the Company.

(3) Performance-based RSUs: Mr. Dennis was granted a maximum of 500,000 shares of the Company's Common Stock. The performance-based RSUs vest based on the achievement of specified levels of the average of the closing prices for the Company's Common Stock as reported on the New York Stock Exchange during the highest of the four quarterly periods ending June 30, 2021 (the "Average Price"), and subject to Mr. Dennis' continued service with the Company. Specifically, the performance criteria for the performance-based RSUs was established as follows:

(a) The Average Price be at least $8.00, otherwise no performance-based RSUs are earned.

(b) The maximum of 500,000 shares are earned if the Average Price is at least $13.00.

(c) If the Average Price is between $8.00 and $13.00, the number of shares earned will increase linearly from 0 shares to 500,000 shares with an increase of 100,000 shares for each $1.00 increase in the Average Price over $8.00.

(d) Shares that become eligible to vest based on the Average Price achievement vest upon the Committee's certification of the Average Price achievement on June 30, 2021, subject to Mr. Dennis' continued service with the Company.

(e) Upon the event of a Change of Control and per Mr. Dennis' Change of Control Agreement, any performance-based RSUs that will become eligible to vest based on Average Price achievement will be determined based on the value or amount of the consideration payable to holders of Company's Common Stock in connection with the Change of Control, provided that vesting will be subject to continued service with the Company (or its successor as applicable) through June 30, 2021, subject to any earlier vesting under the 2012 Plan, the award agreement governing the performance-based RSUs, or the Change of Control Agreement.

Mr. Dennis voluntarily separated from the Company on May 25, 2018, following the end of our fiscal 2018, forfeiting his fiscal 2018 equity grants.

Other Named Executive Officers

At the time the annual equity awards were being decided for our named executive officers, Mr. Gacek was our President and Chief Executive Officer. Mr. Gacek provided the Committee with target annual equity awards for the other named executive officers, which took into account (i) the leadership position of each named executive officer, (ii) the named executive officer's level of individual performance, (iii) the role of each named executive officer and the scope of their responsibilities, (iv) the Company's financial performance for the prior fiscal year, (v) the current equity holdings of each named executive officer, and (vi) restrictions on the size of the equity pool.

The Committee reviewed the recommendations from Mr. Gacek for the executive officers in combination with market data that compared the size of the internal equity awards to that of comparable positions in companies of similar size. While it is always the intention to keep the target value of internal equity comparable to market and Peer Group medians, the Committee took into consideration other factors including the current stock price performance, the financial performance of the Company for the prior year, and the number of shares remaining available for grant in the 2012 Plan. The guidelines for the annual equity mix target were 55% performance-based to 45% time-based for our named executive officers. All of the performance-based restricted stock units vest in equal installments over three-years on each anniversary of the grant date of July 1, 2017, subject to satisfying predetermined company financial goals.

The Company performance goals for all other executive officers were identical to that described for Mr. Gacek except for Mr. Martella who had an additional goal tied to a specific engineering project. For fiscal 2018, the officers were granted 50% of target performance-based RSUs upon the attainment of the meeting specific financial goals and can earn a maximum grant of 150% of their target performance-based RSUs for exceptional performance. Based on the Company's financial results as of March 31, 2018, the financial metrics were not achieved and therefore no performance-based shares were earned with the exception of Mr. Gacek whose shares were accelerated per the conditions of his Change of Control Agreement.

Timing & Pricing of Equity Awards

Equity grants are made on an annual basis upon the review and approval of the Committee. Equity grants may occur outside the annual process for the following reasons: specific one-time events, new hire awards, recognizing and retaining key talent or for discretionary purposes. The Committee has instituted a policy that all equity awards will be approved either at a regularly scheduled Committee meeting, with the annual schedule of such meetings established prior to the beginning of the fiscal year, or by unanimous written consent on the first day of each month, or as close as reasonably possible to the first day of the month. The actual grant date for equity awards under this policy is the later to occur of the first day of the month or the day the last member of the Committee executes a written consent approving in writing the equity award grant.

As required by the Company's long-term incentive plan, the exercise price for any stock option grants is set at not less than the closing market price of our Common Stock on the date of grant or, if the date of grant falls on a weekend or holiday, the closing price on the immediately preceding business day.

Perquisites and Other Benefits

Perquisites - We offer Company-paid financial counseling and tax preparation services to our executive officers andnon-executive vice presidents. Our executive officers are entitled to receive up to $6,000 in their initial year of participation and an additional $3,500 per year thereafter to reimburse them for the cost of such services. The Committee considers this expense to be minimal and appropriate given the level of the executive officers' responsibilities. Other than this perquisite and the non-qualified deferred compensation plan discussed below, we do not provide any other perquisites or personal benefits to our executive officers that are not available to all other full-time employees.

Employee Stock Purchase Plan - We offer all employees, including our executive officers, the ability to acquire shares of the Company's Common Stock through a tax-qualified Employee Stock Purchase Plan ("ESPP"). This plan allows employees to purchase shares of the Company's Common Stock at a 15% discount relative to the market price. The Committee believes that the ESPP is a cost-efficient method of encouraging employee stock ownership. For fiscal 2018, employee contributions for the ESPP were suspended shortly after the February 5, 2018, purchase following the pending Securities and Exchange Commission's investigation limiting our ability to administer stock including collecting funds for the ESPP program.

Health and Welfare Benefits - We offer health, welfare, and other benefit programs to substantially all full-time employees. We share the cost of health and welfare benefits with our employees, the cost of which is dependent on the level of coverage an employee elects. The health and welfare benefits offered to our executive officers are identical to those offered to other full-time employees.

Qualified Retirement Benefits - All U.S.-based employees, including our executive officers, are eligible to participate in the Company's tax-qualified 401(k) Savings Plan. Participants may defer cash compensation up to statutory IRS limits and may receive a discretionary matching Company contribution. The matching contribution for our executive officers is reported in a footnote to the Summary Compensation Table. Participants direct their own investments in the Company's tax-qualified 401(k) Savings Plan, which does not include an opportunity to invest in shares of the Company's Common Stock.

Non-Qualified Deferred Compensation Plan - We maintain a non-qualified deferred compensation plan which allows select employees, including our executive officers, to contribute a portion of their base salary and annual bonus payouts to an irrevocable trust for the purpose of deferring federal and state income taxes. Participants direct the deemed investment of their deferred accounts among a pre-selected group of investment funds, which does not include shares of the Company's Common Stock. The deemed investment accounts mirror the investment options available under the Company's 401(k) Savings Plan. Participants' deferred accounts are credited with interest based on their deemed investment selections. Participants may change their investment elections on a daily basis, the same as they may under the Company's 401(k) Savings Plan. We do not make employer or matching contributions to the deferred accounts under the non-qualified deferred compensation plan. We offer the non-qualified deferred compensation plan as a competitive practice to enable us to attract and retain top talent. During fiscal 2018, none of our executive officers participated in the non-qualified deferred compensation plan.

Change of Control Severance Policy, Employment Agreements and Severance Agreements

Change of Control Agreements

Our Change of Control ("CoC") Agreements are designed to secure the best interests of the Company and our Stockholders by maintaining the continued dedication and objectivity of key Employees during the possibility, threat or occurrence of a Change of Control. The goal is to provide the Employee with the compensation arrangement and stock benefits upon an Involuntary Termination as defined within the CoC so that the Employee will have financial security and remain with the Company prior to a potential Change of Control.

Our CoC Agreements were last modified and became effective at the beginning of fiscal 2019. Details of these modification and current arrangements are described further in "Potential Payment Upon Termination or Change of Control."

Employment Offer Letters

We have entered employment offer letters for all of our Chief Executive Officers and Chief Financial Officers including any individual serving as Interim for each of these roles. Our offer letters provides for certain severance benefits in the event of a qualifying termination of employment that is not associated with a change of control of the Company as described in "Potential Payments Upon Termination or Change of Control". Each of our named executive officer's employment is at will and the named executive officer may be terminated at any time and for any reason, with or without notice.

We entered into an offer letter with Mr. Britts at the time of his initial employment with Quantum. This offer letter provided for certain severance benefits in the event of a qualifying termination of employment that is not associated with a change of control of the Company, subject to Mr. Britts' execution of a separation agreement and general release.

Tax and Accounting Considerations

Section 162(m) of the Internal Revenue Code

In determining executive compensation, the Compensation Committee considers, among other factors, the possible tax consequences to the Company and to its executives. To maintain maximum flexibility in designing compensation programs, the Compensation Committee, while considering company tax deductibility as one of its factors in determining compensation, does not limit compensation to those levels or types of compensation that are intended to be deductible. For example, the Executive Officer Incentive Plan for fiscal 2018 was intended to comply with the exemption for performance-based compensation under Section 162(m) of the Internal Revenue Code ("Section 162(m)"). The Tax Cuts and Jobs Act repealed the exemption for performance-based compensation under Section 162(m) for tax years commencing after December 31, 2017. However, certain compensation is specifically exempt from the deduction limit under a transition rule to the extent that it is "performance-based" as defined in Section 162(m) and subject to a written binding contract under applicable law in effect as of November 2, 2017 that is not later modified in any material respect.

Section 409A of the Internal Revenue Codeof 1986

Section 409A of the Internal Revenue Code of 1986 ("Section 409A") imposes additional significant taxes in the event that an executive officer, director or other service provider receives deferred compensation that does not meet the requirements of Section 409A. Section 409A applies to traditional nonqualified deferred compensation plans, certain severance arrangements, and certain equity awards. As described above, we maintain a non-qualified deferred compensation plan, have entered into severance and change of control agreements with our executive officers and grant equity awards. However, to assist in the prevention of adverse tax consequences under Section 409A, we structure our equity awards in a manner intended to comply with or be exempt from the applicable requirements of Section 409A. With respect to our non-qualified deferred compensation plan and the severance and change of control agreements, we have determined that such agreements are in compliance with or are exempt from Section 409A.

Accounting Considerations

We follow the applicable accounting rules for our stock-based compensation. The applicable accounting rules require companies to calculate the grant date fair value of stock-based awards. This calculation is performed for accounting purposes and reported in the compensation tables, even though the equity award recipients may never realize any value from their awards. The applicable accounting rules also require companies to recognize the compensation cost of their stock-based awards in their income statements over the period that a recipient is required to render service in exchange for the equity award. Compensation cost for stock-based awards with performance conditions is recognized only when it is probable that the performance conditions will be achieved.

RISKS RELATED TO COMPENSATION POLICIES AND PRACTICES

Annually, we conduct a risk assessment of our compensation policies and practices for our employees, including those relating to our executive compensation program, and discuss the findings of this risk assessment with the Committee. The Committee directed Compensia to conduct this assessment for us. Our risk assessment includes a detailed analysis of our compensation programs in which employees at all levels of the organization may participate, including our executive officers. We believe that our compensation programs have been appropriately designed to attract and retain talent and properly reward our employees. Generally, our programs are designed to pay for performance and, thus, provide incentive-based compensation that encourages appropriate risk-taking. These programs contain various mitigating features, however, to ensure our employees, including our executive officers, are not encouraged to take excessive or unnecessary risks in managing our business. These features include:

Independent oversight of the compensation programs by the Committee;

Discretion provided to the Committee to set targets, monitor performance and determine final payouts;

Additional oversight of the compensation programs by a broad-based group of functions within the Company, including Human Resources, Finance and Legal and at multiple levels within the Company;

A balanced mix of compensation programs that focus our employees on achieving both short and long-term objectives, that include both performance-based and non-performance-based pay, and that provide a balanced mix of cash and equity compensation;

An annual review by the Committee of target compensation levels for our executive officers, including a review of the alignment of executive compensation with performance;

Caps on the maximum funding under the Company's annual bonus program, including the Executive Officer Incentive Plan and the Quantum Incentive Plan;

An insider trading policy which expressly prohibits buying Company shares on margin or using or pledging owned shares as collateral for loans and engaging in transactions in publicly-traded options, such as puts and calls, and other derivative securities with respect to the Company's securities. This extends to any hedging or similar transaction designed to decrease the risks associated with holding Company securities;

Incentives focused on the use of reportable and broad-based internal financial metrics(non-U.S. GAAP operating income and revenue);

Pay positioning targeted at the market median based on a reasonable competitive peer group and published surveys;

Multi-year service-based vesting requirements with respect to equity awards; and

Risk mitigators, including stock ownership guidelines for the CEO and Board of Directors and stock pledging policies are in place.

Based on the assessment conducted for fiscal 2018, we believe that our compensation programs are not likely to create excessive risks that might adversely affect the Company.

EXECUTIVE COMPENSATION

The following table lists the compensation for our named executive officers as of the end of fiscal 2019 for fiscal years 2019, 2018, and 2017.

Summary Compensation Table – Fiscal 2019

Name and Principal Position	Year	Salary(1)	Bonus	Stock Awards(2)	Option Awards(2)	Non-Equity Incentive Plan Compensation(3)	Change in Pension Value and Nonqualified Deferred Compensation Earnings	All Other Compensation(4)	Total
James J. Lerner President & Chief Executive Officer(5)	2019	$337,981	$ 0	$1,913,500	$ 0	$ 0	$ 0	$ 1,910	$2,253,391
J. Michael Dodson SVP Chief Financial Officer & Former Interim Chief Executive Officer(5)	2019	$318,462	$ 0	$ 730,148	$ 0	$ 0	$ 0	$ 44,363	$1,092,973
Patrick J. Dennis	2019	$ 88,606	$ 0	$ 0	$ 0	$ 0	$ 0	$ 5,720	$ 94,326
Former President & Chief Executive Officer(6)	2018	$ 70,793	$ 0	$2,885,000	$1,071,025	$ 0	$ 0	$ 0	$4,026,818
Fuad Ahmad	2019	$ 74,279	$ 0	$ 0	$ 0	$ 0	$ 0	$ 70,146	$ 144,425
Former Senior Vice President &	2018	$364,543	$ 0	$ 541,950	$ 0	$ 0	$ 0	$ 1,442	$ 907,935
Chief Financial Officer(6)	2017	$315,154	$ 0	$ 761,000	$ 0	$ 0	$ 0	$ 2,354	$1,078,508
Donald E. Martella Jr.	2019	$352,952	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 352,952
Senior Vice President Engineering	2018	$347,832	$ 0	$ 351,450	$ 0	$ 0	$ 0	$ 4,644	$ 703,926
Lewis W. Moorehead Chief Accounting Officer(5)	2019	$121,154	$ 0	$ 193,833	$ 0	$ 0	$ 0	$ 0	$ 314,987
Shawn D. Hall	2019	$318,780	$ 0	$ 0	$ 0	$ 0	$ 0	$ 2,352	$ 321,132
Senior Vice President & General	2018	$329,445	$ 0	$ 351,450	$ 0	$ 0	$ 0	$ 2,686	$ 683,581
Counsel	2017	$332,608	$ 0	$ 280,260	$ 0	$ 0	$ 0	$ 9,039	$ 621,907
William C. Britts	2019	$219,868	$ 0	$ 91,200	$ 0	$ 93,982	$ 0	$ 0	$ 405,050
Former Senior Vice President,	2018	$362,533	$ 0	$ 429,550	$ 0	$ 73,445	$ 0	$ 0	$ 865,528
WW Sales and Mktg(6)	2017	$370,004	$ 0	$ 167,760	$ 0	$ 105,643	$ 0	$ 0	$ 643,407

(1) The amounts reported in the Salary column represent the dollar value of the cash base salaries earned in fiscal 2019.

(2) During fiscal 2019, equity awards were approved to be made effective as of the first business day on which the Company becomes current with respect to its filings under the Exchange Act. The amounts reported represent the aggregate grant date fair value, calculated in accordance with ASC Topic 718 for stock-based payment transactions and exclude the impact of estimated forfeitures related to service-based vesting conditions. The assumptions used in the calculation of the value are disclosed under Note 7, *Stock Incentive Plans and Stock-Based Compensation* in the Company's Annual Report on Form 10-K filed with the SEC on August 6, 2019.

(3) For Mr. Britts, the total amount reported includes a total cash commission payment of $93,982 under the Fiscal 2018 Sales Compensation Plan. Mr. Britts separated from the Company on October 22, 2018, and this amount represents the commissions he earned against his prior fiscal year plan.

(4) The amounts listed in All Other Compensation column of the Summary Compensation Table for fiscal 2019 consist of the following:

Name	401(k) Matching Contributions[a]	Severance Payments[b]	Financial Planning[c]	Vacation Paid upon Termination[d]	Other Comp[e]
James J. Lerner			$ 1,800		
J. Michael Dodson					$ 44,364
Patrick J. Dennis				$ 5,721	
Fuad Ahmad		$ 48,078		$ 22,068	
Donald E. Martella Jr.					
Lewis W. Moorehead					
Shawn D. Hall			$ 2,352		
William C. Britts					

(a) The Company did not make any 401(k) matching contributions in fiscal 2019.
(b) Mr. Ahmad separated from the Company on May 30, 2018, and received a cash severance payment.
(c) Payments include reimbursement for financial counseling and tax preparation services up to a maximum of $3,500 per year.
(d) Payments include accrued vacation time paid out upon termination.
(e) Other compensation includes reimbursements housing/travel/relo expenses for Mr. Dodson.
(5) Messrs. Lerner, Dodson, and Moorehead were not Named Executive Officers prior to fiscal 2019. Mr. Moorehead, joined the Company on October 22, 2018, as Chief Accounting Officer and appointed to a Section 16 Officer effective January 29, 2019.
(6) Messrs. Dennis, Ahmad, and Britts separated from the Company on May 25, 2018, May 30, 2018, and October 22, 2018, respectively and forfeited any unearned and unvested equity.

Grants of Plan-Based Awards for Fiscal Year 2019

The following table presents information on plan-based awards granted to our named executive officers during fiscal 2019.

		Estimated Future Payouts Under Non-Equity Incentive Plan Awards			Estimated Future Payouts Under Equity Incentive Plan Awards(1)			All Other Stock Awards: Number of Shares of Stock or Units (#)(2)	All Other Option Awards: Number of Securities Underlying Options (#)	Exercise or Base Price of Option Awards ($/Sh)	Grant Date Fair Value of Stock and Option Awards(3)
Name	Grant Date	Threshold ($)	Target ($)	Maximum ($)	Threshold (#)	Target (#)	Maximum (#)				
James J. Lerner	7/1/2018	—	—	—	—	—	—	400,000	—		$880,000
	7/1/2018	—	—	—	—	—	—	150,000	—	—	$330,000
	7/1/2018	—	—	—	—	450,000	—	—	—	—	$703,500
	—		$ 0								
J. Michael Dodson	6/1/2018	—	—	—	—	—	—	14,577	—	—	$ 44,314
	6/1/2018	—	—	—	—	—	—	125,000	—	—	$380,000
	6/1/2018	—	—	—		125,000		—	—	—	$305,834
	—		$ 0								
Patrick J. Dennis	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—
	—										
Fuad Ahmad	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—
	—										
Donald E. Martella Jr.	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—
	—		$ 0								
Lewis W. Moorehead	11/1/2018	—	—	—	—	—	—	50,000	—	—	$114,000
	11/1/2018	—	—	—	—	50,000	—	—	—	—	$ 79,833
	—		$ 0	—							
William C. Britts	6/1/2018	—	—	—	—	—	—	30,000	—	—	$ 91,200
	—	—	—	—					—	—	
	—	—	$ 0	—	—	—	—	—	—	—	
	—		200,000(4)						—	—	

(1) The Fiscal 2019 Performance Share Units (PSUs) are earned based on the achievement of specified levels of the average closing prices of a Share during any sixty (60) day trading period on a National Exchange occurring between July 1, 2018 and June 30, 2022 for Mr. Lerner and June 1, 2018 and May 31, 2022 for Mr. Dodson and Mr. Moorehead.

(2) Restricted Stock Units (RSUs) will vest (based on continued employment) in equal installments annually over three years on each anniversary of the award's grant date, which for accounting purposes is determined to be the date the award was approved, although each award will be effective as of the first business day on which the Company becomes current with respect to its filings under the Exchange Act.

(3) The amounts reported were computed in accordance with ASC 718, excluding the effect of estimated forfeitures. See Note 7,*Stock Incentive Plans and Stock-Based Compensation* in the Company's Annual Report on Form 10-K filed on August 6, 2019, regarding assumptions underlying the valuation of equity awards.

(4) Amount reflects sales commissions target payments pursuant to the Fiscal Year 2018 Sales Compensation Plan based on the sale of the Company's branded products and branded services. The applicable quota for fiscal 2018 was $484.1 million. Mr. Britts earned $93,982 in commissions following his separation from the Company on October 22, 2018.

Outstanding Equity Awards at Fiscal Year End 2019

The following table provides information with respect to outstanding stock options and restricted stock unit awards held by our named executive officers as of March 31, 2019.

	Option Awards					Stock Awards			
Name	Number of Securities Underlying Unexercised Options Exercisable (#)	Number of Securities Underlying Unexercised Options Unexercisable (#)	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options (#)	Option Exercise Price ($)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested ($)	Equity Incentive Plan Awards: Number of Unearned Shares, Units, or Other Rights That Have Not Vested (#)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units, or Other Rights That Have Not Vested ($)
James J. Lerner						150,000(9)	$357,000		
						400,000(10)	$952,000		
								450,000(11)	$ 703,500
J. Michael Dodson						125,000(6)	$297,500		
						14,577(7)	$ 34,693		
								125,000(8)	$ 305,834
Donald E. Martella Jr.						3,125(1)	$ 7,438		
						7,500(2)	$ 17,850		
						13,333(5)	$ 31,733		
						5,875(3)	$ 13,983		
Lewis W. Moorehead						50,000(12)	$119,000		
								50,000(13)	$ 119,000
Shawn D. Hall						3,125(1)	$ 7,438		
						7,500(2)	$ 17,850		
						5,208(4)	$ 12,395		
						13,333(5)	$ 31,733		
						5,875(3)	$ 13,983		

(1) Granted 7/1/15; vest annually over four years beginning 7/1/15, subject to continued employment.
(2) Granted 7/1/16; vest annually over three years beginning 7/1/16, subject to continued employment.

(3) Granted on 7/1/16; Shares earned on 3/31/17 as performance condition threshold was satisfied. Vest annually over three years beginning 7/1/16. Quantum's reverse split on 4/18/17 removed the fractional unvested share to final tranche, subject to continued employment.
(4) Granted 3/2/17; vest annually over three years beginning 3/2/17, subject to continued employment.
(5) Granted 7/1/17; vest annually over three years beginning 7/1/17, subject to continued employment.
(6) Approved on 6/1/18 and to be made effective when the Company becomes current with its Exchange Act filings; vest annually over three years beginning 6/1/18. Adjusted 6/1/19 vest to the date when the Company becomes current with its Exchange Act filings.
(7) Approved on 6/1/18 and to be made effective when the Company becomes current with its Exchange Act filings; cliff vest on 6/1/19. Adjusted to the date when the Company becomes current with its Exchange Act filings.
(8) Approved on 6/1/18 and to be made effective when the Company becomes current with its Exchange Act filings; vest annually over three years beginning 6/1/18 subject to satisfying performance-based criteria (based on continued employment).
(9) Approved on 7/1/18 and to be made effective when the Company becomes current with its Exchange Act filings; cliff vest on 7/1/19. Adjusted to the date when the Company becomes current with its Exchange Act filings.
(10) Approved on 7/1/18 and to be made effective when the Company becomes current with its Exchange Act filings; vest annually over three years beginning 7/1/18. Adjusted to vest to the date when the Company becomes current with its Exchange Act filings.
(11) Approved on 7/1/18 and to be made effective when the Company becomes current with its Exchange Act filings; vest annually over three years beginning 7/1/18 subject to satisfying performance-based criteria (based on continued employment).
(12) Approved on 11/1/18 and to be made effective when the Company becomes current with its Exchange Act filings; vest annual over three years beginning 11/1/18.
(13) Approved on 11/1/18 and to be made effective when the Company becomes current with its Exchange Act filings; vest annually over three years beginning 11/1/18 subject to satisfying performance-based criteria (based on continued employment).

Option Exercises and Stock Vested in Fiscal 2019

The following table provides information on stock option exercises and restricted stock and restricted stock unit vesting for our named executive officers during fiscal 2019.

	Option Awards		Stock Awards	
Name	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise ($)	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting ($)(1)
James J. Lerner	—	—	—	—
J. Michael Dodson	—	—	—	—
Patrick J. Dennis	—	—	—	—
Fuad Ahmad	—	—	25,000	$ 91,000
Donald E. Martella Jr.	—	—	23,168	$ 50,970
Lewis W. Moorehead	—	—	—	—
Shawn D. Hall			28,376	$ 63,729
William C. Britts			26,710	$ 66,508

(1) The amount reported is calculated by multiplying the number of shares that vested by the market price of the underlying shares of the Company's Common Stock on the vesting date.

EXECUTIVE COMPENSATION

The following table lists the compensation for our named executive officers as of the end of fiscal 2018 for fiscal years 2018, 2017, and 2016.

Summary Compensation Table – Fiscal 2018

Name and Principal Position	Year	Salary(1)	Bonus	Stock Awards(2)	Option Awards(2)	Non-Equity Incentive Plan Compensation(3)	Change in Pension Value and Nonqualified Deferred Compensation Earnings(4)	All Other Compensation(5)	Total
Patrick J. Dennis President & Chief Executive Officer	2018	$ 70,793	$ 0	$2,885,000	$1,071,025	$ 0	$ 0	$ 0	$4,026,818
Adalio T. Sanchez Former Interim President & Chief Executive Officer	2018	$117,692	$ 0	$ 533,039	$ 0	$ 57,903	$ 0	$ 8,029	$ 716,663
Jon W. Gacek	2018	$380,769	$ 0	$ 902,055(7)	$ 0	$ 0	$ 0	$ 1,262,021	$2,544,845
Former President &	2017	$600,000	$ 0	$ 419,400	$ 0	$ 0	$ 0	$ 0	$1,019,400
Chief Executive Officer(6)(10)	2016	$600,000	$ 0	$1,597,050	$ 0	$ 0	$ 0	$ 2,769	$2,199,819
Fuad Ahmad	2018	$364,543	$ 0	$ 541,950	$ 0	$ 0	$ 0	$ 1,442	$ 907,935
Senior Vice President & Chief Financial Officer(7)	2017	$315,154	$ 0	$ 761,000	$ 0	$ 0	$ 0	$ 2,354	$1,078,508
William C. Britts	2018	$362,533	$ 0	$ 429,550	$ 0	$ 73,445	$ 0	$ 0	$ 865,528
Senior Vice President,	2017	$370,004	$ 0	$ 167,760	$ 0	$ 105,643	$ 0	$ 0	$ 643,407
WW Sales and Mktg(10)	2016	$370,004	$ 0	$ 450,667	$ 0	$ 30,814	$ 0	$ 4,474	$ 855,959
Robert S. Clark	2018	$391,923	$ 0	$ 351,450	$ 0	$ 0	$ 0	$ 6,531	$ 749,904
Senior Vice President,	2017	$400,000	$ 0	$ 167,760	$ 0	$ 0	$ 0	$ 3,105	$ 570,865
Product Operations(8)(10)	2016	$391,923	$ 0	$ 450,667	$ 0	$ 0	$ 0	$ 6,262	$ 848,852
Donald E. Martella Jr.(9) Senior Vice President, Engineering	2018	$347,832	$ 0	$ 351,450	$ 0	$ 0	$ 0	$ 4,644	$ 703,926

(1) The amounts reported in the Salary column represent the dollar value of the cash base salaries earned in fiscal 2018. For Mr. Sanchez, the amount reflects his base salary paid on a monthly (and pro-rated for partial months of service) as earned during his time as Former Interim President & Chief Executive Officer. As part of a global cost cutting effort and effective January 29, 2018, through April 2, 2018, the base salaries of all executives were reduced by 15% including Mr. Dennis.

(2) The amounts reported represent the aggregate grant date fair value, calculated in accordance with ASC Topic 718 for share-based payment transactions and exclude the impact of estimated forfeitures related to service-based vesting conditions. The assumptions used in the calculation of the value are disclosed under Note 7, *Stock Incentive Plans and Share-Based Compensation* in the Company's Annual Report on Form 10-K filed with the SEC on August 6, 2019. For fiscal 2018, the performance-based restricted stock units were not earned as the company performance was not satisfied.

(3) The amounts reported in this column represent performance-based cash incentive payments paid pursuant to Quantum's Executive Officer Incentive Plan and may include amounts earned in a given fiscal year but not paid until the subsequent year. As Former Interim President & Chief Executive Officer, Mr. Sanchez was tasked with a Company cost savings initiative of which he satisfied following the end of fiscal 2018, and earned $57,903. For Mr. Britts, the total amount reported includes a total cash commission payment of $73,445 under the Fiscal 2018 Sales Compensation Plan.

(4) There is no Change in Pension Value and no Non-Qualified Deferred Compensation Earnings reportable as the Company does not maintain a defined benefit or actuarial pension plan nor was there any compensation that was deferred.

(5) The amounts listed in All Other Compensation column of the Summary Compensation Table for fiscal 2018 consist of the following:

Name	401(k) Matching Contributions(a)	Severance Payments(b)	Financial Planning(c)	Vacation Paid upon Termination(d)	Other Comp(e)
Patrick J. Dennis					
Adalio T. Sanchez				$ 8,029	
Jon W. Gacek	$ 692	$1,200,000	$ 3,500	$ 57,692	$ 136
Fuad Ahmad	$ 1,442				
William C. Britts					
Robert S. Clark	$ 3,231		$ 3,300		
Donald E. Martella Jr.	$ 2,867		$ 1,180		$ 597

(a) 401(k) matching contributions were made for only the first quarter in fiscal 2018
(b) Upon separation from the Company, Mr. Gacek's received a cash severance payment per the conditions of his Change of Control Agreement. Actual payment of funds were deferred six months and one day from the date of separation in accordance with Section 409A of the Internal Revenue Code of 1986.
(c) Payments include reimbursement for financial counseling and tax preparation services up to a maximum of $3,500 per year.
(d) Payments include accrued vacation time paid out upon termination.
(e) Other compensation includes reimbursements for patents for Mr. Gacek and fitness program reimbursements for Mr. Martella.
(6) Mr. Gacek separated from the Company on November 7, 2017, under the conditions of his Change Of Control agreement. The shares reflected in this column are the awards granted in association with the annual fiscal 2018 equity awards, however per the conditions of his agreement, any unvested and outstanding (i.e. unexpired) shares accelerate in vesting including his performance shares including the fiscal 2018 grant. Mr. Gacek had a total of 210,191 shares outstanding before taxes subject to release six months and one day after his separation date in accordance with Section 409A of the Internal Revenue Code of 1986.
(7) Per Mr. Ahmad's employment agreement with the Company, Mr. Ahmad's annual salary was structured as follows: For the first year of employment, his salary was a percentage of the "Total Fee Basis" of $400,000 subject to a 15% placement fee paid directly to FLG Partners, LLC, a leading CFO consulting and board advisory firm where Mr. Ahmad has been a partner since 2013. This placement fee was reduced to 10% of the "Total Fee Basis" for his second year of employment and further reduced to 5% of the "Total Fee Basis" where it would remain for his third year of employment and any continuing years of service thereafter. For fiscal 2018, Mr. Ahmad's received an annual salary increase of 4.17% increasing his salary to $375,000 and the "Total Fee Basis" to $416,667 subject to the reduced 10% placement fee paid to FLG as this was Mr. Ahmad's second year of employment with the Company. Mr. Ahmad separated from the Company on May 25, 2018.
(8) Mr. Clark separated from the Company on May 11, 2018.
(9) Mr. Martella was not a named executive officer in fiscal Year 2017.
(10) Messrs. Gacek, Britts, and Clark had equity compensation reported for fiscal 2016 that did not include the performance-based equity grants. This table has been modified to include the performance-based equity grants calculated using the closing stock price on the date of the grant.

Grants of Plan-Based Awards for Fiscal Year 2018

The following table presents information on plan-based awards granted to our named executive officers during fiscal 2018.

		Estimated Future Payouts Under Non-Equity Incentive Plan Awards(1)			Estimated Future Payouts Under Equity Incentive Plan Awards(2)			All Other Stock Awards: Number of Shares of Stock or Units (#)(3)	All Other Option Awards: Number of Securities Underlying Options (#)(4)	Exercise or Base Price of Option Awards ($/Sh)	Grant Date Fair Value of Stock and Option Awards(5)
Name	Grant Date	Threshold ($)	Target ($)	Maximum ($)	Threshold (#)	Target (#)	Maximum (#)				
Patrick J.	2/1/2018	—	—	—	—	—	—	0	250,000	$4.2841	$1,071,025
Dennis	2/1/2018	—	—	—	—	—	—	125,000	—	—	$ 775,000
	2/1/2018	—	—	—	0	500,000	500,000	—	—	—	$2,110,000
	—		$ 0								
Adalio T.	2/1/2018	—	—	—	—	—	—	20,645	—	—	$ 127,999
Sanchez	1/1/2018	—	—	—	—	—	—	40,000	—	—	$ 225,200
	12/1/2017	—	—	—	—	—	—	32,000	—	—	$ 179,840
	—		$115,806	$ 115,806							
Jon W.	7/1/2017	—	—	—	—	—	—	51,975	—	—	$ 405,925
Gacek	7/1/2017	—	—	—	31,763	63,525	95,288	—	—	—	$ 496,130
	—	—	$600,000	$1,200,000	—	—	—	—	—	—	$ —
Fuad	12/1/2017	—	—	—	—	—	—	20,000	—	—	$ 112,400
Ahmad	7/1/2017	—	—	—	0	0	0	25,000	—	—	$ 195,250
	7/1/2017	—	—	—	15,000	30,000	45,000	0	—	—	$ 234,300
	—	—	$208,340	$ 416,680	—	—	—	—	—	—	$ —
William C.	7/1/2017	—	—	—	—	—	—	25,000	0	—	$ 195,250
Britts	7/1/2017	—	—	—	15,000	30,000	45,000	0	—	—	$ 234,300
	—	—	$185,002	$ 370,004	0	0	0	—	—	—	$ —
	—	—	$200,000(6)	$ —	—	—	—	—	—	—	$ —
Robert S.	7/1/2017	—	—	—	0	0	0	20,000	—	—	$ 156,200
Clark	7/1/2017	—	—	—	12,500	25,000	37,500	0	—	—	$ 195,250
	—	—	$200,000	$ 400,000	—	—	—	—	—	—	$ —
Donald E.	7/1/2017	—	—	—	0	0	0	20,000	—	—	$ 156,200
Martella Jr.	7/1/2017	—	—	—	12,500	25,000	37,500	0	—	—	$ 195,250
	—	—	$177,500	$ 355,000	—	—	—	—	—	—	$ —

(1) The amounts reported reflect the target payments under the Company's Executive Officer Incentive Plan. For fiscal 2018, these awards are subject to an annual payout cap of 200% of the executive officer's annual bonus payment target for only our CEO, the Officers, and his direct reports. The Company's Executive Officer Incentive Plan provides that no executive officer's actual award under the plan may, for any period of three consecutive fiscal years, exceed $15 million. Because Mr. Dennis was hired in the fourth quarter of our fiscal 2018, he was not eligible to participate in the Company's Executive Officer Incentive Plan but is eligible for the performance year ending March 31, 2019. Mr. Sanchez had a pro-rated bonus target of $115,806 based on the number of months he served as Former Interim Chief Executive Officer. Mr. Sanchez's satisfied 50% of his performance goals including a cost savings initiative and earned a total bonus in the amount of $57,903.

(2) Performance Share Units (PSUs) are earned only if the Company exceeds certain revenue targets as of March 31, 2018. For fiscal 2018, the Company had an operating gate that the Fiscal 2018 EPS must be greater than Fiscal 2017 EPS before any PSU would be earned. From there, significant performance on a specific product revenue must be achieved for the PSUs to be granted at threshold, target or maximum levels resulting in 50%, 100% or 150% awards respectively. Threshold performance was not satisfied and no PSUs were earned for fiscal 2018, with the exception to Mr. Gacek whose fiscal 2018 PSU grant was accelerated under the conditions of his change of control agreement. For Mr. Dennis, the performance-based RSUs vest based on the achievement of specified levels of the average of the closing prices for the Company's Common Stock during the highest of the four quarterly periods ending June 30, 2021 (the "Average Price"), and subject to Mr. Dennis' continued service with the Company.

(3) Restricted Stock Units (RSUs) will vest (based on continued employment) in equal installments annually over three years on each anniversary of the award's grant date. Mr. Sanchez was granted 40,000 shares for every month he served as Former Interim Chief Executive Officer with share pro-rated for any partial months of service. Mr. Sanchez received grants of Restricted Stock Units (RSUs) on 12/1/17, 1/1/18 and 2/1/18 as compensation for his role as Interim President & Chief Executive Officer and cliff vest (based on his offer letter) on 11/30/18. Mr. Ahmad was granted 20,000 shares for his assistance on the FY18 financial restructuring efforts on 12/1/17 that cliff vest on 12/1/18.

(4) Stock Options will vest (based on continued employment) over four years as follows:one-fourth (1/4) of the Shares underlying the Option will be scheduled to vest on each of the one (1), two (2), three (3) and four (4) year anniversaries of the Option's date of grant. The options remain exercisable for seven years from the date of grant, unless terminated earlier in accordance with their respective terms. In the event of termination of employment, the exercise period is one year if termination of employment is due to retirement, death, or disability and ninety days for any other termination of service.

(5) The amounts reported were computed in accordance with ASC 718, excluding the effect of estimated forfeitures. See Note 7,*Stock Incentive Plans and Stock-Based Compensation* in the Company's Annual Report on Form 10-K filed on August 6, 2019, regarding assumptions underlying the valuation of equity awards.

(6) Amount reflects sales commissions target payments pursuant to the Fiscal Year 2018 Sales Compensation Plan based on the sale of the Company's branded products and branded services. The applicable quota for fiscal 2018 was $484.1 million.

Outstanding Equity Awards at Fiscal Year End 2018

The following table provides information with respect to outstanding stock options and restricted stock unit awards held by our named executive officers as of March 31, 2018.

	Option Awards					Stock Awards			
Name	Number of Securities Underlying Unexercised Options Exercisable (#)	Number of Securities Underlying Unexercised Options Unexercisable (#)	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options (#)	Option Exercise Price ($)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested ($)	Equity Incentive Plan Awards: Number of Unearned Shares, Units, or Other Rights That Have Not Vested (#)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units, or Other Rights That Have Not Vested ($)
Patrick J. Dennis Adalio T. Sanchez	0	250,000(11)		$ 6.20	2/1/2025	125,000(12)	$455,000	500,000(13)	$2,110,000
						32,000(8)	$116,480		
						40,000(9)	$145,600		
						20,645(10)	$ 75,148		
Fuad Ahmad						75,000(5)	$273,000		
						20,833(4)	$ 75,832		
						25,000(6)	$ 91,000		
						20,000(7)	$ 72,800		
						21,366(3)	$ 77,772		
William C. Britts						10,000(1)	$ 36,400		
						15,000(2)	$ 54,600		
						25,000(6)	$ 91,000		
						11,752(3)	$ 42,777		
Robert S. Clark						10,000(1)	$ 36,400		
						15,000(2)	$ 54,600		
						20,000(6)	$ 72,800		
						11,752(3)	$ 42,777		
Donald E. Martella Jr.						6,250(1)	$ 22,750		
						15,000(2)	$ 54,600		
						20,000(6)	$ 72,800		
						11,752(3)	$ 42,777		

(1) Granted 7/1/15; vest annually over four years beginning 7/1/15, subject to continued employment.
(2) Granted 7/1/16; vest annually over three years beginning 7/1/16, subject to continued employment.
(3) Granted on 7/1/16; Shares earned on 3/31/17 as performance condition threshold was satisfied. Vest annually over three years beginning 7/1/16, subject to continued employment.
(4) Granted 3/2/17; vest annually over three years beginning 3/1/17, subject to continued employment.
(5) Granted 5/1/16; vest annually over four years beginning 5/1/16, subject to continued employment.
(6) Granted 7/1/17; vest annually over three years beginning 7/1/17, subject to continued employment.
(7) Granted 12/1/2017; cliff vest over one year from the grant date.
(8) Granted 12/1/2017; cliff vest over on November 30, 2018.
(9) Granted 1/1/2018; cliff vest over on November 30, 2018.
(10) Granted 2/1/2018; cliff vest over on November 30, 2018.
(11) Granted 2/1/18; vest annually over four years beginning 2/1/18, subject to continued employment.
(12) Granted 2/1/18; vest annually over three years beginning 2/1/18, subject to continued employment.
(13) Granted 2/1/18; earned based on the achievement of highest average stock price of the last four quarterly periods ending June 30, 2021, subject to continued employment.

Note: The table above uses a price of $3.64 per share, the market price of the Company's Common Stock as of March 31, 2018 to calculate the market value of shares or units that have not vested.

Option Exercises and Stock Vested in Fiscal 2018

The following table provides information on stock option exercises and restricted stock and restricted stock unit vesting for our named executive officers during fiscal 2018.

	Option Awards		Stock Awards	
Name	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise ($)	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting ($)(1)
Patrick J. Dennis	—	—	0	$ 0
Adalio T. Sanchez	—	—	0	$ 0
Jon W. Gacek(2)	—	—	298,351	$ 1,586,045
Fuad Ahmad	—	—	46,101	$ 297,131
William C. Britts	—	—	30,918	$ 241,470
Robert S. Clark	—	—	30,918	$ 241,470
Donald E. Martella Jr.			24,749	$ 193,290

(1) The amount reported is calculated by multiplying the number of shares that vested by the market price of the underlying shares of the Company's Common Stock on the vesting date.

(2) Mr. Gacek's had a total of 88,160 units that vested on July 1, 2017, in addition to 210,191 units that accelerated in connection with his termination. The 210,191 units were subject to Section 409A of the Internal Revenue Code of 1986 and the settlement of 205,251 units was deferred 6 months and 1 day following the day of termination.

Non-Qualified Deferred Compensation

The Company's Non-Qualified Deferred Compensation Plan is discussed under the section entitled "Compensation Discussion and Analysis—Perquisites and Other Benefits—Non-Qualified Deferred Compensation Plan."

Name	Executive Contributions in Last Fiscal Year	Company Contributions in Last Fiscal Year	Aggregate Interest or Other Earnings Accrued in Last Fiscal Year	Aggregate Withdrawals/ Distributions During Last Fiscal Year	Aggregate Balance of Executive's Account at Last Fiscal Year End
Jon W. Gacek(1)	$ 876,422		$ 129,308		$ 747,114

(1) The amounts for Mr. Gacek represent fully vested deferred stock units. Mr. Gacek terminated with the Company on November 7, 2017, and per the conditions of his Change of Control agreement, all outstanding stock units including performance shares were considered satisfied and fully accelerated on November 14, 2017. Mr. Gacek had 205,251 shares that accelerated on this date and the value of these stock units on the day of acceleration was based on the stock price $4.27 per share on the date of acceleration. These shares were subject to Section 409A of the Internal Revenue Code of 1986 and deferred 6 months and 1 day following the day of termination. The value of the shares on the last day of fiscal 2018 was based on the stock price of $3.64 per share on the last day of fiscal 2018.

POTENTIAL PAYMENTS UPON TERMINATION OR CHANGE OF CONTROL

We have entered into change of control agreements with our executive officers, whereby in the event of a "change of control" of the Company, which is defined to include, among other things, a merger or sale of all or substantially all of the assets of the Company or a change in the composition of the Board of Directors occurring within a 24 month period as a result of which fewer than a majority of the directors are Incumbent Directors (as defined in the Change of Control Agreement), and, within 12 months of the change of control, there is an "Involuntary Termination" of such executive officer's employment, then the executive officer is entitled to specified payments and benefits, subject to the executive officer's execution of a release of claims in favor of the Company. The agreements define an "Involuntary Termination" to include, among other things, any termination of employment of the executive officer by the Company without "cause" or a significant reduction of the executive officer's duties without his or her express written consent. The change of control agreements do not provide for the payment of any tax gross-up to offset any excise tax incurred as a result of any payment under the agreements.

The potential benefits that would be provided to Mr. Gacek, as President and CEO, per his most recent agreement prior to his separation in the event of both a change of control of the Company and a qualifying termination of employment included:

a lump sum payment equal to 200% of his then established base compensation;

a lump sum payment equal to 200% of his target annual bonus;

payment of COBRA premiums for twelve (12) months; and

vesting of any unvested stock-based compensation award then held by him.

Effective May 4, 2017, a majority change to the Company's Board of Directors satisfied the first event to the Change of Control Agreements. Any involuntary terminations following this event and within 12 months of this date satisfy the second event to the Change of Control Agreements and subject to potential payment in connection with a CoC. Mr. Gacek separated from the Company on November 7, 2017, satisfying the conditions of his Change of Control Agreement. Upon separation and in exchange for a full release of claims in favor of Quantum, Mr. Gacek received severance payments and benefits that consisted of $1,200,000 (which is equivalent to 200% of his annual salary), accelerated vesting of any outstanding equity awards, and Company-paid COBRA health benefits for a period of 12 months.

The potential benefits that would be provided to our other executive officers in the event of both a change of control of the Company and a qualifying termination of employment during fiscal 2018 would be:

a lump sum payment equal to 150% of the executive officer's then established base compensation;

a lump sum payment equal to 150% of the executive officer's target annual bonus;

payment of COBRA premiums for twelve (12) months; and

vesting of any unvested equity-based compensation award then held by the executive officer.

Mr. Britts' offer letter provides for the lump sum payment of severance benefits of 52 weeks of base salary in the event of a qualifying termination of employment that is not associated with a change of control of the Company, subject to his execution of a separation agreement and general release.

During our fiscal 2018 and prior to the expiration of the Company's current Change of Control Agreements, the Committee took the opportunity to review the market practices of these agreements and how that compared to our current existing conditions. In partnership with internal and external legal counsel, Compensia, and Company management, we found that conditions in our current agreements exceeded market trends in several areas including the multiples used to calculate the total cash paid to executives following an involuntary termination in connection with CoC, the definitions of what triggers a CoC, and the percentage voting power any "person" has as a "beneficial owner" of the Company's outstanding voting securities to satisfy the first event in a Change of Control. In January 2018, the Committee reviewed and approved the conditions to the existing CoC as it pertains to involuntary termination in connection with a CoC. These conditions are effective on May 5, 2018, one year and one day following the expiration of the May 4, 2017, Change of Control Event and include the following:

	Involuntary Terminations in Connection with a Change of Control Effective May 5, 2018	
Total Cash	CEO 1.5x Salary + 1.5x Target Bonus	Officers 1.0x Salary + 1.0x Target Bonus
Equity	Any outstanding stock-based compensation that the employee holds as of the termination date and not subject to performance criteria shall automatically become vested. Any stock-based compensation subject to performance criteria based on the company's stock price, whether absolute or relative, shall be deemed to be earned based on the actual stock price performance through the close of the CoC transaction. Any stock-based compensation subject to performance criteria not based on the company's stock price shall be deemed satisfied at target levels.	
COBRA	If elected by the employee, the Company will proceed to reimburse the employee for premiums paid for coverage for up to 12 months for Executives and 18 months for the CEO after the date of the involuntary separation or until the which the employee or eligible dependents are no longer eligible to receive continuation coverage pursuant to COBRA.	
Board Composition	Effective May 5, 2018, a change in Board composition is no longer a trigger for CoC.	
Voting Power	Any "person" that becomes the "beneficial owner", directly or indirectly, of securities of the Corporation representing more than fifty percent (50%) of the total voting power represented by the Corporation's then outstanding voting securities.	

Mr. Dennis joined the Company on January 16, 2018, the same time the revisions to the Change of Control were under consideration and being approved. Per the timing of Mr. Dennis' hire, the conditions of his Change of Control Agreement included the following:

- a lump sum payment equal to one hundred fifty percent (150%) of the Employee's Base Compensation;
- a lump sum payment equal to one hundred fifty percent (150%) of the Employee's Incentive Pay as in effect immediately prior to the Involuntary Termination;
- payment of COBRA premiums for twelve (18) months; and
- vesting of any unvested stock-based compensation award then held by the executive officer.

POTENTIAL PAYMENTS UPON TERMINATION OR CHANGE OF CONTROL FOR FISCAL 2019

Per the changes to our Change of Control agreement effective May 5, 2018 and set forth per the conditions described above for fiscal 2018, the following tables provides information concerning the estimated payments and benefits as they existed on the last day of fiscal 2019 (March 31, 2019) and fiscal 2018 (March 31, 2018) for our named executive officers. On January 29, 2019, Management recommended, and the Committee approved a change to the involuntary termination calculation not associated with a Change of Control. To align with more market competitive practices, the Committee agreed to pay six (6) months of salary and six (6) months of premium COBRA benefits to Officers outside the agreement in place for our President & Chief Executive Officer.

The Company was de-listed from the NYSE on January 15, 2019, and effective January 16, 2019, the Company began trading stock on OTC Pink operated by OTC Markets Group Inc. under the ticker (QMCO). The outstanding equity to accelerate in vesting upon an involuntary termination under a Change of Control is assumed based on the stock price value on OTC Pink ($2.38) on the last day of fiscal 2019.

Fiscal 2019

Name[3]	Type of Benefit	Potential Payments Upon: Involuntary Termination within 12 Months After a Change of Control	Involuntary Termination Not Associated with a Change of Control
James J. Lerner	Cash Severance Payments	$ 1,425,000	$ 475,000
	Vesting Acceleration[1]	$ 2,012,500	$ 908,333
	Continued Coverage of Employee Benefits[2]	$ 45,368	$ 30,245
	Total Termination Benefits:	$ 3,482,868	$ 1,176,078
J. Michael Dodson	Cash Severance Payments	$ 600,000	$ 200,000
	Vesting Acceleration[1]	$ 638,027	$ 0
	Continued Coverage of Employee Benefits[2]	$ 21,535	$ 10,768
	Total Termination Benefits:	$ 1,259,562	$ 210,768
Donald E. Martella Jr.	Cash Severance Payments	$ 532,500	$ 177,500
	Vesting Acceleration[1]	$ 71,003	$ 0
	Continued Coverage of Employee Benefits[2]	$ 29,991	$ 14,995
	Total Termination Benefits:	$ 633,493	$ 192,495
Lewis W. Moorehead	Cash Severance Payments	$ 450,000	$ 150,000
	Vesting Acceleration[1]	$ 212,816	$ 0
	Continued Coverage of Employee Benefits[2]	$ 27,645	$ 13,822
	Total Termination Benefits:	$ 690,461	$ 163,822
Shawn D. Hall	Cash Severance Payments	$ 506,412	$ 168,804
	Vesting Acceleration[1]	$ 83,398	$ 0
	Continued Coverage of Employee Benefits[2]	$ 30,245	$ 15,123
	Total Termination Benefits:	$ 620,055	$ 183,927

(1) Reflects the aggregate market value of outstanding and unvested stock option grants and restricted stock unit awards. For unvested restricted stock unit awards, the aggregate market value is computed by multiplying (i) $2.38, by (ii) the number of unvested restricted stock unit awards outstanding at March 31, 2019 was the closing share price on OTC Pink. In the event of vesting acceleration or other modifications of stock-based awards, we account for such modifications in accordance with ASC 718.

(2) Assumes continued coverage of employee benefits at the fiscal 2019 COBRA premium rate for health, dental, and vision coverage. For Mr. Lerner, the benefit coverage for an involuntary termination within 12 months after a Change of Control is calculated for 18 months per his agreement and 12 months for all other calculation purposes. in addition, in the event that Mr. Lerner is involuntarily separated with the first year of his employment, he is eligible for twelve (12) months of accelerated vesting for any outstanding RSUs and PSUs (which shall vest regardless of performance criteria attainment); provided that, if the Involuntary Termination occurs prior to the Grant Date, then in lieu of the accelerated vesting contemplated above, the Company will provide Mr. Lerner with a cash payment equal to the number of shares that would have vested multiplied by the closing price of a Share on the date of the Involuntary Termination.

(3) Messrs. Ahmad, Britts, and Dennis separated from the Company prior to the end of fiscal 2019 and did not receive any severance benefits.

Fiscal 2018

The following table provides information concerning the estimated payments and benefits that would be provided in the circumstances described above and under the agreements as they existed on the last day of fiscal 2018 for our named executive officers. Payments and benefits are estimated assuming that the triggering event took place on the last business day of fiscal 2018 (March 31, 2018), outstanding equity awards were not assumed or substituted for in connection with a change of control of the Company, and the price per share of the Company's Common Stock is the closing price on the NYSE as of that date ($3.64). There can be no assurance that a triggering event would produce the same or similar results as those estimated below if such event occurs on any other date or at any other price, or if any other assumption used to estimate potential payments and benefits differs with respect to such triggering event. Due to the number of factors that affect the nature and amount of any potential payments or benefits, any actual payments and benefits may be substantially different.

		Potential Payments Upon:	
Name	Type of Benefit	Involuntary Termination within 12 Months After a Change of Control	Involuntary Termination Not Associated with a Change of Control
Patrick J. Dennis	Cash Severance Payments	$ 1,425,000	$ 475,000
	Vesting Acceleration(1)	$ 2,885,000	$ 0
	Continued Coverage of Employee Benefits(2)	$ 23,037	$ 15,358
	Total Termination Benefits:	$ 4,333,037	$ 490,358
Adalio T. Sanchez	Cash Severance Payments	$ 0	$ 0
	Vesting Acceleration(1)	$ 337,228	$ 0
	Continued Coverage of Employee Benefits(2)	$ 0	$ 0
	Total Termination Benefits:	$ 337,228	$ 0
Jon W. Gacek	Total Termination Benefits:(3)	$ 2,112,314	$ 0
Fuad Ahmad	Cash Severance Payments	$ 898,456	$ 0
	Vesting Acceleration(1)	$ 590,404	$ 0
	Continued Coverage of Employee Benefits(2)	$ 24,181	$ 0
	Total Termination Benefits:	$ 1,513,042	$ 0
William C. Britts	Cash Severance Payments	$ 832,509	$ 370,004
	Vesting Acceleration(1)	$ 224,777	$ 0
	Continued Coverage of Employee Benefits(2)	$ 27,041	$ 0
	Total Termination Benefits:	$ 1,084,328	$ 370,004
Robert S. Clark	Cash Severance Payments	$ 900,000	$ 0
	Vesting Acceleration(1)	$ 206,577	$ 0
	Continued Coverage of Employee Benefits(2)	$ 15,303	$ 0
	Total Termination Benefits:	$ 1,121,880	$ 0
Donald E. Martella Jr.	Cash Severance Payments	$ 798,750	$ 0
	Vesting Acceleration(1)	$ 192,927	$ 0
	Continued Coverage of Employee Benefits(2)	$ 27,071	$ 0
	Total Termination Benefits:	$ 1,018,749	$ 0

(1) Reflects the aggregate market value of outstanding and unvested stock option grants and restricted stock unit awards. For unvested stock options, the aggregate market value is computed by multiplying (i) the difference between $20.72 and the exercise price of the option, by (ii) the number of shares of the Company's Common Stock underlying the unvested stock options at March 31, 2017 as adjusted for the reverse stock split that was effective on April 18, 2017. For unvested restricted stock unit awards, the aggregate market value is computed by multiplying (i) $6.96, by (ii) the number of unvested restricted stock unit awards outstanding at March 31, 2017 as adjusted for the reverse stock split that was effective on April 18, 2017. In the event of vesting acceleration or other modifications of stock-based awards, we account for such modifications in accordance with ASC 718.

(2) Assumes continued coverage of employee benefits at the fiscal 2018 COBRA premium rate for health, dental, and vision coverage. For Mr. Dennis, the benefit coverage for an involuntary termination within 12 months after a Change of Control is calculated for 18 months per his agreement and 12 months for all other calculation purposes.

(3) Mr. Gacek separated from the Company under the Change of Control conditions per the agreement set forth prior to the effective May 5, 2018 changes. Mr. Gacek was paid $1,200,000 in total cash, $14,798 in total COBRA premium payments. In addition, Mr. Gacek had 210,191 unvested restricted stock units outstanding that accelerated on November 14, 2017 following his separation with a value of $897,516. Settlement of 205,251 stock units was deferred six (6) months and one (1) day following his separation per the conditions of Section 409A of the Internal Revenue Code of 1986.

CEO PAY RATIO

Presented below are the ratios of annual total compensation of our CEO to the annual total compensation of our median employee for fiscal 2019 and fiscal 2018. These ratios are reasonable estimates calculated in a manner consistent with Item 402(u) of Regulation S-K under the Exchange Act. SEC rules for identifying the median employee allow companies to apply various methodologies and assumptions and, as a result, the pay ratios reported by us may not be comparable to the pay ratios reported by other companies.

Fiscal 2019 CEO Pay Ratio

In fiscal 2019, Mr. Lerner joined the Company as our President and Chief Executive Officer on July 1, 2018, the second quarter of our fiscal year, after Mr. Dodson concluded his service as Interim Chief Executive Officer. For purposes of calculating the pay ratio consistent with SEC rules, we used the annualized total compensation of Mr. Lerner, our CEO as of March 31, 2019. The fiscal 2019 annualized total compensation for Mr. Lerner was $2,390,410 while the fiscal 2019 annual total compensation for our median employee was $122,373, and the ratio of these amounts is 19.5 to 1.

As permitted by SEC rules, and based on the Company's belief there have not been any significant changes to either our workforce or the fiscal 2018 median employee's circumstances that would result in a significant change to the pay ratio, we used the same median employee for our fiscal 2019 calculation.

Fiscal 2018 CEO Pay Ratio

Because of our transformational efforts in fiscal 2018, we had multiple Chief Executive Officers during the year. For purposes of calculating the pay ratio consistent with SEC rules, we used the annualized total compensation of Mr. Dennis, our CEO as of March 31, 2018, the last day of our fiscal year. The fiscal 2018 annualized total compensation for Mr. Dennis was $4,431,025 while the fiscal 2018 annual total compensation for our median employee was $122,508, and the ratio of these amounts is 36 to 1.

As permitted by SEC rules, to identify our median employee, we used wages and compensation reported in box 1 of the FormW-2 for 2017, as reported to the Internal Revenue Service, for U.S. based employees and equivalent earnings similar to the Form W-2 that were locally reported for our non-U.S. based employees. For our 7 new hires that started between January 1, 2018, and March 31, 2018, and did not have a FormW-2 in 2017, we used annualized target cash compensation from our Human Capital Management (HCM) system. We selected the median employee from among our entire population of active employees (excluding our CEO) as of March 31, 2018, including full-time, part-time, temporary, and non-U.S. employees. As of this date, there were 913 employees globally with 70% based in the U.S. and Canada, 22% based in EMEA, and 8% based in APAC.

REPORT OF THE LEADERSHIP AND COMPENSATION COMMITTEE OF THE BOARD OF DIRECTORS[1]

We, the Leadership and Compensation Committee of the Board of Directors, have reviewed and discussed the Compensation Discussion and Analysis ("CD&A") within this Annual Report on Form 10-K with the management of the Company. Based on such review and discussion, we have recommended to the Board of Directors that the CD&A be included as part of this Annual Report on Form 10-K.

Submitted by the Leadership and Compensation Committee of the Board of Directors:

MEMBERS OF THE LEADERSHIP AND
COMPENSATION COMMITTEE

Eric Singer, Chair
John Fichthorn
Marc Rothman

(1) This report of the Leadership and Compensation Committee of the Board of Directors shall not be deemed "soliciting material," nor is it to be deemed filed with the SEC, nor incorporated by reference in any filing of the Company under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED SHAREHOLDER MATTERS

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

Unless otherwise indicated, the following table sets forth as of July 31, 2019, certain information with respect to the beneficial ownership of the Company's Common Stock by (i) each person known by the Company to be the beneficial owner of more than five percent of the outstanding shares of Common Stock, (ii) each of the Company's current directors, (iii) each of the named executive officers for fiscal 2018 and fiscal 2019, and (iv) all current directors and executive officers as a group. Unless otherwise indicated, the business address for the beneficial owners listed below is 224 Airport Parkway, Suite 550, San Jose, CA 95110. The following share data has been adjusted to reflect the 1-for-8 reverse stock split effective April 18, 2017.

Name and Address	Number of Shares Beneficially Owned(1)	Approximate Percentage of Class(2)
5% or Greater Stockholders:		
B. Riley Financial, Inc. 21255 Burbank Blvd., Suite 400 Woodlands Hills, CA 91367	6,091,363(3)	16.8%
The TCW Group, Inc. 865 South Figueroa Street Los Angeles, CA 90017	4,327,179(4)	10.7%
Pacific Investment Management Company LLC 650 Newport Center Drive Newport Beach, CA 92660	4,309,464(5)	10.6%
VIEX Capital Advisors, LLC 825 Third Avenue 33rd Floor New York, NY 10022	3,691,464(6)	10.2%
BTC Holdings Fund I, LLC 430 Park Avenue, Suite 1202 New York, NY 10022	2,801,152(7)	7.2%
Directors and Named Executive Officers:		
James L. Lerner, President and CEO	283,334(8)	*
J. Michael Dodson, Chief Financial Officer	56,244(9)	*
Donald Martella Jr., Sr. Vice President of Engineering	101,164	*
Lewis Moorehead, Chief Accounting Officer	—	*
Shawn D. Hall*	84,985(10)	*
William C. Britts*	161,987(11)	*
Fuad Ahmad*	— (12)	*
Patrick J. Dennis*	— (13)	*
Robert S. Clark*	1,233(14)	*
Jon Gacek*	— (15)	*
Adalio Sanchez*	84,072(16)	*
John Fichthorn, Director	2,529,928(17)	7.0%
Clifford Press, Director	48,107	*
Raghavendra Rau, Director	87,185	*
Marc Rothman, Director	22,648	*
Eric Singer, Director	3,708,145(18)	10.3%
All current directors and executive officers as a group (10 persons)(19)	6,836,755(20)	18.7%

* *Terminated service with Quantum Corporation*

(*) Less than 1%.

(1) Except pursuant to applicable community property laws or as indicated in the footnotes to this table, to the Company's knowledge, each stockholder identified in the table possesses sole voting and investment power with respect to all shares of Common Stock shown as beneficially owned by such stockholder.

(2) Applicable percentage ownership is based on 36,176,823 shares of Common Stock outstanding as of July 31, 2019. Beneficial ownership is determined in accordance with the rules of the SEC, based on factors including voting and investment power with respect to shares. Shares of Common Stock subject to options currently exercisable, or exercisable within 60 days after July 31, 2019 and shares of Common Stock that are deliverable upon settlement of restricted stock units that vest within 60 days after July 31, 2019, are considered beneficially owned by the holder, but such shares are not deemed outstanding for the purposes of computing the percentage ownership of any other person. Shares of Common Stock subject to warrants currently exercisable or exercisable within 60 days after July 31, 2019 are considered beneficially owned by the holder, but such shares are not deemed outstanding for the purposes of computing the percentage ownership of any other person.

(3) Information is based on Schedule 13G (Amendment No. 1) filed with the Securities and Exchange Commission on January 28, 2019 by B. Riley Financial, Inc. and its affiliates. B. Riley Financial, Inc. ("BRF") beneficially owns and has shared voting and dispositive power with respect to 6,091,363 shares. B. Riley FBR, Inc. ("BRFBR") beneficially owns and has shared voting and dispositive power with respect to 3,627,662 shares. B. Riley Capital Management, Inc. ("BRCM") beneficially owns and has shared voting and dispositive power with respect to 2,463,701 shares. BRC Partners Management GP, LLC ("BRPGP") beneficially owns and has shared voting and dispositive power with respect to 1,493,801 shares. BRC Partners Opportunity Fund, L.P. ("BRPLP") beneficially owns and has shared voting and dispositive power with respect to 1,493,801 shares. BR Dialectic Capital Management, LLC ("BR Dialectic") beneficially owns and has shared voting and dispositive power with respect to 969,900 shares. Dialectic Antithesis Partners, L.P. ("Dialectic") beneficially owns and has shared voting and dispositive power with respect to 969,900 shares. BRPGP is the general partner of BRPLP. BRCM is an investment advisor to BRPLP. As a result, each of BRPGP and BRCM may be deemed to own the 1,493,801 shares owned directly by BRPLP. BR Dialectic is the general partner of Dialectic. BRCM is the parent company of BR Dialectic. As a result, each of BR Dialectic and BRCM may be deemed to beneficially own the 969,900 shares owned directly by Dialectic. BRD, as the parent company of BRFBR and BRCM may be deemed to beneficially own the 6,091,363 shares owned in the aggregate by BRCM and BRFBR. The foregoing should not be construed as an admission by BRF and any of its affiliates as to beneficial ownership of any shares owned by BRF or any other affiliate of BRF, as applicable. Each of the BRF affiliates contained in this note disclaims beneficial ownership of the shares that are not directly owned by such entity, except to the extent of their pecuniary interest therein. John Fichthorn was appointed to Quantum's board of directors on April 4, 2019. Mr. Fichthorn is the head of Alternative Investments for B. Riley Capital Management, L.L.C., which is a wholly owned subsidiary of BRF.

(4) Information is based on Schedule 13G filed with the Securities and Exchange Commission on December 10, 2018 by The TCW Group, Inc., on behalf of the TCW Business Unit. The reported shares consist of 478,813 shares of common stock held by The TCW Group, Inc., together with warrants to purchase 3,848,366 shares of common stock which are currently exercisable. Such warrants are subject to cashless exercise provisions; and therefore, the actual number of shares received upon exercise of the warrants may be less than the full amount disclosed hereunder if The TCW Group, Inc. elects to utilize such cashless exercise mechanics. The TCW Group, Inc. ("TCW") reports beneficial ownership of these shares on behalf of itself and its direct and indirect subsidiaries, which collectively constitute The TCW Group, Inc. business unit (the "TCW Business Unit"). The TCW Business Unit is primarily engaged in the provision of investment management services, and is managed separately and operated independently. TCW disclaims beneficial ownership interest in the reported shares, except to the extent of its direct pecuniary interest therein. Investment funds affiliated with The Carlyle Group, L.P. ("The Carlyle Group") hold a minority indirect interest ownership interest in TCW that technically constitutes an indirect controlling interest. The principal business of The Carlyle Group is acting as a private investment firm with affiliated entities that include certain distinct specialized business units that are independently operated, including the TCW Business Unit. Entities affiliated with The Carlyle Group may be deemed to share beneficial ownership of the Quantum shares reported as beneficial owned by TCW. The Carlyle Group disclaims beneficial ownership of the shares beneficially owned by TCW.

(5) Information is based on Schedule 13G filed with the Securities and Exchange Commission on January 10, 2019 by Pacific Investment Management Company LLC ("PIMCO"). The reported shares consist of warrants to purchase 4,309,464 shares of common stock which are currently exercisable. Such warrants are subject to cashless exercise provisions; and therefore, the actual number of shares received upon exercise of the warrants may be less than the full amount disclosed hereunder if PIMCO elects to utilize such cashless exercise mechanics. The reported shares are held by investment advisory clients or discretionary accounts of which PIMCO is the investment adviser. OC II FIE V LP, a private fund of which PIMCO is the investment adviser, holds these reported securities in its investment advisory account managed by PIMCO and has the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of the reported securities.

(6) Information is based on Schedule 13D (Amendment No. 10) filed with the Securities and Exchange Commission on November 13, 2017 by VIEX Capital Advisors, LLC ("VIEX Capital") and its affiliates. VIEX Opportunities Fund, LP – Series One ("VIEX Series One") beneficially owns and has shared voting and dispositive power with respect to 925,983 shares. VIEX Opportunities Fund, LP – Series Two (VIEX Series Two") beneficially owns and has shared voting and dispositive power with respect to 176,648 shares. Each of VIEX Special Opportunities Fund III, LP ("VSO III") beneficially owns and has shared voting and dispositive power with respect to 2,588,833 shares. VIEX Special Opportunities GP III LLC, as the general partner of VSO III, may be deemed to beneficially own and have shared voting and dispositive power with respect to 2,588,833 shares. VIEX GP, LLC ("VIEX GP"), as the general partner of VIEX Series One and VIEX Series Two, may be deemed to beneficially own and has shared voting and dispositive power with respect to 1,102,631 shares. VIEX Capital, as the investment manager of VIEX Series One and VIEX Series Two, and Eric Singer, as the managing member of VIEX GP and VIEX Capital, may be deemed to beneficially own and have shared voting and dispositive power with respect to 3,691,464 shares, which constitutes the shares owned by VIEX Series One, VIEX Series Two and VSO III. VIEX Capital, Eric Singer and each of their affiliates disclaim the beneficial ownership of the reported shares except to the extent of their pecuniary interest therein. Eric Signer was appointed to Quantum's Board of Directors on November 9, 2017.

(7) The reported shares consist of warrants to purchase 2,801,152 shares of common stock which are currently exercisable and held by BTC Holdings Fund I, LLC ("BTC"). Such warrants are subject to cashless exercise provisions; and therefore, the actual number of shares received upon exercise of the warrants may be less than the full amount disclosed hereunder if BTC elects to utilize such cashless exercise mechanics.

(8) Consists of 283,334 shares of common stock that are deliverable in settlement of vested restricted stock units within sixty (60) days of July 31, 2019, subject to satisfaction of vesting requirements and applicable regulations.

(9) Consists of 56,244 shares of common stock that are deliverable in settlement of vested restricted stock units within sixty (60) days of July 31, 2019, subject to satisfaction of vesting requirements and applicable regulations.

(10) Mr. Hall terminated from Quantum on June 17, 2019. Therefore, Quantum is unable to disclose a current address.

(11) Mr. Britts terminated from Quantum on October 22, 2018. Therefore, Quantum is unable to disclose a current address or confirm Mr. Britt's beneficial ownership.

(12) Mr. Ahmad terminated from Quantum on May 30, 2018. Therefore, Quantum is unable to disclose a current address or confirm Mr. Ahmad's beneficial ownership.

(13) Mr. Dennis terminated from Quantum on May 25, 2018. Therefore, Quantum is unable to disclose a current address or confirm Mr. Dennis' beneficial ownership.

(14) Mr. Clark terminated from Quantum on May 11, 2018. Therefore, Quantum is unable to disclose a current address or confirm Mr. Clark's beneficial ownership.

(15) Mr. Gacek terminated from Quantum on November 7, 2017. Therefore, Quantum is unable to disclose a current address.

(16) Mr. Sanchez served as interim CEO during fiscal 2018 and completed his service as a Quantum Director on April 11, 2019.

(17) Consists of 66,227 shares held directly by Mr. Fichthorn, 1,493,801 shares beneficially owned by BRC Partners Opportunity Fund, L.P. ("BRPLP") and 969,900 shares beneficially owned by Dialectic Antithesis Partners, L.P. ("Dialectic"). Mr. Fichthorn was appointed to Quantum's board of directors on April 4, 2019. BR Dialectic Capital Management, LLC is the investment manager of Dialectic and, as such, shares voting and dispositive power over the securities held by Dialectic. B. Riley Capital Management, LLC is the investment manager of BRPLP and, as such, shares voting and dispositive power over the securities held by BRPLP. Mr. Fichthorn is a portfolio manager for BR Dialectic Capital Management, LLC and B. Riley Capital Management, LLC; and therefore, shares voting and dispositive power over the reported securities, but Mr. Fichthorn disclaims beneficial ownership of any of Quantum's securities in which he does not have a pecuniary interest or that he does not directly own. BR Dialectic Capital Management, LLC and B. Riley Capital Management, LLC are wholly owned subsidiaries of B. Riley Financial, Inc.

(18) Mr. Singer was appointed to Quantum's board of directors on November 9, 2017. Mr. Singer is the managing member of VIEX GP, LLC and VIEX Capital Advisors, LLC. Please refer to footnote (7) above, the contents of which are incorporated here. In addition, Mr. Singer holds 16,681 shares of common stock issued to him as a result of the vesting of restricted stock units granted to him as a Quantum director.

(19) Includes (i) the following current directors: John Fichthorn, Clifford Press, Raghavendra Rau, Marc Rothman and Eric Singer and (ii) the following current executive officers: James L. Lerner, James M. Dodson, Donald Martella Jr., Lewis Moorehead and Elizabeth King. Ms. King joined Quantum as its Chief Revenue Officer on April 1, 2019.

(20) Represents 6,497,177 shares of Common Stock, 339,578 restricted stock units that are vested at July 31, 2019, or within sixty (60) days thereafter, subject to satisfaction of vesting requirements and applicable regulations.

Equity Compensation Plan Information

The following table sets forth required information for the Company's equity plans as of March 31, 2019:

EQUITY COMPENSATION PLAN INFORMATION

The table below presents information as of March 31, 2019 relating to compensation plans under which we may issue shares of our common stock.

Plan category	Number of shares to be issued upon exercise of outstanding options and settlement of outstanding restricted stock units (a)	Weighted-average exercise price of outstanding options (b)	Number of shares remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by stockholders(1)	2,042,721(2)	$ 5.04(2)	2,770,689(3)
Equity compensation plans not approved by stockholders	—	—	—
Total	2,042,721(2)	$ 5.04(2)	2,770,689(3)

(1) This category consists of our 2012 Long-Term Incentive Plan, and our Employee Stock Purchase Plan.
(2) Consists of (i) 1,207 shares issuable upon exercise of outstanding options, (ii) 1,271,309 shares issuable upon settlement of restricted stock units that are not subject to performance conditions, and (iii) 770,205 shares issuable upon settlement of performance-based restricted stock units, which represents the maximum payment under the performance-based restricted stock units. The weighted-average exercise price in column (b) does not take these restricted stock units and performance-based restricted stock units into account.
(3) Consists of 2,273,778 shares of common stock that remain available for issuance under our 2012 plan, 300,000 shares that remain available for issuance under our EKIN plan and 496,615 shares that remain available for issuance under our ESPP.

The table below presents information as of March 31, 2018 relating to compensation plans under which we may issue shares of our common stock.

Plan category	Number of shares to be issued upon exercise of outstanding options and settlement of outstanding restricted stock units (a)	Weighted-average exercise price of outstanding options (b)	Number of shares remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by stockholders(1)	2,804,623(2)	$ 6.19(2)	3,100,784(3)
Equity compensation plans not approved by stockholders	—	—	—
Total	2,804,623(2)	$ 6.19(2)	3,100,784(3)

(1) This category consists of our 2012 Long-Term Incentive Plan, and our Employee Stock Purchase Plan.
(2) Consists of (i) 251,503 shares issuable upon exercise of outstanding options, (ii) 1,838,543 shares issuable upon settlement of restricted stock units that are not subject to performance conditions, and (iii) 714,577 shares issuable upon settlement of performance-based restricted stock units, which represents the maximum payment under the performance-based restricted stock units. The weighted-average exercise price in column (b) does not take these restricted stock units and performance-based restricted stock units into account.
(3) Consists of 2,304,169 shares of common stock that remain available for issuance under our 2012 plan, 300,000 shares that remain available for issuance under our EKIN plan and 496,615 shares that remain available for issuance under our ESPP.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Certain Relationships and Related Transactions

We describe below transactions and series of similar transactions, since the beginning of our fiscal year 2018, to which we were a party or will be a party, in which:

- the amounts involved exceeded or will exceed $120,000; and
- any of our directors, nominees for director, executive officers or holders of more than 5% of our outstanding capital stock, or any immediate family member of, or person sharing the household with, any of these individuals or entities, had or will have a direct or indirect material interest.

Other than as described below, there has not been, nor is there any currently proposed, transactions or series of similar transactions to which we have been or will be a party.

Employment Arrangements and Indemnification Agreements

We have entered into employment and consulting arrangements with certain of our current and former executive officers. See *Item 11 – Executive Compensation* above in this Form 10-K.

We have also entered into indemnification agreements with certain of our current and former directors and officers. The indemnification agreements and our restated certificate of incorporation and bylaws currently in effect require us to indemnify our directors and officers to the fullest extent permitted by Delaware law.

Equity Award Grants to Executive Officers and Directors

We have granted stock options, RSUs and/or PSUs to our executive officers and our non-employee directors. See *Item 11 – Executive Compensation* and *Item 10 – Director, Executive Officers of the Registrant and Corporate Governance – Director Compensation* above in this Form 10-K.

Other Transactions

Other than as described above under this section titled “Related Party Transactions,” since April 1, 2017, we have not entered into any transactions, nor are there any currently proposed transactions, between us and a related party where the amount involved exceeds, or would exceed, $120,000, and in which any related person had or will have a direct or indirect material interest. We believe the terms of the transactions described above were comparable to terms we could have obtained in arm’s-length dealings with unrelated third parties.

Policies and Procedures for Related Party Transactions

The audit committee of our board of directors has the primary responsibility for reviewing and approving transactions with related parties. Our audit committee charter provides that the audit committee may review and approve in advance any related party transactions.

We have adopted a formal written policy providing that our executive officers, directors, nominees for election as directors, beneficial owners of more than 5% of any class of our common stock, any member of the immediate family of any of the foregoing persons, and any firm, corporation, or other entity in which any of the foregoing persons is employed, is a general partner or principal or in a similar position, or in which such person has a 5% or greater beneficial ownership interest, is not permitted to enter into a related party transaction with us without the consent of our audit committee, subject to the exceptions described below. In approving or rejecting any such proposal, our audit committee is to consider the relevant facts and circumstances available and deemed relevant to our audit committee, including, whether the transaction is on terms no less favorable than terms generally available to an unaffiliated third party under the same or similar circumstances, and the extent of the related party’s interest in the transaction. Our audit committee has determined that certain transactions shall be deemed to be pre-approved by the audit committee, even if the aggregate amount involved will exceed $120,000, including certain employment arrangements of executive officers, director compensation, transactions with another company at which a related party’s only relationship is as a non-executive employee or beneficial owner of less than 5% of that company’s shares, transactions where a related party’s interest arises solely from the ownership of our common stock and all holders of our common stock received the same benefit on a pro rata basis, and transactions available to all employees generally.

In addition, the Company’s Code of Business Conduct and Ethics – the High Road (the “Code”) requires that the Company’s employees, officers and directors avoid conducting Company business with a relative or significant other, or with a business in which a relative or significant other is associated in any significant role unless disclosed to the Company’s ethics committee (the “Ethics Committee”) and approved in advance by the Ethics Committee or the Audit Committee, as applicable.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

Fees Paid to Independent Registered Public Accounting Firm

The following table provides details on the fees billed by Armanino for the fiscal years ended March 31, 2017, 2018 and 2019, inclusive ofout-of-pocket expenses.

	For the year ended March 31,		
Nature of Services	**2019**	**2018**	**2017**
Audit Fees	$ 1,232	$ 1,334	$ 1,334
Audit-related Fees	—	—	—
Tax Fees	—	—	—
Other Fees	—	—	—
Total Fees	$ 1,232	$ 1,334	$ 1,334

Fees Paid to Prior Independent Registered Public Accounting Firm

The following table provides details on the fees billed by the Company's previous independent registered public accounting firm, PwC, for the fiscal years ended March 31, 2017, 2018 and 2019, inclusive of out-of-pocket expenses.

	For the year ended March 31,		
Nature of Services	**2019**	**2018**	**2017**
Audit Fees	$ —	$ 2,769	$ 1,254
Audit-related Fees	—	—	7
Tax Fees	—	—	210
Other Fees	—	1,557	—
Total Fees	**$ —**	**$ 4,327**	**$ 1,471**

Audit Fees. Audit fees of Armanino and PwC includes the aggregate fees incurred for the audits of Quantum's annual consolidated financial statements and the review of the quarterly consolidated financial statements included in Quantum's Quarterly Reports on form 10-Q.

Audit-related Fees. Audit-related fees paid to PwC for the fiscal year ended March 31, 2017 are for accounting consultations, internal control reviews and other non-statutory services related to accounting. No audit-related fees were paid for the fiscal years ended March 31, 2018 and 2019.

Tax Fees. PwC tax fees are for tax compliance and tax consulting. The tax compliance services principally include preparation and review of various tax returns.

Other Fees: other fees paid to PwC relate to costs associated with the SEC investigation.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a)

1. Financial Statements: The Consolidated Financial Statements of Quantum Corporation are set forth in Part II, Item 8 of this Annual Report on Form 10-K.

2. Financial Statement Schedules: Schedule II—Valuation and Qualifying Accounts.

Schedule II – Valuation and Qualifying Accounts

	Balance at beginning of period	Net additions (release) charged to expense	Recoveries (deductions)	Balance at end of period
Reserves for deferred Tax Asset Valuation Allowance:				
For the fiscal year ended March 31, 2019	$ 130,048	$ 10,311	$ —	$140,539
For the fiscal year ended March 31, 2018	154,296	(24,248)	—	130,048
For the fiscal year ended March 31, 2017	157,040	(2,744)	—	154,296

All other financial statement schedules are not required or are not applicable, or the required information is shown in the consolidated financial statements or notes to the consolidated financial statements.

(b) Exhibits:

Exhibit NUMBER	EXHIBIT DESCRIPTION	Incorporated by Reference			
		FORM	FILE NO.	EXHIBIT(S)	FILING DATE
3.1	Amended and Restated Certificate Of Incorporation Of Quantum.	8-K	001-13449	3.1	August 16, 2007
3.2	Amended and Restated By-Laws Of Quantum, As Amended.	8-K	001-13449	3.1	December 5, 2008
3.3	Certificate Of Designation Of Rights, Preferences and Privileges Of Series B Junior Participating Preferred Stock.	S-3	333-109587	4.7	October 9, 2003
3.4	Certification Of Amendment To The Bylaws Of Quantum Corporation, As Adopted On January 20, 2010.	8-K	001-13449	3.1	January 26, 2010
3.5	Certification Of Amendment To The Bylaws Of Quantum Corporation, As Adopted On February 3, 2016.	8-K	001-13449	3.1	February 8, 2016
3.6	Certificate Of Amendment To The Amended Articles Of Incorporation Of Quantum Corporation.	10-Q	001-13449	3.1	November 9, 2017
4.1	Indenture For 4.50% Convertible Senior Subordinated Notes Due 2017, between the Company and U.S. Bank National Association, As Trustee, dated October 31, 2012, including the Form of 4.50% Convertible Senior Subordinated Note Due 2017.	8-K	001-13449	4.1	October 31, 2012
4.2	Registration Rights Agreement, dated December 27, 2018 between the Company, OC II FIE V LP and BTC Holdings Fund I, LLC.	8-K	001-13449	4.3	Dec. 28, 2018

Exhibit NUMBER	EXHIBIT DESCRIPTION	Incorporated by Reference			
		FORM	FILE NO.	EXHIBIT(S)	FILING DATE
10.1	Form Of Indemnification Agreement between the Company and The Named Executive Officers and Directors.*	8-K	001-13449	10.4	April 4, 2007
10.2	Form Of Amended and Restated Change Of Control Agreement between the Company and Each Of Registrant's Executive Officers.*	10-Q	001-13449	10.2	November 6, 2015
10.3	Form Of Amended and Restated Director Change Of Control Agreement between the Company and the Directors (other than the Executive Chairman and the CEO).*	8-K	001-13449	10.2	May 10, 2011
10.4	Quantum Corporation 2012 Long-Term Incentive Plan As Amended.*	8-K	001-13449	10.1	August 31, 2015
10.5	Form Of Restricted Stock Unit Agreement (U.S. Employees), Under The Quantum Corporation 2012 Long-Term Incentive Plan.*	10-Q/A	001-13449	10.2	February 15, 2013
10.6	Form Of Restricted Stock Unit Agreement (Non-U.S. Employees), Under The Quantum Corporation 2012 Long-Term Incentive Plan.*	10-Q/A	001-13449	10.3	February 15, 2013
10.7	Form Of Restricted Stock Unit Agreement (Directors), Under The Quantum Corporation 2012 Long-Term Incentive Plan.*	10-Q/A	001-13449	10.4	February 15, 2013
10.8	Quantum Corporation Employee Stock Purchase Plan, As Amended.*	10-K	001-13449	10.9	June 12, 2015
10.9	Quantum Corporation Executive Officer Incentive Plan.*	10-K	001-13449	10.10	June 12, 2015
10.10	Employment Offer Letter, Dated March 31, 2011, between the Company and Jon W. Gacek.*	8-K	001-13449	10.1	April 5, 2011
10.11	Amendment To Employment Offer Letter between the Company and Jon W. Gacek.*	10-Q	001-13449	10.1	February 8, 2013
10.12	Employment Offer Letter, Dated August 31, 2006, between the Company and William C. Britts.*	8-K	001-13449	10.1	September 7, 2006
10.13	Amendment To Employment Offer Letter between the Company and William C. Britts.*	10-Q	001-13449	10.6	November 7, 2008
10.14	Amendment To Employment Offer Letter between the Company and William C. Britts.*	10-Q	001-13449	10.3	February 5, 2010
10.15	Offer Letter, Dated May 2, 2011, between the Company and David E. Roberson.*	8-K	001-13449	10.1	May 10, 2011
10.16	Offer Letter, Dated August 20, 2007, between the Company and Paul Auvil.*	8-K	001-13449	10.1	August 29, 2007
10.17	Offer Letter, Dated August 7, 2013, between the Company and Gregg J. Powers.*	10-Q	001-13449	10.4	November 12, 2013
10.18	Offer Letter, Dated March 29, 2016, between the Company and Clifford Press.*	8-K	001-13449	10.1	April 5, 2016
10.19	Offer Letter, Dated April 14, 2016 between the Company and Fuad Ahmad.*	8-K	001-13449	10.1	April 18, 2016

Exhibit NUMBER	EXHIBIT DESCRIPTION	Incorporated by Reference			
		FORM	FILE NO.	EXHIBIT(S)	FILING DATE
10.20	Confidential Placement Agreement, Date April 15, 2016 between the Company and FLG Partners.	8-K	001-13449	10.2	April 18, 2016
10.21	Form Of Agreement To Advance Legal Fees between the Company and Certain Of Its Executive Officers.*	10-K	001-13449	10.25	June 12, 2015
10.22	Credit Agreement, Dated March 29, 2012, by and among the Company, Wells Fargo Capital Finance, LLC, As Administrative Agent, and The Lenders Party Thereto.	10-K	001-13449	10.22	June 14, 2012
10.23	Security Agreement, Dated March 29, 2012, among the Company and Wells Fargo Capital Finance, LLC.	8-K	001-13449	10.2	April 2, 2012
10.24	First Amendment To Credit Agreement, Dated June 28, 2012, among the Company, The Lenders Identified Therein, and Wells Fargo Capital Finance, LLC, As The Administrative Agent For The Lenders.	8-K	001-13449	10.1	June 28, 2012
10.25	Fourth Amendment To Credit Agreement and First Amendment To Security Agreement, Dated January 31, 2013, among the Company, The Lenders Identified Therein, and Wells Fargo Capital Finance, LLC, As The Administrative Agent For The Lenders.	8-K	001-13449	10.1	February 6, 2013
10.26	Consent and Fifth Amendment To Credit Agreement, Dated February 6, 2014, by and among Wells Fargo Capital Finance, LLC, As Administrative Agent, The Lenders That Are Parties Thereto, and Quantum Corporation.	8-K	001-13449	10.1	April 29, 2014
10.27	Sixth Amendment To Credit Agreement and Second Amendment To Security Agreement, Dated April 24, 2014, by and among Wells Fargo Capital Finance, LLC, As Administrative Agent, The Lenders That Are Parties Thereto, and Quantum Corporation.	8-K	001-13449	10.2	April 29, 2014
10.28	Seventh Amendment To Credit Agreement, Dated August 7, 2015, by and among Wells Fargo Capital Finance, LLC, As Administrative Agent, The Lenders That Are Parties Thereto, and Quantum Corporation.	8-K	001-13449	10.1	August 13, 2015
10.29	Eighth Amendment To Credit Agreement, Dated November 13, 2015, by and among Wells Fargo Capital Finance, LLC, As Administrative Agent, The Lenders That Are Parties Thereto, and Quantum Corporation.‡	10-K	001-13449	10.31	June 3, 2016
10.30	Ninth Amendment To Credit Agreement, Dated April 15, 2016, by and among Wells Fargo Capital Finance, LLC, As Administrative Agent, The Lenders That Are Parties Thereto, and Quantum Corporation.	8-K	001-13449	10.1	April 18, 2016
10.31	Term Loan Credit and Security Agreement, Dated October 21, 2016, among Quantum Corporation, TCW Asset Management Company LLC, As Agent, and The Lender Parties Thereto.	8-K	001-13449	10.1	October 21, 2016
10.32	Revolving Credit and Security Agreement, Dated October 21, 2016, among Quantum Corporation, PNC Bank, National Association, As Agent, and The Lender Party Thereto.	8-K	001-13449	10.2	October 21, 2016

Exhibit NUMBER	EXHIBIT DESCRIPTION	Incorporated by Reference			
		FORM	FILE NO.	EXHIBIT(S)	FILING DATE
10.33	Lease Agreement, Dated February 6, 2006, between the Company and CS/Federal Drive AB LLC (For Building A).	8-K	001-13449	10.2	February 10, 2006
10.34	Lease Agreement, Dated February 6, 2006, between the Company and Cs/Federal Drive AB LLC (For Building B).	8-K	001-13449	10.3	February 10, 2006
10.35	Agreement, Dated As Of September 23, 2016, by and among the Company, VIEX Capital Advisors, LLC, and certain of its Affiliates.	8-K	001-13449	10.1	September 26, 2016
10.36	Agreement, Dated As Of December 2, 2016, by and among the Company and VIEX Capital Advisors, LLC and its Affiliates.	8-K	001-13449	10.1	December 5, 2016
10.37	Settlement Agreement, Dated As Of March 2, 2017, by and among the Company and VIEX Capital Advisors LLC and certain of its Affiliates.	8-K	001-13449	10.1	March 3, 2017
10.38	Director Resignation and CEO Waiver Letter From Jon W. Gacek, Dated As Of March 2, 2017.*	8-K	001-13449	10.2	March 3, 2017
10.39	Offer Letter, Dated May 1, 2017, between the Company and Adalio Sanchez.*	8-K	001-13449	10.2	May 4, 2017
10.40	Offer Letter, Dated May 1, 2017, between the Company and Marc Rothman.*	8-K	001-13449	10.1	May 4, 2017
10.41	Offer Letter, Dated May 21, 2017, between the Company and Alex Pinchev.*	8-K	001-13449	10.1	June 1, 2017
10.42	Quantum Corporation 2012 Long-Term Incentive Plan, Amended and Restated As Of August 23, 2017.*	8-K	001-13449	10.1	August 24, 2017
10.43	Quantum Corporation Executive Officer Incentive Plan, Restated As Of August 23, 2017.*	8-K	001-13449	10.2	August 24, 2017
10.44	Offer Letter with Raghu Rau, Dated August 31, 2017.*	8-K	001-13449	10.1	September 5, 2017
10.45	Second Amendment To Term Loan Credit and Security Agreement, Dated November 6, 2017, by and among the Company, TCW Asset Management Company LLC, As Agent, and The Lender Parties Thereto.	8-K	001-13449	10.1	November 9, 2017
10.46	Second Amendment To Revolving Loan Credit and Security Agreement, Dated November 6, 2017, by and among the Company, PNC Bank, National Association, As Agent, and The Lender Parties Thereto.	8-K	001-13449	10.2	November 9, 2017
10.47	Offer Letter between the Company and Eric Singer, Effective As Of November 9, 2017.*	8-K	001-13449	10.1	November 13, 2017
10.48	Offer Letter between the Company and Adalio Sanchez, Dated November 7, 2017.*	8-K	001-13449	10.2	November 13, 2017
10.49	Release Of Claims between the Company and Jon Gacek, Dated November 7, 2017.*	8-K	001-13449	10.3	November 13, 2017
10.50	Resignation Letter Of Paul R. Auvil III, Resigning From The Board Of Directors, Dated November 8, 2017.*	8-K	001-13449	99.1	November 13, 2017

Exhibit NUMBER	EXHIBIT DESCRIPTION	Incorporated by Reference			
		FORM	FILE NO.	EXHIBIT(S)	FILING DATE
10.51	Offer Letter between the Company and Patrick Dennis, Dated January 16, 2018.*	8-K	001-13449	10.1	January 22, 2018
10.52	Change Of Control Agreement between the Company and Patrick Dennis, Dated January 16, 2018.*	8-K	001-13449	10.2	January 22, 2018
10.53	Third Amendment To Revolving Credit and Security Agreement, Dated As Of February 14, 2018, between the Company and PNC Bank, National Association, As Agent.	8-K	001-13449	10.1	February 20, 2018
10.54	Third Amendment To Term Loan Credit and Security Agreement, Dated February 14, 2018, between the Company and TCW Asset Management Company LLC, As Agent.	8-K	001-13449	10.2	February 20, 2018
10.55	Warrant To Purchase Stock, Dated December 14, 2017, between the Company and TCW Direct Lending, LLC.	8-K	001-13449	10.3	February 20, 2018
10.56	Warrant To Purchase Stock, Dated December 14, 2017, between the Company and West Virginia Direct Lending LLC.	8-K	001-13449	10.4	February 20, 2018
10.57	Warrant To Purchase Stock, Dated December 14, 2017, between the Company and TCW Skyline Lending, L.P.	8-K	001-13449	10.5	February 20, 2018
10.58	Amendment No. 1 To Warrant To Purchase Stock, Dated December 14, 2017, between the Company and TCW Direct Lending, LLC.	8-K	001-13449	10.6	February 20, 2018
10.59	Amendment No. 1 To Warrant To Purchase Stock, Dated December 14, 2017, between the Company and West Virginia Direct Lending LLC.	8-K	001-13449	10.7	February 20, 2018
10.60	Amendment No. 1 To Warrant To Purchase Stock, Dated December 14, 2017, between the Company and TCW Skyline Lending, L.P.	8-K	001-13449	10.8	February 20, 2018
10.61	Warrant To Purchase Stock, Dated February 14, 2018, between the Company and TCW Direct Lending, LLC.	8-K	001-13449	10.9	February 20, 2018
10.62	Warrant To Purchase Stock, Dated February 14, 2018, between the Company and West Virginia Direct Lending LLC.	8-K	001-13449	10.10	February 20, 2018
10.63	Warrant To Purchase Stock, Dated February 14, 2018, between the Company and TCW Skyline Lending, L.P.	8-K	001-13449	10.11	February 20, 2018
10.64	Offer Letter between the Company and J. Michael Dodson, Dated May 29, 2018.*	8-K	001-13449	10.1	May 30, 2018
10.65	Change Of Control Agreement between the Company and J. Michael Dodson, Dated May 29, 2018.*	8-K	001-13449	10.2	May 30, 2018
10.66	Offer Letter between the Company and James J. Lerner, Dated June 22, 2018.*	8-K	001-13449	10.1	June 27, 2018
10.67	Change Of Control Agreement between the Company and James J. Lerner, Dated June 22, 2018.*	8-K	001-13449	10.2	June 27, 2018
10.68	Joinder and Fourth Amendment To Term Loan Credit and Security Agreement Dated August 23, 2018.‡				
10.69	Form of Warrant to Purchase Stock dated September 7, 2018 issued to TCW Direct Lending, LLC and its affiliates.‡				

Exhibit NUMBER	EXHIBIT DESCRIPTION	Incorporated by Reference			
		FORM	FILE NO.	EXHIBIT(S)	FILING DATE
10.70	Form of Warrant to Purchase Stock dated September 30, 2018 issued to TCW Direct Lending, LLC and its affiliates.‡				
10.71	Form of Warrant to Purchase Stock dated October 31, 2018 issued to TCW Direct Lending, LLC and its affiliates.‡				
10.72	Form of Warrant to Purchase Stock dated November 30, 2018 issued to TCW Direct Lending, LLC and its affiliates.‡				
10.73	Warrant Repurchase Agreement dated January 16, 2019 between the Company and TCW Direct Lending, LLC and certain of its affiliates.‡				
10.74	Fourth Amendment and Joinder To Revolving Credit and Security Agreement Dated August 23, 2018.‡				
10.75	Offer Letter between the Company and Lewis W. Moorehead, Dated October 3, 2018.‡				
10.76	Offer Letter between the Company and John Fichthorn, Dated April 4, 2019.‡				
10.77	Term Loan Credit and Security Agreement, dated December 27, 2018, between the Company, Quantum LTO, the lenders party thereto, and U.S. Bank, National Association.	8-K	001-13449	10.1	Dec. 28, 2018
10.78	Amended and Restated Revolving Credit and Security Agreement, dated December 27, 2018, between the Company, Quantum LTO, the lenders party thereto, and PNC Bank, National Association.#	8-K	001-13449	10.2	Dec. 28, 2018
10.79	Warrant to Purchase Common Stock dated December 27, 2018 issued to OC II FIE V LP.	8-K	001-13449	4.1	Dec. 28, 2018
10.80	Warrant to Purchase Common Stock dated December 27, 2018 issued to BTC Holdings Fund I, LLC.	8-K	001-13349	4.2	Dec. 28, 2018
10.81	Stipulation and Agreement Of Settlement Entered Into April 11, 2019.	8-K	001-13449	99.2	May 31, 2019
16.1	Pricewaterhousecoopers LLP Letter Dated January 25, 2019 Acknowledging the Company's Change In Accounting Firm.	8-K	001-13449	16.1	January 25, 2019
21.1	Quantum Subsidiaries.‡				
23.1	Consent Of Independent Registered Public Accounting Firm, Armanino LLP.‡				
24.1	Power Of Attorney ‡ (See Signature Page).				
31.1	Certification Of The Chief Executive Officer Pursuant To Section 302(A) Of The Sarbanes-Oxley Act Of 2002.‡				
31.2	Certification Of The Chief Financial Officer Pursuant To Section 302(A) Of The Sarbanes-Oxley Act Of 2002.‡				
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. section 1350, as adopted pursuant to section 906 of the Sarbanes-Oxley Act of 2002.†				
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. section 1350, as adopted pursuant to section 906 of the Sarbanes-Oxley Act of 2002.†				
101.INS	XBRL Instance Document				
101.SCH	XBRL Taxonomy Extension Schema Document				
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document				
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document				
101.LAB	XBRL Taxonomy Extension Label Linkbase Document				
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document				

* Indicates Management Contract Or Compensatory Plan, Contract Or Arrangement.
‡ Filed Herewith.
† Furnished Herewith.
# Schedules and exhibits have been omitted pursuant to Item 601(b)(2) of Regulation S-K. The registrant will furnish copies of any such schedules to the U.S. Securities and Exchange Commission upon request.

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SIGNATURE

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

QUANTUM CORPORATION

/s/ J. MICHAEL DODSON
J. Michael Dodson
Chief Financial Officer
(Principal Financial and Chief Accounting Officer)
Date: August 6, 2019

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POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints James J. Lerner and J. Michael Dodson, jointly and severally, his attorneys-in-fact, each with the power of substitution, for him in any and all capacities, to sign any amendments to this Annual Report on Form 10-K, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact, or his substitute or substitutes, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this Report has been signed below by the following persons in the capacities on August 6, 2019.

Signature	Title
/s/ JAMES J. LERNER James J. Lerner	President and Chief Executive Officer (Principal Executive Officer)
/s/ J. MICHAEL DODSON J. Michael Dodson	Chief Financial Officer (Principal Financial Officer)
/a/ LEWIS MOOREHEAD Lewis Moorehead	Chief Accounting Officer (Principal Accounting Officer)
/s/ CLIFFORD PRESS Clifford Press	Director
/s/ ERIC B. SINGER Eric B. Singer	Director
/s/ RAGHAVENDRA RAU Raghavendra Rau	Director
/s/ MARC E. ROTHMAN Marc E. Rothman	Director
/s/ JOHN A. FICHTHORN John A. Fichthorn	Director

JOINDER AND FOURTH AMENDMENT TO TERM LOAN CREDIT AND SECURITY AGREEMENT

THIS JOINDER AND FOURTH AMENDMENT TO TERM LOAN CREDIT AND SECURITY AGREEMENT (this "Amendment"), with an effective date of August 23, 2018, is entered into by and among QUANTUM CORPORATION, a Delaware corporation ("Quantum", and together with each Person joined to the Credit Agreement (as defined below) as a borrower from time to time, collectively, the "Borrowers" and each a "Borrower"), Quantum LTO Holdings, LLC, a Delaware limited liability company ("New Guarantor"), each other Loan Party (as defined in the Credit Agreement) party hereto, the financial institutions which are now or which hereafter become a party to the Credit Agreement as lenders (collectively, the "Lenders" and each a "Lender") party hereto, and TCW ASSET MANAGEMENT COMPANY LLC ("TCW"), in its capacity as agent for the Lenders (in such capacity, together with its successors and assigns, the "Agent").

RECITALS

A. Agent, the Lenders, the Borrowers and the each other Loan Party from time to time party thereto are parties to that certain Term Loan Credit and Security Agreement, dated as of October 21, 2016 (as amended by the First Amendment to Term Loan Credit and Security Agreement, dated as of April 19, 2017, the Second Amendment to Term Loan Credit and Security Agreement, dated as of November 6, 2017, the Third Amendment to Term Loan Credit and Security Agreement, dated as of February 14, 2018 and this Amendment, and as the same may be further amended, modified, supplemented, renewed, restated or replaced from time to time, the "Credit Agreement"), pursuant to which the Lenders have made and may hereafter make certain loans and have provided and may hereafter provide certain financial accommodations to the Borrowers.

B. The Borrowers have notified Agent and Lenders that Quantum has formed New Subsidiary as a wholly-owned Subsidiary on or about August 17, 2018, and, pursuant to Section 7.12 of the Credit Agreement, Administrative Borrower requests that such Subsidiary join the Credit Agreement as a Guarantor and become jointly and severally liable for the obligations of the Loan Parties thereunder and under the Other Documents and grant to Agent, for its benefit and for the ratable benefit of each Lender and each other Secured Party, a security interest in its Collateral to secure the Obligations.

C. The Borrowers have requested that Agent and the Lenders make certain amendments to the Credit Agreement as set forth herein, and Agent and the Lenders have agreed to make such amendments, subject to the terms and conditions set forth herein.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants herein contained, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree as follows:

1. Definitions. Capitalized terms used herein and not defined shall have the meanings given to such terms in the Credit Agreement.

2. New Guarantor Joinder. New Guarantor has indicated its desire to join the Credit Agreement as a Guarantor pursuant to the terms thereof. Accordingly, New Guarantor, Agent, Lenders and the other Loan Parties hereby agree as follows:

(a) New Guarantor acknowledges and confirms that it has received a copy of the Credit Agreement and the schedules and exhibits thereto, in each case as amended to date (including by this Amendment).

(b) New Guarantor hereby acknowledges, agrees and confirms that, by its execution of this Amendment, New Guarantor will become a party to the Credit Agreement and a "Guarantor" for all purposes of the Credit Agreement and the Other Documents, and shall have all of the obligations of a Guarantor thereunder as if it had originally executed the Credit Agreement and such Other Documents. New Guarantor hereby ratifies, as of the date hereof, and agrees to be bound by, all of the terms, provisions and conditions contained in the Credit Agreement and in the Other Documents applicable to Guarantors and/or the Loan Parties, including without limitation (i) all of the representations and warranties set forth in Article V of the Credit Agreement, (ii) all of the affirmative covenants set forth in Article VI of the Credit Agreement, and (iii) all of the negative covenants set forth in Article VII of the Credit Agreement.

(c) Without limiting the generality of the foregoing, New Guarantor hereby (i) assigns, pledges and grants to Agent, for its benefit and for the ratable benefit of each Lender and each other Secured Party, a continuing security interest in and to and Lien on all of its Collateral, whether now owned or existing or hereafter created, acquired or arising and wheresoever located, to secure the prompt payment and performance to Agent and each Lender (and each other holder of any Obligations) of the Obligations, and (ii) unconditionally guarantees, as a primary obligor and not merely as a surety, jointly and severally with each other Guarantor when and as due, whether at maturity, by acceleration, by notice of prepayment or otherwise, the due and punctual performance of all Obligations. In furtherance of the foregoing, New Guarantor authorizes Agent to file against it, one or more financing, continuation or amendment statements pursuant to the Uniform Commercial Code in form and substance satisfactory to Agent (which statements may have a description of collateral which is broader than that set forth herein, including without limitation a description of Collateral as "all assets" and/or "all personal property" of such New Guarantor).

(d) New Guarantor hereby agrees that at any time and from time to time, upon the reasonable request of Agent, it will execute and deliver such other and further agreements, documents and instruments and do such other further acts and things as Agent may reasonably request in order to effect the purposes of the joinder set forth in this Section 2. In addition, and in accordance with Article XV of the Credit Agreement, New Guarantor hereby irrevocably designates Borrowing Agent to be its attorney and agent and in such capacity to (i) borrow, (ii) request the Delayed Draw Term Loan, (iii) sign and endorse notes, (iv) execute and deliver all instruments, documents, applications, security agreements and all other agreements, documents, instruments, certificates, notices and further assurances now or hereafter required under the

Credit Agreement or the Other Documents, (v) make elections regarding interest rates, and (vi) otherwise take action under and in connection with the Credit Agreement and the Other Documents, all on behalf of and in the name such Loan Party, and hereby authorizes Agent to pay over or credit all loan proceeds thereunder in accordance with the request of Borrowing Agent.

3. Amendments to Credit Agreement. Subject to the satisfaction of the conditions to effectiveness set forth in Section 4 of this Amendment and in reliance upon the representations and warranties set forth in Section 5 of this Amendment, the Credit Agreement is hereby amended as follows:

(a) The Credit Agreement is hereby amended to delete the stricken text (indicated textually in the same manner as the following example: ~~stricken text~~) and to add the bold and double-underlined text (indicated textually in the same manner as the following example: **bold and double-underlined text**) as set forth in the amended Credit Agreement attached hereto as Exhibit A (the "Amended Credit Agreement"), and any term or provision of the Credit Agreement which is different from that set forth in the Amended Credit Agreement shall be replaced and superseded in all respects by the terms and provisions of the Amended Credit Agreement.

(b) The schedules to the Credit Agreement are hereby amended as set forth on the attached Exhibit B.

4. Conditions Precedent. The effectiveness of this Amendment is expressly conditioned upon the satisfaction of each of the following conditions precedent in a manner satisfactory to Agent:

(a) Agent shall have received this Amendment, duly authorized, executed and delivered by each Loan Party and each Lender;

(b) Agent shall have received a fully executed copy (as applicable), in each case in form and substance reasonably satisfactory to Agent, of each of the documents set forth on the closing checklist attached hereto as Exhibit C;

(c) Agent shall have received payment of all fees payable to Agent and Lenders pursuant to the terms of the Fee Letter, and all other fees, charges and disbursements of Agent and its counsel required to be paid pursuant to the Credit Agreement in connection with the preparation, execution and delivery of this Amendment;

(d) All proceedings taken in connection with the transactions contemplated by this Amendment and all documents, instruments and other legal matters incident thereto shall be reasonably satisfactory to Agent and its legal counsel; and

(e) on the date of this Amendment and after giving effect to the provisions of this Amendment and the transactions contemplated hereby, no Default or Event of Default shall exist or have occurred and be continuing.

5. Representations and Warranties. In addition to the continuing representations and warranties heretofore or hereafter made by the Loan Parties to Agent and Lenders pursuant to the Credit Agreement and the Other Documents, each Loan Party hereby represents and warrants to Agent and each Lender as follows:

(a) each Loan Party has full power, authority and legal right to enter into this Amendment and to perform all its respective Obligations hereunder;

(b) this Amendment has been duly executed and delivered by each Loan Party;

(c) this Amendment constitutes the legal, valid and binding obligation of each Loan Party enforceable in accordance with its terms, except as such enforceability may be limited by any applicable bankruptcy, insolvency, moratorium or similar laws affecting creditors' rights generally;

(d) the execution, delivery and performance of this Amendment (i) are within each Loan Party's corporate powers, as applicable, (ii) have been duly authorized by all necessary corporate action, as applicable, (iii) are not in contravention of law or the terms of such Loan Party's Organizational Documents or to the conduct of such Loan Party's business or of any Material Contract or undertaking to which such Loan Party is a party or by which such Loan Party is bound, including without limitation the Revolving Loan Documents, (iv) will not conflict with or violate any law or regulation, or any judgment, order or decree of any Governmental Body, (v) will not require the Consent of any Governmental Body, any party to a Material Contract or any other Person, except (x) any Consents of any party to a Material Contract or any other Person (other than a Governmental Body) with respect to which the failure to obtain could not reasonably be expected, individually or in the aggregate to have a Material Adverse Effect or (y) any immaterial Consents of any Governmental Body, all of which will have been duly obtained, made or complied with prior to the date hereof and which are in full force and effect on the date hereof, and (vi) will not conflict with, nor result in any breach in any of the provisions of or constitute a default under or result in the creation of any Lien except Permitted Encumbrances upon any asset of such Loan Party under the provisions of any material agreement, instrument, or other document to which such Loan Party is a party or by which it or its property is a party or by which it may be bound, including without limitation the Revolving Loan Documents;

(e) each Loan Party is duly formed or incorporated, as applicable, and in good standing under the laws of the state of its incorporation or formation, as applicable, and is good standing in such state and is qualified to do business in any state where the failure to be so qualified could reasonably be expected to result in a Material Adverse Effect;

(f) each of the representations and warranties made by any Loan Party in the Credit Agreement and the Other Documents, each as amended hereby, are true and correct in all material respects (except that such materiality qualifier shall not be applicable to any representations and warranties that are qualified or modified by materiality in the text thereof) as if made on the date of this Amendment and after giving effect to this Amendment and the

transactions contemplated hereby, except to the extent that any such representation or warranty is made as of an earlier and/or specified date, in which case such representation or warranty shall have been true and correct in all material respects (except that such materiality qualifier shall not be applicable to any representations and warranties that are qualified or modified by materiality in the text thereof)) as of such earlier or specified date; and

(g) after giving effect to the transactions contemplated by this Amendment, on the date of this Amendment, no Default or Event of Default exists or has occurred and is continuing.

6. Conditions Subsequent. Any failure by the Loan Parties to comply with the requirements of this Section 6 shall constitute an immediate Event of Default.

(a) On or prior to the date that is five (5) Business Days after the date hereof (or such later date as Agent shall agree to in writing in its sole discretion), the Loan Parties shall deliver to Agent appropriate loss payable endorsements, in form and substance satisfactory to Agent, naming Agent as mortgagee and/or lender loss payee (as applicable) as its interests may appear with respect to all insurance coverage of the Loan Parties referred to in clauses (i) and (iii) of Section 6.6 of the Credit Agreement, and providing (i) that all proceeds under such policies shall be payable to Agent, (ii) no such insurance shall be affected by any act or neglect of the insured or owner of the property described in such policy, and (iii) that such policy and loss payable clauses may not be cancelled, amended or terminated unless at least thirty (30) days prior written notice is given to Agent (or in the case of non-payment, at least ten (10) days prior written notice).

(b) On or prior to the date that is thirty (30) days after the date hereof (or such later date as Agent shall agree to in writing in its sole discretion), Quantum shall (i) transfer to New Guarantor all of its rights, titles and interests under, in and to (x) the LTO Program, the Recurring Royalty Revenue, all Format Development Agreements and any other contracts related to the foregoing, and (y) all Intellectual Property necessary to, and primarily used in, the LTO Program, and (ii) take all action that Agent may reasonably request in order to perfect Agent's Lien on, or to enable Agent to protect, exercise or enforce its rights in, the Collateral of such New Guarantor (including, but not limited to, executing and delivering an assignment of security interest in all of such New Guarantor's Intellectual Property), in each case in form and substance reasonably satisfactory to Agent.

(c) On or prior to January 31, 2019, each Loan Party shall, or shall cause Borrowing Agent on its behalf to, furnish to Agent audited financial statements of Quantum and its Subsidiaries, on a consolidated basis and unaudited financial statements of Quantum and its Subsidiaries, on a consolidating basis (which shall consist of a balance sheet and statements of income, stockholders' equity and cash flow), with respect to the fiscal year of Quantum ended March 31, 2018 and the balance sheet as at the end of such fiscal year, all prepared in accordance with GAAP, and in reasonable detail and audited by independent certified public accountants reasonably acceptable to Agent and certified without qualification (except (i) to the extent such qualification solely is due to the projected, potential or possible failure to comply with any covenant under the Credit Agreement or the Revolving Loan Agreement during the one year period following the date such certification is delivered, or (b) a "going concern" statement or qualification solely due to the impending maturity of the Obligations and the Revolving Loan Indebtedness), together with a completed Compliance Certificate.

(d) Each Loan Party, will, and will cause each of its Subsidiaries to, comply with each of the Milestones (as defined below) set forth in Section 7 on or prior to the applicable date for compliance indicated below with respect to such Milestone.

7. Repayment Transaction and Related Milestones. The Loan Parties have notified Agent and the Lenders that the Loan Parties have retained Armory Securities, LLC (the "Investment Banker") to pursue a refinancing or other transaction that results in the Payment in Full of all of the Obligations and the termination of the Credit Agreement and the Other Documents pursuant to the terms of a payoff letter reasonably acceptable to Agent (the "Repayment Transaction") with one or more Potential Repayment Transaction Parties (as defined below). The Loan Parties hereby (i) authorize the Investment Banker to meet with Agent, Lenders, and each of their respective advisors (in person and telephonically), and provide to Agent such information and reports as Agent may request from time to time, and (ii) agree, at all times, to (x) continue to retain the Investment Banker for the purpose of effectuating the Repayment Transaction, (y) not interfere with the Investment Banker or with the performance of the Investment Banker's responsibilities, and (z) diligently pursue the Repayment Transaction and take all commercially reasonable steps to consummate the Repayment Transaction. In furtherance of the foregoing, the Loan Parties, will, and will cause each of their Subsidiaries to, comply with each of the milestones (the "Milestones") set forth below. Failure by the Loan Parties to comply with any Milestone as of the date indicated below therefor (or such later date as Agent agrees to in writing in its sole discretion) will constitute an immediate Event of Default.

(a) List of Potential Repayment Transaction Parties. On or before August 24, 2018 (or such later date as Agent agrees to in writing in its sole discretion), Borrowers will provide to Agent a list of financial institutions and/or investors that Borrowers, in consultation with the Investment Bank, have identified as a potential financing source or transaction counterparty for the Repayment Transaction (each, a "Potential Repayment Transaction Party"); provided, that if negotiations cease with any Potential Repayment Transaction Party in respect of the Repayment Transaction, such financial institution or other third party shall no longer be considered a "Potential Repayment Transaction Party" for purposes of this Section 7.

(b) Distribution of "Teaser" and Non-Disclosure Agreement. On or before August 31, 2018 (or such later date as Agent agrees to in writing in its sole discretion), Borrowers will cause the Investment Bank to distribute a "teaser" regarding the Loan Parties assets and businesses, and a non-disclosure agreement with respect to the Repayment Transaction, in each case in form and substance reasonably acceptable to Agent, to each Potential Repayment Transaction Party.

(c) Establishment of Data Site. On or before August 31, 2018 (or such later date as Agent agrees to in writing in its sole discretion), Borrowers will cause the Investment Banker to (i) establish a data site with respect to the Repayment Transaction and (ii) permit each Potential Repayment Transaction Party who has executed a non-disclosure agreement in form and substance reasonably satisfactory to the Borrowers (an "NDA") to obtain access thereto.

(d) Distribution of CIM. On or before August 31, 2018 (or such later date as Agent agrees to in writing in its sole discretion), Borrowers will cause the Investment Banker to distribute a confidential information memorandum, in form and substance reasonably acceptable to Agent, with respect to the Repayment Transaction, to each Potential Repayment Transaction Party who has executed an NDA.

(e) Term Sheet. On or before October 15, 2018 (or such later date as Agent agrees to in writing in its sole discretion), Borrowers will provide to Agent copies of one or more non-binding term sheets (at least one of which (i) contains reasonable and market diligence and closing conditions for a transaction of the type which would, if consummated, result in the consummation of the Repayment Transaction, and (ii) sets forth the material economic terms of a proposed transaction which, if consummated, would be sufficient to result in the consummation of a Repayment Transaction ("Sufficient Terms")).

(f) Commitment Letter/Draft Documentation. On or before November 30, 2018 (or such later date as Agent agrees to in writing in its sole discretion), Borrowers will provide to Agent either (i) executed copies of at least one binding commitment letter, setting forth Sufficient Terms and a reasonable timeline for closing of a Repayment Transaction on or prior to January 31, 2019, or (ii) copies of draft documentation that has been provided to the Borrowers by a Potential Repayment Transaction Party containing Sufficient Terms.

8. Reaffirmation. Each Loan Party hereby ratifies and reaffirms (a) all of its payment and performance obligations, contingent or otherwise, under the Credit Agreement and each of the Other Documents to which it is a party, and (b) its grant to Agent of a security interest in the Collateral under the Credit Agreement and each of the Other Documents to which it is a party, in each case as amended by this Amendment or, with respect to the Other Documents, as otherwise amended or modified on of the date hereof.

9. Acknowledgments. To induce Agent and Lenders to enter into this Amendment, Borrowers and each other Loan Party acknowledge that:

(a) as of the date hereof, (i) Agent and Lenders have performed without default all obligations required of Agent and Lenders under the Credit Agreement and each of the Other Documents; and (ii) there are no disputes with or claims against Agent or Lenders, or any knowledge of any facts giving rise to any disputes or claims, related to any of the Credit Agreement or any of the Other Documents, including without limitation any disputes or claims, or knowledge of facts giving rise thereto, that involve a breach or violation on the part of Agent or any Lender of the terms and conditions of the Credit Agreement or any of the Other Documents;

(b) as of the date hereof, after giving effect to the borrowing of the First Delayed Draw Term Loan to be funded on the date hereof and application of all fees payable to Agent and Lenders pursuant to the terms of the Fee Letter on the date hereof, Borrowers are indebted to Lenders in respect of the Term Loan (including any PIK Interest that has been added to the outstanding principal amount of the Term A Loan) in the aggregate outstanding principal amount of $98,382,131.98, and all such Loans, together with interest accrued and accruing thereon, and all fees, costs, expenses and other charges now or hereafter payable by Borrowers to Agent and Lenders pursuant to the terms of the Credit Agreement, are unconditionally owing by Borrowers (and guaranteed by each of the Loan Parties) to Agent and Lenders, without offset, defense or counterclaim of any kind, nature or description; and

(c) no Borrower nor any other Loan Party has any valid defense to the enforcement of their respective obligations set forth in the Credit Agreement, the Other Documents or this Amendment, as applicable, by reason of any circumstance, action, cause or thing whatsoever which arises at any time on or prior to the day and date of this Amendment.

10. Governing Law. This Amendment and all matters relating hereto or arising herefrom (whether arising under contract law, tort law or otherwise) shall, in accordance with Section 5-1401 of the General Obligations Law of the State of New York, be governed by and construed in accordance with the laws of the State of New York.

11. Effect of this Agreement. Except as expressly amended pursuant hereto, no other changes or modifications to the Credit Agreement or any of the Other Documents are intended or implied, and in all other respects, the Credit Agreement and each of the Other Documents is hereby specifically ratified, restated and confirmed by all parties hereto as of the date of this Amendment. To the extent that any provision of the Credit Agreement or any of the Other Documents are inconsistent with the provisions of this Amendment, the provisions of this Amendment shall control.

12. Binding Effect. This Amendment shall bind and inure to the benefit of the respective successors and permitted assigns of each of the parties hereto.

13. Further Assurances. The Loan Parties shall execute and deliver such further documents and take such further action as may be reasonably requested by Agent to effectuate the provisions and purposes of this Amendment.

14. Counterparts; Electronic Signature. This Amendment may be executed in any number of and by different parties hereto on separate counterparts, all of which, when so executed, shall be deemed an original, but all such counterparts shall constitute one and the same agreement. Any signature delivered by a party by facsimile or electronic transmission (including email transmission of a .pdf image) shall be deemed to be an original signature hereto.

15. Release. In consideration of the agreements of Agent and Lenders contained herein and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, each Loan Party, on behalf of itself and its respective successors, assigns, and other legal representatives, hereby absolutely, unconditionally and irrevocably releases, remises and forever discharges Agent and Lenders, and their successors and assigns, and their present and former shareholders, affiliates, subsidiaries, divisions, predecessors, directors, officers, attorneys, employees, agents and other representatives (Agent, each Lender and all such

other Persons being hereinafter referred to collectively as the "Releasees" and individually as a "Releasee"), of and from all demands, actions, causes of action, suits, covenants, contracts, controversies, agreements, promises, sums of money, accounts, bills, reckonings, damages and any and all other claims, counterclaims, defenses, rights of set-off, demands and liabilities whatsoever (individually, a "Claim" and collectively, "Claims") of every name and nature, known or unknown, suspected or unsuspected, as of the date of this Amendment, both at law and in equity, which such Loan Party, or any of its respective successors, assigns, or other legal representatives may now or hereafter own, hold, have or claim to have against the Releasees or any of them for, upon, or by reason of any circumstance, action, cause or thing whatsoever which arises at any time on or prior to the day and date of this Amendment, in each case for or on account of, or in relation to, or in any way in connection with any of the Credit Agreement, any of the Other Documents or transactions thereunder or related thereto; provided that nothing contained herein shall release any Releasee from any Claims resulting from the gross negligence, willful misconduct or material breach of the Credit Agreement or any of the Other Documents by any Releasee as determined by a court of competent jurisdiction in a final non-appealable judgment or order or for any Claim arising with respect to obligations arising under this Amendment or the documents entered into as of the date hereof.

[Signature Page Follows]

IN WITNESS WHEREOF, the parties have entered into this Amendment as of the date first above written.

LOAN PARTIES:

QUANTUM CORPORATION, as Borrower

By: /s/ J. Michael Dodson
Name: J. Michael Dodson
Title: Chief Financial Officer

QUANTUM LTO HOLDINGS, LLC, as a Guarantor

By: /s/ J. Michael Dodson
Name: J. Michael Dodson
Title: Chief Financial Officer

AGENT AND LENDERS:

TCW ASSET MANAGEMENT COMPANY LLC, as Agent and a Lender

By: /s/ Suzanne Grosso
Name:
Title:

TCW DIRECT LENDING, LLC, as a Lender
By: TCW Asset Management Company LLC, its Investment Advisor

By: /s/ Suzanne Grosso
Name:
Title:

WEST VIRGINIA DIRECT LENDING LLC, as a Lender
By: TCW Asset Management Company LLC, its Investment Advisor

By: /s/ Suzanne Grosso
Name:
Title:

TCW SKYLINE LENDING, L.P., as a Lender
By: TCW Asset Management Company LLC, its Investment Advisor

By: /s/ Suzanne Grosso
Name:
Title:

Exhibit A

Amended Credit Agreement

(attached)

~~<Conformed through:>~~

~~<First Amendment to Term Loan Credit and Security Agreement, dated as of April 19, 2017 >~~

~~<Second Amendment to Term Loan Credit and Security Agreement, dated as of November 6, 2017>~~

~~<Third Amendment to Term Loan Credit and Security Agreement, dated as of February 14, 2018>~~

TERM LOAN CREDIT

AND

SECURITY AGREEMENT

TCW ASSET MANAGEMENT COMPANY LLC
(AS AGENT)

THE LENDERS PARTY HERETO
(AS LENDERS)

WITH

QUANTUM CORPORATION
(AS BORROWER)

October 21, 2016

~~<Conformed through:>~~

~~<First Amendment to Term Loan Credit and Security Agreement, dated as of April 19, 2017 >~~

~~<Second Amendment to Term Loan Credit and Security Agreement, dated as of November 6, 2017>~~

~~<Third Amendment to Term Loan Credit and Security Agreement, dated as of February 14, 2018>~~

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LIST OF EXHIBITS AND SCHEDULES

Exhibits

Schedules

~~<Conformed through:>~~

~~<First Amendment to Term Loan Credit and Security Agreement, dated as of April 19, 2017 >~~

~~<Second Amendment to Term Loan Credit and Security Agreement, dated as of November 6, 2017>~~

~~<Third Amendment to Term Loan Credit and Security Agreement, dated as of February 14, 2018>~~

TERM LOAN CREDIT
AND
SECURITY AGREEMENT

Term Loan Credit and Security Agreement, dated as of October 21, 2016, by and among QUANTUM CORPORATION, a Delaware corporation ("Quantum" and together with each Person joined hereto as a borrower from time to time, collectively, the "Borrowers" and each a "Borrower"), each Person joined hereto as a guarantor from time to time (collectively, the "Guarantors", and each a "Guarantor" and together with the Borrowers, collectively the "Loan Parties" and each a "Loan Party"), the financial institutions which are now or which hereafter become a party hereto (together with their respective successors and assigns, collectively, the "Lenders" and each individually a "Lender"), and TCW ASSET MANAGEMENT COMPANY LLC ("TCW"), in its capacity as agent for Lenders (in such capacity, together with its successors and assigns, the "Agent").

IN CONSIDERATION of the mutual covenants and undertakings set forth herein, the Loan Parties, Lenders and Agent hereby agree as follows:

I DEFINITIONS.

1.1 Accounting Terms. As used in this Agreement, the Other Documents or any certificate, report or other document made or delivered pursuant to this Agreement, accounting terms not defined in Section 1.2 hereof or elsewhere in this Agreement and accounting terms partly defined in Section 1.2 hereof to the extent not defined shall have the respective meanings given to them under GAAP; provided that, whenever such accounting terms are used for the purposes of determining compliance with financial covenants in this Agreement, such accounting terms shall be defined in accordance with GAAP; provided that, notwithstanding the foregoing, if there occurs after March 31, 2016 any change in GAAP that affects in any respect the calculation of any covenant set forth in this Agreement or the definition of any term defined under GAAP used in such calculations, and either Agent or Borrowing Agent so request, Agent and Borrowing Agent shall negotiate in good faith to amend the provisions of this Agreement that relate to the calculation of such covenants with the intent of having the respective positions of Agent, Lenders and the Loan Parties after such change in GAAP conform as nearly as possible to their respective positions as of the Closing Date, provided that, until any such amendments have been agreed upon, the covenants in this Agreement shall be calculated as if no such change in GAAP had occurred and the Loan Parties shall provide additional financial statements or supplements thereto, attachments to Compliance Certificates and/or calculations regarding financial covenants as Agent may reasonably require in order to provide the appropriate financial information required hereunder with respect to the Loan Parties both reflecting any applicable changes in GAAP and as necessary to demonstrate compliance with the financial covenants before giving effect to the applicable changes in GAAP. The term "without qualification" as used herein to refer to opinions or reports

provided by accountants shall mean an opinion or report that is (i) unqualified (other than qualifications pertaining solely to changes in GAAP to the extent any such change has no effect on the calculation of, or compliance with, any financial covenant contained herein), and (ii) does not include any explanation, supplemental comment, or other comment concerning the ability of the applicable Person to continue as a going concern or concerning the scope of the audit.

1.2 General Terms. For purposes of this Agreement the following terms shall have the following meanings:

"Accountants" shall have the meaning set forth in Section 9.7 hereof.

"Acquired Indebtedness" shall mean Indebtedness of a Person whose assets or Equity Interests are acquired by a Loan Party or any of its Subsidiaries in a Permitted Acquisition; provided that such Indebtedness: (a) was in existence prior to the date of such Permitted Acquisition, and (b) was not incurred in connection with, or in contemplation of, such Permitted Acquisition.

"Additional Reporting Liquidity Triggering Event" shall mean Liquidity is less than $35,000,000 on any Business Day.

"Additional Reporting Period" shall mean the period commencing upon the occurrence of an Additional Reporting Triggering Event and ending on the occurrence of an Additional Reporting Satisfaction Event.

"Additional Reporting Satisfaction Event" shall mean the earliest date on which all of the following conditions precedent have been satisfied: (a) if the Additional Reporting Triggering Event shall have occurred as a result of the occurrence of an Additional Reporting Liquidity Triggering Event, Liquidity is equal to or greater than $35,000,000 for thirty (30) consecutive days; and (b) if the Additional Reporting Triggering Event shall have occurred as a result of the occurrence of an Event of Default, such Event of Default shall have been waived in writing by Agent and all of the Lenders or the Required Lenders, as applicable.

"Additional Reporting Triggering Event" shall mean any of the following: (a) an Additional Reporting Liquidity Triggering Event has occurred or (b) an Event of Default has occurred and is continuing.

"Adjusted Funded Debt" shall mean, with respect to any Person on any date of determination, the result of (a) the Funded Debt of such Person on such date, minus (b) the Convertible Subordinated Debt of such Person outstanding on such date,minus (c) all Qualified Cash of such Person and all PNC Other Cash of such Person on such date in an aggregate amount of up to the Specified Adjusted Funded Debt Amount.

"Advances" shall have the meaning provided for in the Revolving Loan Credit Agreement.

"Affected Lender" shall have the meaning set forth in Section 3.11 hereof.

"Affiliate" of any Person shall mean (a) any Person which, directly or indirectly, is in control of, is controlled by, or is under common control with such Person, or (b) any Person who is a director, manager, member, managing member, general partner or officer (i) of such Person, (ii) of any Subsidiary of such Person or (iii) of any Person described in clause (a) above. For purposes of this definition, control of a Person shall mean the power, direct or indirect, (x) to vote ten percent (10%) or more of the Equity Interests having ordinary voting power for the election of directors of such Person or other Persons performing similar functions for any such Person, or (y) to direct or cause the direction of the management and policies of such Person whether by ownership of Equity Interests, contract or otherwise.

"Agent" shall have the meaning set forth in the preamble to this Agreement and shall include its successors and permitted assigns.

"Agreement" shall mean this Term Loan Credit and Security Agreement, as the same may be amended, modified, supplemented, renewed, restated or replaced from time to time.

"Alternate Source" shall have the meaning set forth in the definition of "Federal Funds Open Rate".

"Anti-Terrorism Laws" shall mean any Laws applicable to any Loan Party relating to terrorism, trade sanctions programs and embargoes, import/export licensing, money laundering or bribery, and any regulation, order, or directive promulgated, issued or enforced pursuant to such Laws, all as amended, modified, supplemented or replaced from time to time.

"Applicable Law" shall mean all laws, rules and regulations applicable to the Person, conduct, transaction, covenant, Other Document or contract in question, including all applicable common law and equitable principles, all provisions of all applicable state, federal and foreign constitutions, statutes, rules, regulations, treaties, directives and orders of any Governmental Body, and all orders, judgments and decrees of all courts and arbitrators.

~~<"Applicable Margin" shall mean the applicable rate per annum corresponding to the applicable Senior Net Leverage Ratio, all as set forth in the following table:>~~

~~*Senior Net Leverage Ratio*~~	~~*Prime Rate Loans*~~	~~*LIBOR Rate Loans*~~
~~> 3.00x~~	~~7.25%~~	~~8.25%~~
~~> 2.50x, but < 3.00x~~	~~6.75%~~	~~7.75%~~
~~>2.00x, but < 2.50x~~	~~6.25%~~	~~7.25%~~
~~<2.00x~~	~~6.00%~~	~~7.00%~~

~~<The>~~"Applicable Margin~~< shall be adjusted quarterly, to the extent applicable, as of the first Business Day of the month following the date on which financial statements are required to be delivered pursuant to Section 9.8 hereof (including with respect to the last fiscal quarter of each fiscal year) after the end of each related fiscal quarter based on the Senior Net Leverage Ratio as of the last day of such fiscal quarter. Notwithstanding the foregoing, (a) until the first Business Day of the month following the date on which financial statements for the fiscal quarter ending March 31, 2019 are required to be delivered pursuant to Section 9.8~~

~~hereof, the Applicable Margin shall be (i>~~" shall mean (a) 7.25% per annum with respect to Prime Rate Loans and (~~<ii>~~b) 8.25% per annum with respect to LIBOR Rate Loans~~<, (b) if Borrowers fail to deliver the financial statements required by Section 9.8 hereof, and the related Compliance Certificate required by Section 9.8 hereof, by the respective date required thereunder after the end of any related fiscal quarter, if requested in writing by Agent or Required Lenders, the Applicable Margin shall be the rates corresponding to the Senior Net Leverage Ratio of > 3.00x in the foregoing table until such financial statements and Compliance Certificate are delivered (plus, if requested by Agent or Required Lenders, the Default Rate), (c) no reduction to the Applicable Margin shall become effective at any time when an Event of Default has occurred and is continuing; provided, that such a reduction shall occur on the date all such Events of Default have been cured or waived in accordance with Section 16.2(b) hereof, and (d)>~~. Notwithstanding the foregoing, during the PIK Interest Period, the Applicable Margin shall be increased by an amount equal to the PIK Interest Rate, with 100% of such increase being paid in kind by adding such interest to the outstanding principal amount of the Term A Loan ("PIK Interest").

~~<If, as a result of any restatement of or other adjustment to the financial statements of the Loan Parties or for any other reason, Agent determines that (a) the Senior Net Leverage Ratio as calculated by Borrowers as of any applicable date was inaccurate and (b) a proper calculation of the Senior Net Leverage Ratio would have resulted in different pricing for any period, then (i) if the proper calculation of the Senior Net Leverage Ratio would have resulted in higher pricing for such period, Borrowers shall automatically and retroactively be obligated to pay to Agent, for the benefit of the applicable Lenders, promptly on demand by Agent, an amount equal to the excess of the amount of interest that should have been paid for such period over the amount of interest actually paid for such period; and (ii) if the proper calculation of the Senior Net Leverage Ratio would have resulted in lower pricing for such period, neither Agent nor any Lender shall have any obligation to repay any interest or fees to Borrowers; provided, that, if as a result of any restatement or other event a proper calculation of the Senior Net Leverage Ratio would have resulted in higher pricing for one or more periods and lower pricing for one or more other periods (due to the shifting of income or expenses from one period to another period or any similar reason), then (x) the amount payable by Borrowers pursuant to clause (i) above shall be based upon the excess, if any, of the amount of interest that should have been paid for all applicable periods over the amount of interest paid for all such periods and (y) the amount credited to Borrowers pursuant to clause (ii) above shall be based upon the excess, if any, of the amount of interest paid by Borrowers for all applicable periods over the amount of interest that should have been paid for all such periods.>~~

"Approvals" shall have the meaning set forth in Section 5.7(b) hereof.

"Approved Electronic Communication" shall mean each notice, demand, communication, information, document and other material transmitted, posted or otherwise made or communicated by e-mail, e-fax, the Pinnacle System, or any other equivalent electronic service agreed to by Agent, whether owned, operated or hosted by Agent, any Lender, any of their Affiliates or any other Person, that any party is obligated to, or otherwise chooses to, provide to Agent pursuant to this Agreement or any Other Document, including any financial statement,

financial and other report, notice, request, certificate and other information material;provided that Approved Electronic Communications shall not include any notice, demand, communication, information, document or other material that Agent specifically instructs a Person to deliver in physical form.

"Assignment Agreement" shall mean a document in the form of Exhibit 16.3 hereto or such other form acceptable to Agent.

"Audit Committee" shall mean the audit committee of Quantum.

"Average Liquidity" shall mean, for any period of determination, the quotient obtained by dividing (a) the sum of Liquidity for each day during the applicable period ending on the day immediately preceding such date of determination, by (b) the number of days in such period.

"Bail-In Action" shall mean the exercise of any Write-Down and Conversion Powers by the applicable EEA Resolution Authority in respect of any liability of an EEA Financial Institution.

"Bail-In Legislation" shall mean, with respect to any EEA Member Country implementing Article 44 of Directive 2014/59/EU of the European Parliament and of the Council of the European Union, the implementing law for such EEA Member Country from time to time which is described in the EU Bail-In Legislation Schedule.

"Blocked Account Banks" shall have the meaning set forth in Section 4.8(h) hereof.

"Blocked Accounts" shall have the meaning set forth in Section 4.8(h) hereof.

"Borrower" or "Borrowers" shall have the meaning set forth in the preamble to this Agreement and shall extend to all permitted successors and assigns of such Persons.

"Borrower Account" shall have the meaning set forth in Section 2.2(b) hereof.

"Borrowing Agent" shall mean Quantum.

"Borrowing Base Certificate" shall have the meaning provided for in the Revolving Loan Credit Agreement.

"Business Day" shall mean any day other than Saturday or Sunday or a legal holiday on which commercial banks are authorized or required by law to be closed for business in East Brunswick, New Jersey and, if the applicable Business Day relates to any LIBOR Rate Loans, such day must also be a day on which dealings are carried on in the London interbank market.

"Capital Expenditures" shall mean (a) expenditures made or liabilities incurred for the acquisition of any fixed assets or improvements (or of any replacements or substitutions thereof or additions thereto) which have a useful life of more than one year and which, in accordance with GAAP, would be classified as capital expenditures and (b) purchases of Service Inventory and net transfers of Manufacturing Inventory into Service Inventory. Capital Expenditures for any period shall include the principal portion of Capitalized Lease Obligations paid in such period.

"Capitalized Lease Obligation" shall mean, with respect to any Person, obligations of such Person under a Capital Lease.

"Capital Lease" shall mean a lease that is required to be capitalized for financial reporting purposes in accordance with GAAP.

"Cash Dominion Liquidity Triggering Event" shall mean Liquidity is less than the following amount on any Business Day: (a) for the period from the Closing Date until the date of satisfaction of clause (c) of the Specified Convertible Subordinated Debt Condition, $30,000,000, (b) for the period from the date of the satisfaction of clause (c) of the Specified Convertible Subordinated Debt Condition to March 31, 2018, $22,000,000, and (c) from and after April 1, 2018, $30,000,000.

"Cash Dominion Period" shall mean the period commencing upon the occurrence of a Cash Dominion Triggering Event and ending on the occurrence of a Cash Dominion Satisfaction Event.

"Cash Dominion Satisfaction Event" shall mean the earliest date on which all of the following conditions precedent have been satisfied: (a) if the Cash Dominion Triggering Event shall have occurred as a result of the occurrence of a Cash Dominion Liquidity Triggering Event, Liquidity is equal to or greater than the following amount for thirty (30) consecutive days: (i) for the period from the Closing Date until the date of satisfaction of clause (c) of the Specified Convertible Subordinated Debt Condition, $30,000,000, (ii) for the period from the date of the satisfaction of clause (c) of the Specified Convertible Subordinated Debt Condition to March 31, 2018, $22,000,000, and (iii) from and after April 1, 2018, $30,000,000; and (b) if the Cash Dominion Triggering Event shall have occurred as a result of the occurrence of an Event of Default, such Event of Default shall have been waived in writing by Agent and all of the Lenders or the Required Lenders, as applicable.

"Cash Dominion Triggering Event" shall mean any of the following: (a) a Cash Dominion Liquidity Triggering Event has occurred or (b) an Event of Default has occurred and is continuing.

"Cash Equivalents" shall mean (a) marketable direct obligations issued by, or unconditionally guaranteed by, the United States or issued by any agency thereof and backed by the full faith and credit of the United States, in each case maturing within one year from the date of acquisition thereof, (b) marketable direct obligations issued or fully guaranteed by any state of the United States or any political subdivision of any such state or any public instrumentality thereof maturing within one year from the date of acquisition thereof and, at the time of acquisition, having one of the two highest ratings obtainable from either S&P or Moody's, (c) commercial paper maturing no more than 270 days from the date of creation thereof and, at the time of acquisition, having a rating of at least A-1 from S&P or at least P-1 from Moody's, (d) certificates of deposit, time deposits, overnight bank deposits or bankers' acceptances maturing within one year from the date of acquisition thereof issued by any bank

organized under the laws of the United States or any state thereof or the District of Columbia or any United States branch of a foreign bank having at the date of acquisition thereof combined capital and surplus of not less than $500,000,000, (e) deposit accounts maintained with (i) any bank that satisfies the criteria described in clause (d) above, or (ii) any other bank organized under the laws of the United States or any state thereof so long as the full amount maintained with any such other bank is insured by the Federal Deposit Insurance Corporation, (f) repurchase obligations of any commercial bank satisfying the requirements of clause (d) of this definition or recognized securities dealer having combined capital and surplus of not less than $500,000,000, having a term of not more than seven days, with respect to securities satisfying the criteria in clauses (a) or (d) above, (g) debt securities with maturities of six months or less from the date of acquisition backed by standby letters of credit issued by any commercial bank satisfying the criteria described in clause (d) above, and (h) Investments in money market funds substantially all of whose assets are invested in the types of assets described in clauses (a) through (g) above.

"Cash Management Policy" shall mean that certain Domestic Investment Policy of Quantum, as approved by its board of directors and as in effect on the Closing Date.

"Cash Management Products and Services" shall mean agreements or other arrangements entered into by a Loan Party in the Ordinary Course of Business for the following products or services: (a) credit cards; (b) credit card processing services; (c) debit cards and stored value cards; (d) commercial cards; (e) ACH transactions; or (f) cash management and treasury management services and products, including without limitation controlled disbursement accounts or services, lockboxes, automated clearinghouse transactions, overdrafts, interstate depository network services.

"CEA" shall mean the Commodity Exchange Act (7 U.S.C. §1 et seq.), as amended from time to time, and any successor statute.

"CERCLA" shall mean the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, 42 U.S.C. §§9601 et seq.

"Change in Law" shall mean the occurrence, after the Closing Date, of any of the following: (a) the adoption or taking effect of any Applicable Law; (b) any change in any Applicable Law or in the administration, implementation, interpretation or application thereof by any Governmental Body; or (c) the making or issuance of any request, rule, guideline or directive (whether or not having the force of law) by any Governmental Body; provided that notwithstanding anything herein to the contrary, (x) the Dodd-Frank Wall Street Reform and Consumer Protection Act and all requests, rules, regulations, guidelines, interpretations or directives thereunder or issued in connection therewith (whether or not having the force of Applicable Law) and (y) all requests, rules, regulations, guidelines, interpretations or directives promulgated by the Bank for International Settlements, the Basel Committee on Banking Supervision (or any successor or similar authority) or the United States or foreign regulatory authorities (whether or not having the force of law), in each case pursuant to Basel III, shall in each case be deemed to be a Change in Law regardless of the date enacted, adopted, issued, promulgated or implemented.

"Change of Control" shall mean:

(a) any person or group of persons (within the meaning of Section 13(d) or 14(a) of the Exchange Act) shall have acquired beneficial ownership (within the meaning of Rule 13d-3 promulgated by the SEC under the Exchange Act) of thirty-five percent (35%) or more of the voting Equity Interests of Quantum;

(b) any person or group of persons shall have acquired, by contract or otherwise, or shall have entered into a contract or arrangement that, upon consummation thereof, will result in its or their acquisition of the power to exercise, directly or indirectly, a controlling influence over the management or policies of Quantum or control over the Equity Interests of such persons entitled to vote for members of the board of directors of Quantum (on a fully diluted basis and taking into account all such Equity Interests that such person or group of persons has the right to acquire pursuant to any option right) representing thirty-five percent (35%) or more of the combined voting power of such Equity Interests;

(c) the failure of Quantum to beneficially own, directly or indirectly (on a fully diluted basis), one hundred percent (100%) of the voting Equity Interests of any other Loan Party; or

(d) while the Convertible Subordinated Debt is outstanding, the occurrence of a "Change in Control" under (and as such term is defined in) the Convertible Subordinated Debt Documents.

"Charges" shall mean all taxes, charges, fees, imposts, levies or other assessments, including all net income, gross income, gross receipts, sales, use, ad valorem, value added, transfer, franchise, profits, inventory, capital stock, license, withholding, payroll, employment, social security, unemployment, excise, severance, stamp, occupation and property taxes, custom duties, fees, assessments, liens, claims and charges of any kind whatsoever, together with any interest and any penalties, additions to tax or additional amounts, imposed by any taxing authority or other Governmental Body, domestic or foreign (including the PBGC or any environmental agency or superfund), upon the Collateral, any Loan Party or any of its Subsidiaries or Affiliates.

"CIP Regulations" shall have the meaning set forth in Section 14.12 hereof.

"Claims" shall have the meaning set forth in Section 16.5 hereof.

"Closing Date" shall mean the date of this Agreement.

"Closing Date Projections" shall have the meaning set forth in Section 5.5(b) hereof.

"Code" shall mean the Internal Revenue Code of 1986, as the same may be amended, modified or supplemented from time to time, and any successor statute of similar import, and the rules and regulations thereunder, as from time to time in effect.

"Collateral" shall mean and include all right, title and interest of each Loan Party in all of the following property and assets of such Loan Party, in each case whether now existing or hereafter arising or created and whether now owned or hereafter acquired and wherever located:

(a) all Receivables and all supporting obligations relating thereto;

(b) all Equipment and fixtures;

(c) all general intangibles (including all payment intangibles and all software) and all supporting obligations related thereto;

(d) all Inventory;

(e) all Subsidiary Stock, securities, Investment Property, and financial assets;

(f) all Real Property;

(g) all Leasehold Interests;

(h) all contract rights, rights of payment which have been earned under a contract rights, chattel paper (including electronic chattel paper and tangible chattel paper), commercial tort claims (whether now existing or hereafter arising); documents (including all warehouse receipts and bills of lading), deposit accounts, goods, instruments (including promissory notes), letters of credit (whether or not the respective letter of credit is evidenced by a writing) and letter-of-credit rights, cash, certificates of deposit, insurance proceeds (including hazard, flood and credit insurance), security agreements, eminent domain proceeds, condemnation proceeds, tort claim proceeds and all supporting obligations;

(i) all ledger sheets, ledger cards, files, correspondence, records, books of account, business papers, computers, computer software (owned by any Loan Party or in which it has an interest), computer programs, tapes, disks and documents, including all of such property relating to the property described in clauses (a) through and including (h) of this definition; and

(j) all proceeds and products of the property described in clauses (a) through and including (i) of this definition, in whatever form. It is the intention of the parties that if Agent shall fail to have a perfected Lien in any particular property or assets of any Loan Party for any reason whatsoever, but the provisions of this Agreement and/or of the Other Documents, together with all financing statements and other public filings relating to Liens filed or recorded by Agent against the Loan Parties, would be sufficient to create a perfected Lien in any property or assets that such Loan Party may receive upon the Disposition of such particular property or assets, then all such "proceeds" of such particular property or assets shall be included in the Collateral as original collateral that is the subject of a direct and original grant of a security interest as provided for herein and in the Other Documents (and not merely as proceeds (as defined in Article 9 of the Uniform Commercial Code) in which a security interest is created or arises solely pursuant to Section 9-315 of the Uniform Commercial Code).

Notwithstanding the forgoing, Collateral shall not include any Excluded Property.

"Commitment" shall mean, as to any Lender, such Lender's commitment to make ~~<the Term A Loan, the Original>~~First Delayed Draw Term ~~<Loan or the Incremental>~~Loans, Second Delayed Draw Term ~~<Loan>~~Loans or Third Delayed Draw Term Loans, as applicable, under this Agreement. The initial amount of each Lender's commitment to make ~~<the Term A Loan, the Original>~~First Delayed Draw Term ~~<Loan or the Incremental>~~Loans, Second Delayed Draw Term ~~<Loan>~~Loans or Third Delayed Draw Term Loans, as applicable, is set forth in the Schedule 1.1 hereto.

"Compliance Certificate" shall mean a compliance certificate substantially in the form of Exhibit 1.2(b) hereto to be signed by the Chief Financial Officer, Treasurer or Controller of Borrowing Agent.

"Consents" shall mean all filings and all licenses, permits, consents, approvals, authorizations, qualifications and orders of Governmental Bodies and other third parties, domestic or foreign, necessary to carry on any Loan Party's business or necessary (including to avoid a conflict or breach under any agreement, instrument, other document, license, permit or other authorization) for the execution, delivery or performance of this Agreement, the Other Documents, or the Revolving Loan Documents, including any Consents required under all applicable federal, state or other Applicable Law.

"Control Agreement" means a control agreement, in form and substance reasonably satisfactory to Agent, executed and delivered by a Loan Party, Agent, Revolving Loan Agent and the applicable depository bank (with respect to a Blocked Account or Depository Account) or securities intermediary (with respect to a securities account).

"Controlled Group" shall mean, at any time, each Loan Party and all members of a controlled group of corporations and all trades or businesses (whether or not incorporated) under common control and all other entities which, together with any Loan Party, are treated as a single employer under Section 414 of the Code.

"Convertible Subordinated Debt" shall mean the Indebtedness owing by Borrowers to the "Holders" (as defined in Convertible Trust Indenture) pursuant to the Convertible Subordinated Debt Documents.

"Convertible Subordinated Debt Documents" shall mean, collectively, the following (as the same may be amended, modified, supplemented, renewed, restated or replaced from time to time in accordance with the terms hereof and thereof): (a) the Convertible Trust Indenture, including all of the exhibits and schedules thereto, and (b) all of the other agreements, documents and instruments executed and delivered in connection therewith or related to the Convertible Subordinated Debt.

"Convertible Subordinated Debt Maturity Date" shall mean November 15, 2017.

"Convertible Subordinated Debt Payment Conditions" shall mean, on any applicable date of determination: (a) Liquidity shall be equal to or greater than $20,000,000 on such date, and (b) no Event of Default shall exist or shall have occurred and be continuing on such date.

"Convertible Trust Indenture" shall mean the Indenture, dated as of October 31, 2012, between Quantum and U.S. Bank National Association, as trustee.

"Covered Entity" shall mean (a) each Loan Party, each Subsidiary of each Loan Party, all Guarantors and all pledgors of Collateral and (b) each Person that, directly or indirectly, is in control of a Person described in clause (a) above. For purposes of this definition, control of a Person shall mean the direct or indirect (x) ownership of, or power to vote, twenty-five percent (25%) or more of the issued and outstanding equity interests having ordinary voting power for the election of directors of such Person or other Persons performing similar functions for such Person, or (y) power to direct or cause the direction of the management and policies of such Person whether by ownership of equity interests, contract or otherwise.

"Currency Exchange Rate" means, with respect to a currency, the rate determined by Agent as the spot rate for the purchase of such currency with another currency.

"Customer" shall mean and include the account debtor with respect to any Receivable and/or the prospective purchaser of goods, services or both with respect to any contract or contract right, and/or any party who enters into or proposes to enter into any contract or other arrangement with any Loan Party, pursuant to which such Loan Party is to deliver any personal property or perform any services.

"Debt Payments" shall mean for any Person for any period, all cash actually expended by such Person to make:

(a) Interest Expense for such period (including, without limitation, interest payments on any Term Loans hereunder or any other Indebtedness but excluding interest paid-in-kind, amortization of financing fees and other non-cash Interest Expense), plus

(b) regularly scheduled principal payments made by such Person during such period in respect of the Term Loan and, to the extent accompanied with a permanent reduction of the applicable underlying commitment, regularly scheduled principal payments made by such Person during such period in respect of any other Indebtedness for borrowed money (which shall exclude, for the avoidance of doubt, the repayment of the Convertible Subordinated Debt on the Convertible Subordinated Debt Maturity Date), plus

(c) regularly scheduled principal payments in respect of Capitalized Lease Obligations during such period,plus

(d) payments of any fees, commissions and charges payable under this Agreement, any of the Other Documents or any of the Revolving Loan Documents during such period.

"Default" shall mean an event, circumstance or condition which, with the giving of notice or passage of time or both, would constitute an Event of Default.

"Default Rate" shall have the meaning set forth in Section 3.1 hereof.

"Defaulting Lender" shall mean any Lender that: (a) has failed, within two (2) Business Days of the date required to be funded or paid, to (i) fund any portion of its Term Loans or (ii) pay over to Agent or any Lender any other amount required to be paid by it hereunder, unless, in the case of clause (i) above, such Lender notifies Agent in writing that such failure is the result of such Lender's good faith determination that a condition precedent to funding (specifically identified and including a particular Default or Event of Default, if any) has not been satisfied; (b) has notified the Loan Parties or Agent in writing, or has made a public statement to the effect, that it does not intend or expect to comply with any of its funding obligations under this Agreement (unless such writing or public statement indicates that such position is based on such Lender's good faith determination that a condition precedent (specifically identified and including a particular Default or Event of Default, if any) to funding a loan under this Agreement cannot be satisfied) or generally under other agreements in which it commits to extend credit; (c) has failed, within two (2) Business Days after request by Agent, acting in good faith, to provide a certification in writing from an authorized officer of such Lender that it will comply with its obligations (and is financially able to meet such obligations) to fund Term Loans, provided that such Lender shall cease to be a Defaulting Lender pursuant to this clause (c) upon Agent's receipt of such certification in form and substance satisfactory to Agent; or (d) has become the subject of an Insolvency Event.

"Depository Accounts" shall have the meaning set forth in Section 4.8(h) hereof.

"Delayed Draw Funding Conditions" shall mean, with respect to ~~<the>~~each First Delayed Draw Term Loan, each Second Delayed Draw Term Loan and each Third Delayed Draw Term Loan, the following: (a) Borrowing Agent shall have given written notice to Agent of the proposed funding of ~~<the>~~such First Delayed Draw Term Loan, such Second Delayed Draw Term Loan or such Third Delayed Draw Term Loan, as applicable, not later than 11:00 a.m. (Chicago time), at least ten Business Days prior to the proposed applicable Delayed Draw Term Loan Draw Date (or by such later time as Agent may agree, in its sole discretion); provided that Borrowing Agent and Agent agree and acknowledge that delivery and execution of the ~~<Second>~~Fourth Amendment constitutes sufficient notice that the proposed funding of the first First Delayed Draw Term Loan shall be ~~<November 8>~~August 23, ~~<2017>~~2018, (b) if the applicable Delayed Draw Term Loan Draw Date is after September 30, 2018, Borrowers shall have provided Agent with written confirmation, supported by reasonably detailed calculations, that the EBITDA of Quantum and its Subsidiaries, on a consolidated basis, for the fiscal quarter period ending on the last day of the most recently ended fiscal quarter is not less than the amount set forth in Section 6.5(b) for such fiscal quarter, (c) Borrowers shall have provided Agent with written confirmation, supported by reasonably detailed calculations, that on a pro forma basis after giving effect to funding of ~~<the>~~such First Delayed Draw Term Loan~~< and the repayment of the Convertible Subordinated Debt, the Loan Parties >~~, such Second Delayed Draw Term Loan or such Third Delayed Draw Term Loan, as applicable, Quantum and its Subsidiaries, on a consolidated basis, are projected to be in compliance with each of the financial covenants set forth in Section 6.5 hereof for ~~<the>~~each (4) fiscal ~~<quarters (on a quarter-by-quarter basis) immediately following the>~~quarter period ended after the proposed applicable Delayed Draw Term Loan Draw Date prior to the Maturity Date, and (~~<c>~~d) immediately before and after giving effect to the funding of ~~<the>~~such First Delayed Draw Term Loan, such Second Delayed Draw Term Loan or such Third Delayed Draw Term Loan, as applicable, no Default or Event of Default shall have occurred and be continuing.

"Delayed Draw Term Loan" shall ~~have the meaning set forth in Section 2.1(a)(ii) hereof~~mean, collectively, the First Delayed Draw Term Loans, the Second Delayed Draw Term Loans and the Third Delayed Draw Term Loans, in each case when and to the extent funded.

"Delayed Draw Term Loan Amount" shall mean an amount equal to $~~<40,000,000>~~20,000,000.

~~<"Delayed Draw Term Loan Commitment Completion Date" shall mean the date on which the Lenders have made to Borrowers the Delayed Draw Term Loan in accordance with Section 2.1(a)(ii) hereof.>~~

"Delayed Draw Term Loan Commitment Percentage" shall mean, as to any Lender, (a) on any date prior to the Delayed Draw Term Loan ~~<Draw>~~Commitment Termination Date, the percentage set forth opposite such Lender's name on Schedule 1.1 hereof under the column "Delayed Draw Term Loan Commitment Percentage" (if such Lender's name is not so set forth thereon, then such percentage for such Lender shall be deemed to be zero) (or, in the case of any Lender that became party to this Agreement after the ~~<Closing>~~Fourth Amendment Effective Date, the Delayed Draw Term Loan Commitment Percentage of such Lender as set forth in the applicable Assignment Agreement) and (b) on any date following the Delayed Draw Term Loan ~~<Draw>~~Commitment Termination Date, the percentage equal to the principal amount of the Delayed Draw Term Loan held by such Lender on such date divided by the aggregate principal amount of the Delayed Draw Term Loan on such date.

~~<">~~Delayed Draw Term Loan Commitment Period" shall mean the period commencing on the ~~<Closing >~~Date and ending on the Delayed Draw Term Loan Commitment Termination Date.

"Delayed Draw Term Loan Commitment Termination Date" shall mean the ~~<earliest>~~earlier of (a) the date ~~<of satisfaction of the Specified Convertible Subordinated Debt Condition, (b) the date that the>~~that the Commitments of the Lenders to make First Delayed Draw Term ~~<Loan Amount has>~~Loans, Second Delayed Draw Term Loans and Third Delayed Draw Term Loans have been reduced to zero~~<, (c) the Maturity Date,>~~ and (~~<d>~~b) ~~<the Convertible Subordinated Debt Maturity Date>~~December 31, 2018.

"Delayed Draw Term Loan Draw Date" shall ~~<have the meaning set forth in Section 2.1(a)(ii) hereof>~~mean a First Delayed Draw Term Loan Draw Date, a Second Delayed Draw Term Loan Draw Date or a Third Delayed Draw Term Loan Draw Date, as applicable

"Designated Lender" shall have the meaning set forth in Section 16.2(d) hereof.

"Disposition" shall mean, with respect to any particular property or asset (other than cash or Cash Equivalents), the sale, lease, license, exchange, transfer or other disposition of such property or asset, and to "Dispose" of any particular property or asset shall mean to sell, lease, license, exchange, transfer or otherwise dispose of such property or asset.

"Disqualified Equity Interests" shall mean any Equity Interests which, by their terms (or by the terms of any security or other Equity Interests into which they are convertible or for which they are exchangeable), or upon the happening of any event or condition, (a) mature or are mandatorily redeemable, pursuant to a sinking fund obligation or otherwise, or are redeemable at the option of the holder thereof, in whole or in part, on or prior to the date that is one hundred eighty (180) days following the Maturity Date (excluding any provisions requiring redemption upon a "change of control" or similar event; provided that such "change of control" or similar event results in the Payment in Full of the Obligations), (b) are convertible into or exchangeable for (i) debt securities or (ii) any Equity Interests referred to in (a) above, in each case, at any time on or prior to the date that is one hundred eighty (180) days following the Maturity Date, or (c) are entitled to receive scheduled dividends or distributions in cash prior to the time that the Obligations are Paid in Full.

"Document" shall have the meaning given to the term "document" in the Uniform Commercial Code.

"Dollar" and the sign "$" shall mean lawful money of the United States of America.

"Dollar Equivalent" means, as of any date of determination, (a) as to any amount denominated in Dollars, the amount thereof as of such date of determination, and (b) as to any amount denominated in another currency, the equivalent amount thereof in Dollars as determined by Agent on the basis of the Currency Exchange Rate for the purchase of Dollars with such currency in effect on such date of determination.

"EBITDA" shall mean, for any period, with respect to Quantum and its Subsidiaries, on a consolidated basis, the result of:

(a) net income (or loss) for such period, minus

(b) without duplication, the sum of the following amounts for such period (in each case to the extent included in determining net income (or loss) for such period):

(i) tax credits based on income, profits or capital, including federal, foreign, state, franchise and similar taxes,

(ii) extraordinary, unusual, or non-recurring revenue, income and gains,

(iii) interest income,

(iv) income arising by reason of the application of FAS 141R,

(v) gains attributable to Investments in joint ventures and partnerships to the extent not distributed in cash to Quantum and its Subsidiaries,

(vi) cash or non-cash exchange, translation or performance gains relating to any Interest Rate Hedge or Foreign Currency Hedge, and

(vii) reserve reversals of production Inventory in the Permitted Discretion of Agent based on excess or out of period adjustments in an amount not to exceed $2,000,000 in any fiscal year, plus

(c) without duplication, the sum of the following amounts for such period (in each case to the extent included in determining net income (or loss) for such period):

(i) (x) extraordinary, unusual, or non-recurring non-cash costs, non-cash expenses and non-cash losses, and (y) extraordinary, unusual, or non-recurring cash costs, cash expenses and cash losses in an aggregate amount not to exceed $~~<3,000,000>~~750,000 in any fiscal ~~<year>~~quarter commencing with the fiscal ~~<year>~~quarter commencing on ~~<April>~~July 1, 2018,

(ii) Interest Expense,

(iii) cash or non-cash exchange, translation, or performance losses relating to any Interest Rate Hedge or Foreign Currency Hedge,

(iv) tax expense based on income, profits or capital, including federal, foreign, state, franchise and similar taxes (and for the avoidance of doubt, specifically excluding any sales taxes or any other taxes held in trust for a Governmental Body),

(v) depreciation and amortization expenses,

(vi) service parts lower of cost or market adjustment up to an aggregate amount not to exceed $~~<8,000,000>~~2,000,000 in any fiscal ~~<year>~~quarter,

(vii) reasonable transaction costs and expenses (whether or not capitalized through amortization) incurred in connection with this Agreement and the Revolving Loan Agreement on or prior to the Closing Date up to an aggregate amount not to exceed $5,000,000,

~~<(viii) >~~(viii) reasonable transaction costs and expenses (whether or not capitalized through amortization) (A) incurred in connection with this Agreement and the Revolving Loan Agreement (1) during the period from the Closing Date through and including the fiscal year ending on or about March 31, 2017 up to an aggregate amount not to exceed $750,000, and (2) in addition to, but without duplication of, the transaction costs and expenses described in clauses (B) and (C) below, during any fiscal year ending thereafter up to an aggregate amount not to exceed $500,000 in any fiscal year; (B) actually incurred in connection with the Second Amendment, the Third Amendment and the Fourth Amendment and the corresponding amendments to the Revolving Loan Agreement and the Intercreditor Agreement ~~<up to an aggregate amount not to exceed $1,500,000>~~(other than, for the avoidance of doubt, any costs and expenses incurred in connection with the Repayment Transaction (as defined in the Fourth Amendment)); and (C) actually incurred in connection with the warrants issued to the Lenders in connection with the Second Amendment, the Third Amendment and the Fourth Amendment,

(ix) amortization or write-off of capitalized debt issuance costs arising with respect to the Loan Parties' existing credit facility under the Existing Credit Agreement up to an aggregate amount not to exceed $150,000,

(x) amortization or write-off of capitalized debt issuance costs arising with respect to any permitted Refinancing Indebtedness hereunder or the repayment of the Convertible Subordinated Debt and permitted Refinancing Indebtedness in respect thereof up to an aggregate amount not to exceed $1,000,000 in any fiscal year,

(xi) reasonable fees, costs and expenses incurred prior to the Maturity Date in connection with cash restructuring charges up to (A) the amount of such restructuring charges actually incurred through October 31, 2017 and (B) an aggregate amount not to exceed $15,000,000 during the Term for such restructuring charges incurred after October 31, 2017, in each case, to the extent (1) the realization of the savings to Quantum and its Subsidiaries directly arising from such restructuring charges are reasonably expected by Borrowers to commence within 12 months of any such restructuring charge and (2) Agent has received evidence, in form and substance reasonably satisfactory to Agent, supporting such expectations,

(xii) reasonable fees, costs and expenses incurred prior to the Maturity Date in connection with non-cash restructuring charges; provided, that to the extent any such non-cash charges in any period results in a cash payment in such period or in a subsequent period such cash charges shall be subject to the limitation set forth in clause (c)(xi) above

(xiii) non-cash compensation expenses (including deferred non-cash compensation expenses), or other non-cash expenses or charges, arising from the sale or issuance of Equity Interests, the granting of stock options, and the granting of stock appreciation rights and similar arrangements (including any repricing, amendment, modification, substitution, or change of any such Equity Interests, stock option, stock appreciation rights, or similar arrangements), minus the amount of any such expenses or charges when paid in cash to the extent not deducted in the computation of net income (or loss),

(xiv) expenses reimbursed in cash by a third Person pursuant to an indemnity or guaranty in favor of Quantum or any of its Subsidiaries to the extent such amounts are actually received by Quantum or any of its Subsidiaries during such period,

(xv) with respect to any Permitted Acquisition consummated after the Closing Date:

(A) out-of pocket costs, fees, charges or expenses paid by Quantum or any of its Subsidiaries to any Person for services performed by such Person in connection with such Permitted Acquisition to the extent incurred on or within 180 days prior to the consummation of such Permitted Acquisition, (1) up to an aggregate amount for such Permitted Acquisition not to exceed the greater of (x) $1,500,000 and (y) 1.50% of the

purchase price of such Permitted Acquisition and (2) in any amount to the extent such costs, fees, charges or expenses in this clause (A) are paid with proceeds of new equity Investments in exchange for Equity Interests of Quantum contemporaneously made by current shareholders of Quantum;

(B) purchase accounting adjustments, including, without limitation, a dollar for dollar adjustment for that portion of revenue that would have been recorded in the relevant period had the balance of deferred revenue (unearned income) recorded on the closing balance sheet and before application of purchase accounting not been adjusted downward to fair value to be recorded on the opening balance sheet in accordance with GAAP purchase accounting rules; and

(C) non-cash adjustments in accordance with GAAP purchase accounting rules under FASB Statement No. 141R and EITF Issue No. 01-3, in the event that such an adjustment is required by Quantum's independent auditors, in each case, as determined in accordance with GAAP,

(xvi) non-cash losses attributable to Investments in joint ventures and partnerships,

(xvii) non-cash losses on sales of assets or write-downs of assets,

(xviii) without duplication of any other add-back herein, cost savings and expense reductions factually supportable and projected by Borrower in good faith to be realized as a result of specified actions taken in the fiscal quarters ending September 30, 2017, December 31, 2017 and March 31, 2018, in each case, calculated on a pro forma basis as though such cost savings and expense reductions had been realized on the first day of each applicable fiscal quarter; provided, that in any four-quarter period containing any such fiscal quarter, the amount of cost savings and expense reductions added back pursuant to this clause (xviii) shall not exceed (x) $9,800,000 with respect to the fiscal quarter ending September 30, 2017, (y) $8,100,000 with respect to the fiscal quarter ending December 31, 2017 and (z) $3,100,000 with respect to the fiscal quarter ending March 31, 2018, ~~<and>~~

(xix) without duplication of any other add-back herein, amounts paid by Borrowers to Agent to reimburse Agent for costs, fees and expenses incurred in connection with Agent's engagement of an independent financial advisor pursuant to Section 4.7(b) hereof, in an aggregate amount not to exceed $250,000 during the Term, ~~<minus>~~ and

~~<(d) the amount (if any) by which the aggregate "Total Controlled Spend" (as such term is used in the income statements of Quantum and its Subsidiaries) for any fiscal quarter exceeds $51,800,000.>~~

(xx) reasonable fees, costs, and expenses incurred in connection with the SEC Inquiry and the Repayment Transaction (as defined in the Fourth Amendment), in an aggregate amount for all such fees, costs and expenses incurred under this clause (xx) not to exceed $4,000,000 in any fiscal quarter.

Notwithstanding the foregoing, for purposes of calculating EBITDA for any fiscal period ending on December 31, 2016, March 31, 2017, June 30, 2017 and September 30, 2017, (a) EBITDA for the fiscal quarter ending on March 31, 2016 shall be deemed to be $11,377,144; (b) EBITDA for the fiscal quarter ending on June 30, 2016 shall be deemed to be $4,720,666; (c) EBITDA for the fiscal quarter ending on September 30, 2016 shall be deemed to be $8,429,074, and (d) EBITDA for the fiscal quarter ending on December 31, 2016 shall be calculated in a manner consistent with the adjustments set forth above. In addition, for the purposes of calculating EBITDA for any period of four (4) consecutive fiscal quarters (each, a "Reference Period"), if at any time during such Reference Period (and after the Closing Date), Quantum or any of its Subsidiaries shall have made a Permitted Acquisition, EBITDA for such Reference Period shall be calculated after giving pro forma effect thereto (including pro forma adjustments arising out of events which are directly attributable to such Permitted Acquisition, are factually supportable, and are expected to have a continuing impact, in each case to be mutually and reasonably agreed upon by Borrower and Agent).

"EEA Financial Institution" shall mean (a) any credit institution or investment firm established in any EEA Member Country which is subject to the supervision of an EEA Resolution Authority, (b) any entity established in an EEA Member Country which is a parent of an institution described in clause (a) of this definition, or (c) any financial institution established in an EEA Member Country which is a subsidiary of an institution described in clauses (a) or (b) of this definition and is subject to consolidated supervision with its parent.

"EEA Member Country" shall mean any of the member states of the European Union, Iceland, Liechtenstein and Norway.

"EEA Resolution Authority" shall mean any public administrative authority or any person entrusted with public administrative authority of any EEA Member Country (including any delegee) having responsibility for the resolution of any EEA Financial Institution.

"Effective Date" shall mean the date indicated in a document or agreement to be the date on which such document or agreement becomes effective, or, if there is no such indication, the date of execution of such document or agreement.

"Environmental Complaint" shall have the meaning set forth in Section 9.3(b) hereof.

"Environmental Laws" shall mean all federal, state and local environmental, land use, zoning, health, chemical use, safety and sanitation laws, statutes, ordinances and codes as well as common laws, relating to the protection of the environment, human health and/or governing the use, storage, treatment, generation, transportation, processing, handling, production or disposal of Hazardous Materials and the rules, regulations, policies, guidelines, interpretations, decisions, orders and directives of federal, state, international and local governmental agencies and authorities with respect thereto.

"Equipment" shall have the meaning given to the term "equipment" in the Uniform Commercial Code.

"Equity Interests" shall mean, with respect to any Person, any and all shares, rights to purchase from such Person, options, warrants, general, limited or limited liability partnership interests, member interests, participation or other equivalents of or interest in (regardless of how designated) equity of such Person, whether voting or nonvoting, including common stock, preferred stock, convertible securities or any other "equity security" (as such term is defined in Rule 3a11-1 of the General Rules and Regulations promulgated by the SEC under the Exchange Act), including in each case all rights relating to such Equity Interests, whether arising under the Organizational Documents of the Person issuing such Equity Interests or under the Applicable Laws of such issuer's jurisdiction of organization relating to the formation, existence and governance of corporations, limited liability companies or partnerships or business trusts or other legal entities, as the case may be.

"ERISA" shall mean the Employee Retirement Income Security Act of 1974, as the same may be amended, modified or supplemented from time to time and the rules and regulations promulgated thereunder.

"EU Bail-In Legislation Schedule" shall mean the EU Bail-In Legislation Schedule published by the Loan Market Association (or any successor person), as in effect from time to time.

"Event of Default" shall have the meaning set forth in Article X hereof.

"Excess Cash Flow" shall mean, for any Person for any period of determination, the result of:

(a) EBITDA of such Person for such period, plus

(b) the sum of the following:

(i) the cash portion of extraordinary, unusual, or non-recurring revenue, income and gains received by such Person during such period,

(ii) the cash portion of interest income received by such Person during such period, and

(iii) cash exchange, translation or performance gains relating to any Interest Rate Hedge or Foreign Currency Hedge received by such Person during such period, minus

(c) the sum of the following:

(i) the cash portion of extraordinary, unusual, or non-recurring costs, expenses and losses of such Person during such period,

(ii) the cash portion of all Interest Expense paid by such Person during such period,

(iii) the cash portion of all taxes paid by such Person during such period,

(iv) to the extent added back to net income in the calculation of EBITDA during such period, the cash portion of the reasonable transaction costs and expenses (whether or not capitalized through amortization) incurred in connection with this Agreement and the Revolving Loan Agreement on or prior to the Closing Date which is paid by such Person during such period,

(v) to the extent added back to net income in the calculation of EBITDA during such period, the cash portion of the reasonable transaction costs and expenses (whether or not capitalized through amortization) incurred in connection with this Agreement and the Revolving Loan Agreement after the Closing Date which is paid by such Person during such period,

(vi) to the extent added back to net income in the calculation of EBITDA during such period, the cash portion of capitalized debt issuance costs arising with respect to the Loan Parties' existing credit facility under the Existing Credit Agreement which is paid by such Person during such period,

(vii) to the extent added back to net income in the calculation of EBITDA during such period, the cash portion of capitalized debt issuance costs arising with respect to any refinancing of Indebtedness permitted hereunder or the repayment of the Convertible Subordinated Debt and permitted Refinancing Indebtedness in respect thereof which is paid by such Person during such period,

(viii) to the extent added back to net income in the calculation of EBITDA during such period, the cash portion of the reasonable fees, costs and expenses incurred prior to the Maturity Date in connection with restructuring charges which is paid by such Person during such period,

(ix) to the extent added back to net income in the calculation of EBITDA during such period, the cash portion of out-of pocket costs, fees, charges or expenses paid by Quantum or any of its Subsidiaries during such Period to any Person for services performed by such Person in connection with a Permitted Acquisition consummated after the Closing Date to the extent incurred on or within 180 days prior to the consummation of such Permitted Acquisition,

(x) the cash portion of all Unfunded Capital Expenditures (net of any proceeds of related financings with respect to such Capital Expenditures) made by such Person during such period,

(xi) the cash portion of all regularly scheduled principal payments made by such Person during such period in respect of the Term Loan and, to the extent accompanied with a permanent reduction of the applicable underlying commitment, the cash portion of all regularly scheduled principal payments made by such Person during such period in respect of any other Indebtedness for borrowed money (which shall exclude, for the avoidance of doubt, the repayment of the Convertible Subordinated Debt on the Convertible Subordinated Debt Maturity Date),

(xii) the cash portion of all regularly scheduled principal payments in respect of Capitalized Lease Obligations made by such Person during such period,

(xiii) the cash portion of all fees, commissions and charges paid by such Person during such period under this Agreement, any of the Other Documents or any of the Revolving Loan Documents, and

(xiv) the cash portion of all Restricted Payments made by such Person during such period (to the extent such Restricted Payments are permitted to be made hereunder).

"Excess Cash Flow Due Date" shall have the meaning set forth in Section 2.3(e) hereof.

"Exchange Act" shall mean the Securities Exchange Act of 1934, as amended.

"Excluded Accounts" shall mean (a) deposit accounts of Quantum and its Subsidiaries maintained at a depository bank located in the United States having an aggregate amount on deposit of not more than $250,000 at any one time, (b) deposit accounts of Quantum and its Subsidiaries maintained at depository banks located outside of the United States (other than the Swiss Blocked Accounts) having an aggregate amount on deposit of not more than $2,000,000 at any one time, (c) deposit accounts specially and exclusively used for payroll, payroll taxes and other employee wage and benefit payments to or for employees of Quantum or any of its Subsidiaries, (d) the deposit account maintained at Existing Agent for the sole purpose of cash collateralizing letters of credit issued by Existing Agent in favor of Quantum up to an aggregate amount, as of any date of determination, not to exceed the aggregate undrawn amount of all such outstanding letters of credit as of such date of determination, (e) deposit accounts or securities accounts of Quantum and its Subsidiaries maintained for the sole purpose of cash collateralizing the German Tax Obligations or bank guaranties issued in respect of the German Tax Obligations, and (f) deposit accounts or securities accounts of Quantum and its Subsidiaries maintained for the sole purpose of providing deposits permitted pursuant to clause (k) of the definition of "Permitted Encumbrances".

"Excluded Property" shall mean (a) any lease, license, license agreement, permit, contract or agreement to which any Loan Party is a party, and any of its rights or interests thereunder, if and to the extent that a security interest therein is prohibited by or in violation of (i) any Applicable Law, or (ii) a term, provision or condition of any such lease, license, license agreement, permit, contract or agreement (unless in each case, such Applicable Law, term, provision or condition would be rendered ineffective with respect to the creation of such security interest pursuant to Sections 9-406, 9-407, 9-408 or 9-409 of the Uniform Commercial Code (or any successor provision or provisions) of any relevant jurisdiction or any other Applicable Law), provided, however, that the foregoing shall cease to be treated as "Excluded Property" (and shall constitute Collateral) immediately at such time as the contractual or legal prohibition shall no longer be applicable and to the extent severable, such security interest shall attach immediately to any portion of such lease, license, contract or agreement not subject to

the prohibitions specified in clauses (x) or (y) above, provided, further that Excluded Property shall not include any proceeds of any such lease, license, contract or agreement or any goodwill of the Loan Parties' business associated therewith or attributable thereto; (b) Excluded Accounts; (c) any Real Property of any Loan Party with a fair market value of less than $500,000; (d) Equity Interests issued by any Foreign Subsidiary other than Equity Interests described in clause (b) of the definition of Subsidiary Stock; and (e) any United States intent-to-use trademark applications to the extent that, and solely during the period in which, the grant of a security interest therein would impair the validity or enforceability of such intent-to-use trademark applications under applicable federal law, provided that upon submission and acceptance by the Patent and Trademark Office of an amendment to allege use pursuant to 15 U.S.C. Section 1060(a) (or any successor provision), such intent-to-use trademark application shall be considered Collateral.

"Excluded Taxes" shall mean, with respect to any Recipient, (a) Taxes imposed on or measured by net income (however denominated) and franchise Taxes, in each case (i) imposed by the jurisdiction (or any political subdivision thereof) under the laws of which such Recipient is organized or in which its principal office or applicable lending office is located or (ii) imposed as a result of a present or former connection between such Recipient and the jurisdiction imposing such Tax (other than any such connection arising solely from such Recipient having executed, delivered or performed its obligations or received payment under, or enforced its rights or remedies under, this Agreement or any Other Document), (b) any branch profits Taxes imposed by the United States of America or any similar tax imposed by any other jurisdiction in which any Loan Party is or has been located, (c) in the case of a Lender, any withholding Tax that is imposed on amounts payable to such Lender pursuant to a law in effect at the time such Lender becomes a party hereto (or designates a new lending office), except to the extent that such Lender (or its assignor, if any) was entitled, at the time of designation of a new lending office (or assignment), to receive additional amounts from the Loan Parties with respect to such withholding Tax pursuant to Section 3.10(a) hereof, (d) Taxes attributable to such Recipient's failure to comply with Section 3.10(e) hereof, or (e) any Taxes imposed under FACTA.

"Existing Agent" shall mean Wells Fargo Capital Finance, LLC, a Delaware limited liability company, in its capacity as administrative agent under the Existing Loan Documents.

"Existing Credit Agreement" shall mean the Credit Agreement, dated as of March 29, 2012, as heretofore amended, modified and supplemented, by and among Quantum, Existing Agent and Existing Lenders.

"Existing Lenders" shall mean the financial institutions which are parties to the Existing Credit Agreement as lenders.

"Existing Loan Documents" shall mean, collectively, the Existing Credit Agreement and all of the other agreements, documents and instruments executed and delivered in connection therewith or related thereto.

"Existing Term Loan" shall have the meaning set forth in Section 2.1(a)(i) hereof.

"Extraordinary Receipts" shall mean the Net Cash Proceeds received by any Loan Party or any of its Subsidiaries not in the Ordinary Course of Business (and not consisting of proceeds from the sale of Inventory), including, without limitation, (a) proceeds under any insurance policy on account of damage or destruction of any assets or property of such Loan Party or Subsidiary, (b) condemnation awards (and payments in lieu thereof), (c) indemnity payments, (d) foreign, United States, state or local tax refunds, (e) pension plan reversions and (f) judgments, proceeds of settlements or other consideration of any kind in connection with any cause of action.

"FATCA" shall mean Sections 1471 through 1474 of the Code, as of the Closing Date (or any amended or successor version that is substantively comparable and not materially more onerous to comply with), any current or future regulations thereunder or official interpretations thereof, any agreement entered into pursuant to Section 1471(b)(1) of the Code, any intergovernmental agreement between a non-U.S. jurisdiction and the United States with respect to the foregoing, and any law, regulation or practice adopted pursuant to any such intergovernmental agreement.

"Federal Funds Rate" shall mean, for any period, a fluctuating interest rate per annum equal to, for each day during such period, the weighted average of the rates on overnight Federal funds transactions with members of the Federal Reserve, as published on the next succeeding Business Day by the Federal Reserve Bank of New York, or, if such rate is not so published for any day which is a Business Day, the average of the quotations for such day on such transactions received by Agent from three major banks of recognized standing selected by it.

"Fee Letter" shall mean the fee letter dated the Closing Date among Borrowers and Agent, as amended, restated or otherwise modified from time to time, including as amended by the First Amendment to Fee Letter~~< and >~~, the Second Amendment to Fee Letter and the Third Amendment to Fee Letter.

"First Delayed Draw Term Loan" shall have the meaning set forth in Section 2.1(a)(ii) hereof.

"First Delayed Draw Term Loan Amount" shall mean an amount equal to $6,700,000.

"First Delayed Draw Term Loan Commitment Period" shall mean the period commencing on the Fourth Amendment Effective Date and ending on the First Delayed Draw Term Loan Commitment Termination Date.

"First Delayed Draw Term Loan Commitment Termination Date" shall mean the earlier of (a) the date that the Commitments of the Lenders to make First Delayed Draw Term Loans has been reduced to zero and (b) December 31, 2018.

"First Delayed Draw Term Loan Draw Date" shall have the meaning set forth in Section 2.1(a)(ii) hereof.

"Fixed Charge Coverage Ratio" shall mean, with respect to any Person for any fiscal period, the ratio of (a) the result of (i) EBITDA for such Person for such period, minus (ii) Unfunded Capital Expenditures made by such Person during such period, to (b) the sum of all Fixed Charges made by such Person during such period.

"Fixed Charges" shall mean, with respect to any Person for any fiscal period, the sum of the following, without duplication (in each case determined in accordance with GAAP): (a) all Debt Payments made by such Person during such period, plus (b) all federal, state, and local income taxes paid in cash during such period (other than the German Tax Obligations in an amount not to exceed the Dollar Equivalent of €1,313,582.12 during the Term), plus (c) all Restricted Payments paid (whether in cash or other property, other than common Equity Interests) during such period; plus (d) all rent paid in cash during such period for restructured facilities; provided that, notwithstanding the foregoing, "Fixed Charges" shall not include ~~<(x) >~~any prepayments or repayments of the Convertible Subordinated Debt made in accordance with Section 7.18 ~~<hereof during such period and (y) the amount of the Incremental Delayed Draw Term Loan repaid on June 30, 2020 in accordance with Section 2.1(b)(ii) >~~hereof during such period. Notwithstanding the foregoing, for purposes of calculating the Fixed Charge Coverage Ratio of Quantum and its Subsidiaries for any fiscal period ending on December 31, 2017, March 31, 2018, June 30, 2018 and September 30, 2018: the Fixed Charges of Quantum and its Subsidiaries for the fiscal quarter ending on December 31, 2017 shall be deemed to be $3,078,104.00.

"Flood Laws" shall mean all Applicable Laws relating to policies and procedures that address requirements placed on federally regulated lenders under the National Flood Insurance Reform Act of 1994 and other Applicable Laws related thereto.

"Foreign Cash Equivalents" shall mean (a) marketable direct obligations issued by, or unconditionally guaranteed by, the United Kingdom or any European Union Central Bank or issued by any agency thereof and backed by the full faith and credit of the United Kingdom or any European Union Central Bank, in each case maturing within one year from the date of acquisition thereof, (b) marketable direct obligations issued or fully guaranteed by any state, province or territory of the United Kingdom or any European Union Central Bank, or any political subdivision of any such state, province, territory or country or any public instrumentality thereof maturing within one year from the date of acquisition thereof and, at the time of acquisition, having one of the two highest ratings obtainable from either S&P or Moody's, (c) certificates of deposit, time deposits, overnight bank deposits or bankers' acceptances maturing within one year from the date of acquisition thereof issued by any bank organized under the laws of the United Kingdom or any European Union Central Bank at the date of acquisition thereof combined capital and surplus of not less than the Dollar Equivalent of $500,000,000, (d) deposit accounts maintained with (i) any bank that satisfies the criteria described in clause (c) above, or (ii) any other bank organized under the laws of the United Kingdom so long as the full amount maintained with any such other bank is insured by the Financial Services Compensation Scheme, (e) repurchase obligations of any commercial bank satisfying the requirements of clause (c) of this definition or recognized securities dealer having combined capital and surplus of not less than the Dollar Equivalent of $500,000,000, having a term of not more than seven days, with respect to securities satisfying the criteria in clauses (a)

or (c) above, (f) debt securities with maturities of six months or less from the date of acquisition backed by standby letters of credit issued by any commercial bank satisfying the criteria described in clause (c) above, and (g) Investments in money market funds substantially all of whose assets are invested in the types of assets described in clauses (a) through (f) above.

"Foreign Currency Hedge" shall mean any foreign exchange transaction, including spot and forward foreign currency purchases and sales, listed or over-the-counter options on foreign currencies, non-deliverable forwards and options, foreign currency swap agreements, currency exchange rate price hedging arrangements, and any other similar transaction providing for the purchase of one currency in exchange for the sale of another currency.

"Foreign Currency Hedge Liabilities" shall mean the liabilities of the Loan Parties and their Subsidiaries owing to the provider of a Foreign Currency Hedge.

"Foreign Lender" shall mean any Lender that is organized under the laws of a jurisdiction other than that in which the Loan Parties are resident for tax purposes. For purposes of this definition, the United States of America, each State thereof and the District of Columbia shall be deemed to constitute a single jurisdiction.

"Foreign Subsidiary" shall mean (a) any Subsidiary of any Person that is not organized or incorporated in the United States, any State or territory thereof or the District of Columbia, or (b) any Subsidiary of any Person that is organized or incorporated in the United States, any State or territory thereof or the District of Columbia that owns (directly or indirectly) no assets other than Equity Interests and/or debt interests of one or more Subsidiaries described in clause (a) above and other de minimis assets.

"Format Development Agreement" shall mean: (a) the Format Development Agreement, dated March 10, 2016, among Quantum, Hewlett-Packard Company ("HP") and International Business Machines Corporation ("IBM") relating to LTO8; (b) the Format Development Agreement, dated August 20, 2012, between Quantum, HP, and IBM relating to LTO7; (c) the Format Development Agreement, dated August 24, 2009, between Quantum, HP and IBM relating to LTO6; (d) the Format Development Agreement, dated March 23, 2007, between Quantum, HP and IBM relating to LTO 5; (e) the Format Development Agreement, dated August 18, 2005, between Quantum, HP and IBM relating to LTO4; (f) the Format Development Agreement, dated January 22, 2003, between Certance LLC, HP and IBM relating to LTO3; and (g) any prior or subsequent format development agreement relating to LTO to which Quantum or any Subsidiary is a party.

"Fourth Amendment" means that certain Joinder and Fourth Amendment to Term Loan Credit and Security Agreement, dated as of the Fourth Amendment effective Date, by and among Quantum, LTO Subsidiary, the Lenders party thereto, and Agent.

"Fourth Amendment Effective Date" means August 23, 2018.

"Funded Debt" shall mean, with respect to any Person, without duplication, all Indebtedness for borrowed money evidenced by notes, bonds, debentures, or similar evidences of Indebtedness that by its terms matures more than one year from, or is directly or indirectly renewable or extendible at such Person's option under a revolving credit or similar agreement obligating the lender or lenders to extend credit over a period of more than one year from the date of creation thereof, and specifically including Capitalized Lease Obligations, current maturities of long-term debt, revolving credit and short term debt extendible beyond one year at the option of the debtor, and also including, in the case of the Loan Parties, the Obligations and, without duplication, Indebtedness consisting of guaranties of Funded Debt of other Persons; provided however that for purposes of determining the amount of Funded Debt with respect to the Revolving Loan Indebtedness, the amount of Funded Debt shall be equal to the quotient of (x) the sum of the outstanding Advances for each day of the most recently ended fiscal quarter, divided by (y) the number of such days in such fiscal quarter.

"GAAP" shall mean generally accepted accounting principles in the United States of America in effect from time to time.

"German Tax Obligations" shall mean the potential tax obligations of Quantum Böhmenkirch GmbH & Co. KG and Advanced Digital Information Corp. resulting from a tax audit covering the fiscal years 2004 through 2011 in an aggregate amount of up to the Dollar equivalent of $3,200,000.

"Governmental Acts" shall mean any act or omission, whether rightful or wrongful, of any present or future de jure or de facto Governmental Body.

"Governmental Body" shall mean any nation or government, any state or other political subdivision thereof or any entity, authority, agency, division or department exercising the executive, legislative, judicial, taxing, regulatory or administrative powers or functions of or pertaining to a government (including any supra-national bodies such as the European Union or the European Central Bank) and any group or body charged with setting financial accounting or regulatory capital rules or standards (including, without limitation, the Financial Accounting Standards Board, the Bank for International Settlements or the Basel Committee on Banking Supervision or any successor or similar authority to any of the foregoing).

"Guarantor" or "Guarantors" shall have the meaning set forth in the preamble to this Agreement and shall extend to all permitted successors and assigns of such Persons.

"Guarantor Security Agreement" shall mean any security agreement executed by any Guarantor in favor of Agent securing the Obligations or the Guaranty of such Guarantor, in form and substance reasonably satisfactory to Agent.

"Guaranty" shall mean any guaranty of the Obligations executed by a Guarantor in favor of Agent for its benefit and for the ratable benefit of Lenders, in form and substance reasonably satisfactory to Agent, including Article XVII hereof.

"Hazardous Discharge" shall have the meaning set forth in Section 9.3(b) hereof.

"Hazardous Materials" shall mean, without limitation, any flammable explosives, radon, radioactive materials, asbestos, urea formaldehyde foam insulation, polychlorinated biphenyls, petroleum and petroleum products, methane, hazardous materials, Hazardous Wastes, hazardous or Toxic Substances or related materials as defined in or subject to regulation under Environmental Laws.

"Hazardous Wastes" shall mean all waste materials subject to regulation under CERCLA, RCRA or applicable state law, and any other applicable Federal and state laws now in force or hereafter enacted relating to hazardous waste disposal.

"Hedge Liabilities" shall mean collectively, the Foreign Currency Hedge Liabilities and the Interest Rate Hedge Liabilities.

"Immaterial Subsidiary" shall mean, at any time, any Subsidiary of any Loan Party (a) designated as such by Borrowing Agent after the Closing Date in a written notice delivered to Agent and (b) which does not (x) own or generate any Receivables or Inventory, (y) have revenues in any fiscal year in excess of $250,000 (other than, in the case of Quantum International, revenue generated through foreign branch offices pursuant to the Transfer Pricing Program) and (z) receive or generate any royalty revenue; it being understood that, as of the Closing Date, each of (1) Advanced Digital Information Corporation, a Washington corporation, (2) Certance (US) Holdings, Inc., a Delaware corporation, (3) Certance Holdings Corporation, a Delaware corporation, (4) Certance LLC, a Delaware limited liability company, (5) Quantum International, (6) Quantum India Development Center Private Ltd. and (7) Quantum Storage Mexico S. de R.L. de C.V. shall be deemed to be an "Immaterial Subsidiary".

~~< Incremental >Delayed Draw Term Loan" shall have the meaning set forth in Section 2.1(a)(ii) hereof.~~

~~<"Incremental >Draw Term Loan Amount" shall mean an amount equal to $<20,000,000><.>~~

"Indebtedness" shall mean, as to any Person at any time, any and all indebtedness, obligations or liabilities of such Person (whether matured or unmatured, liquidated or unliquidated, direct or indirect, absolute or contingent, or joint or several) of such Person for or in respect of: (a) borrowed money; (b) amounts received under or liabilities in respect of any note purchase or acceptance credit facility, and all obligations of such Person evidenced by bonds, debentures, notes or other similar instruments; (c) all Capitalized Lease Obligations; (d) reimbursement obligations (contingent or otherwise) under any letter of credit agreement, banker's acceptance agreement or similar arrangement; (e) obligations under any Interest Rate Hedge, Foreign Currency Hedge, or other interest rate management device, foreign currency exchange agreement, currency swap agreement, commodity price protection agreement or other interest or currency exchange rate or commodity price hedging arrangement; (f) any other advances of credit made to or on behalf of such Person or any other transaction (including forward sale or purchase agreements and conditional sales agreements) having the commercial effect of a borrowing of money entered into by such Person to finance its operations or capital requirements including to finance the purchase price of property or services and all obligations of such Person to pay the deferred purchase price of property or services (but not including trade payables and accrued expenses incurred in the Ordinary Course of Business which are not

represented by a promissory note or other evidence of indebtedness and which are not more than thirty (30) days past due (and, for the avoidance of doubt, any royalty payments payable in the Ordinary Course of Business in respect of non-exclusive licenses); (g) all Equity Interests of such Person subject to repurchase or redemption rights or obligations (excluding repurchases or redemptions at the sole option of such Person); (h) all indebtedness, obligations or liabilities secured by a Lien on any asset of such Person, whether or not such indebtedness, obligations or liabilities are otherwise an obligation of such Person; (i) all obligations of such Person for "earnouts", purchase price adjustments, profit sharing arrangements, deferred purchase money amounts and similar payment obligations or continuing obligations of any nature of such Person arising out of purchase and sale contracts; (j) off-balance sheet liabilities of such Person; (k) obligations arising under bonus, deferred compensation, incentive compensation or similar arrangements, other than those arising in the Ordinary Course of Business; and (l) any guaranty of any indebtedness, obligations or liabilities of a type described in the foregoing clauses (a) through (k).

"Indemnified Taxes" shall mean Taxes other than Excluded Taxes.

"Independent Investigation" shall mean the independent investigation, assisted by independent advisors, initiated by the Audit Committee in connection with the SEC Inquiry.

"Insolvency Event" shall mean, with respect to any Person, including without limitation any Lender, such Person or such Person's direct or indirect Parent (a) becomes the subject of a bankruptcy or insolvency proceeding (including any proceeding under Title 11 of the United States Code), or regulatory restrictions, (b) has had a receiver, conservator, trustee, administrator, custodian, assignee for the benefit of creditors or similar Person charged with the reorganization or liquidation of its business appointed for it or has called a meeting of its creditors, (c) admits in writing its inability, or be generally unable, to pay its debts as they become due or ceases operations of its present business, (d) with respect to a Lender, such Lender is unable to perform hereunder due to the application of Applicable Law, or (e) in the good faith determination of Agent, has taken any action in furtherance of, or indicating its consent to, approval of, or acquiescence in, any such proceeding or appointment of a type described in clauses (a) or (b), provided that an Insolvency Event shall not result solely by virtue of any ownership interest, or the acquisition of any ownership interest, in such Person or such Person's direct or indirect Parent by a Governmental Body or instrumentality thereof if, and only if, such ownership interest does not result in or provide such Person with immunity from the jurisdiction of courts within the United States or from the enforcement of judgments or writs of attachment on its assets or permit such Person (or such Governmental Body or instrumentality) to reject, repudiate, disavow or disaffirm any contracts or agreements made by such Person.

"Intellectual Property" shall mean property constituting a patent, copyright, trademark (or any application in respect of the foregoing), service mark, trade name, mask work, trade secrets or design right under Applicable Law, including any such property to which a Loan Party has a license or other right to use any of the foregoing under Applicable Law.

"Intercreditor Agreement" shall mean that certain Intercreditor Agreement, dated as of the Closing Date among Agent, Revolving Loan Agent and the Loan Parties, as the same may be amended, modified, supplemented, renewed, restated or replaced in accordance with the terms thereof.

"Interest Expense" shall mean, for any period, the aggregate interest expense of Quantum and its Subsidiaries, for such period, determined in accordance with GAAP.

"Interest Period" shall mean, as to any LIBOR Rate Loan, the period commencing on the date such Loan is borrowed or continued as, or converted into, a LIBOR Rate Loan and ending on the date one (1), two (2), three (3) or six (6) months thereafter, as selected by Borrowing Agent pursuant to Section 3.2 hereof; *provided*, that: (a) if any Interest Period would otherwise end on a day that is not a Business Day, such Interest Period shall be extended to the following Business Day unless the result of such extension would be to carry such Interest Period into another calendar month, in which event such Interest Period shall end on the preceding Business Day; (b) with respect to an Interest Period that begins on the last Business Day of a calendar month (or on a day for which there is no numerically corresponding day in the calendar month at the end of such Interest Period), the Interest Period shall end on the last Business Day of the calendar month at the end of such Interest Period, as applicable, and (c) the Borrowing Agent shall not elect an Interest Period which will end after the Maturity Date.

"Interest Rate Hedge" shall mean an interest rate exchange, collar, cap, swap, floor, adjustable strike cap, adjustable strike corridor, cross-currency swap or similar agreements entered into by any Loan Party or any of its Subsidiaries in order to provide protection to, or minimize the impact upon, any Loan Party or its Subsidiaries of increasing floating rates of interest applicable to Indebtedness.

"Interest Rate Hedge Liabilities" shall mean the liabilities owing to the provider of any Interest Rate Hedge.

"Inventory" shall mean and include as to each Loan Party all of such Loan Party's inventory (as defined in Article 9 of the Uniform Commercial Code) and all of such Loan Party's goods, merchandise and other personal property, wherever located, to be furnished under any consignment arrangement, contract of service or held for sale or lease, all raw materials, work in process, finished goods and materials and supplies of any kind, nature or description which are or might be used or consumed in such Loan Party's business or used in selling or furnishing such goods, merchandise and other personal property, and all Documents.

"Investment" shall mean, with respect to any Person, any investment by such Person in any other Person (including Affiliates) in the form of loans, guarantees, advances, capital contributions (excluding (a) commission, travel, moving expenses and similar advances to officers and employees of such Person made in the ordinary course of business, and (b) bona fide accounts receivable arising in the ordinary course of business), or acquisitions of Indebtedness, Equity Interests, or all or substantially all of the assets of such other Person (or of any division or business line of such other Person), and any other items that are or would be classified as investments on a balance sheet prepared in accordance with GAAP. The amount of any Investment shall be the original cost of such Investment plus the cost of all additions thereto, without any adjustment for increases or decreases in value, or write-ups, write-downs, or write-offs with respect to such Investment.

"Investment Property" shall mean and include, with respect to any Person, all of such Person's now owned or hereafter acquired securities (whether certificated or uncertificated), securities entitlements, securities accounts, commodities contracts and commodities accounts, and any other asset or right that would constitute "investment property" under the Uniform Commercial Code.

"Law(s)" shall mean any law(s) (including common law), constitution, statute, treaty, regulation, rule, ordinance, opinion, issued guidance, release, ruling, order, executive order, injunction, writ, decree, bond, judgment, authorization or approval, lien or award of or any settlement arrangement, by agreement, consent or otherwise, with any Governmental Body, foreign or domestic.

"Leasehold Interests" shall mean all of each Loan Party's right, title and interest in and to, and as lessee of, the premises identified as leased Real Property on Schedule 4.4 hereto.

"Lender" and "Lenders" shall have the meaning ascribed to such term in the preamble to this Agreement and shall include each Person which becomes a permitted transferee, successor or assign of any Lender. For the purposes of any provision of this Agreement or any Other Document which provides for the granting of a security interest or other Lien to Agent for the benefit of Lenders as security for the Obligations, "Lenders" shall include any Affiliate of a Lender to which such Obligation is owed.

"LIBOR" shall mean, with respect to each day during each Interest Period pertaining to a LIBOR Rate Loan, the greater of (a) one percent (1.00%) per annum and (b) the rate per annum appearing on Bloomberg L.P.'s (the "Service") Page BBAM1/(Official BBA USD Dollar Libor Fixings) (or on any successor or substitute page of such Service, or any successor to or substitute for such Service) two Business Days prior to the beginning of such Interest Period, in an amount approximately equal to the principal amount of the LIBOR Rate Loan to which such Interest Period is to apply and for a period of time comparable to such Interest Period, which determination shall be conclusive absent manifest error. If such rate is not available at such time for any reason, then "LIBOR" for such Interest Period shall be the rate per annum determined by the Agent to be the rate per annum equal to the offered quotation rate to first class banks in the London interbank market for deposits (for delivery on the first day of the relevant period) in Dollars of amounts in same day funds comparable to the principal amount of the applicable LIBOR Rate Loan of 3 major London banks for which LIBOR is then being determined with maturities comparable to such Interest Period as of approximately 11:00 a.m., London time, two Business Days prior to the commencement of such Interest Period, which determination shall be conclusive absent manifest error. Notwithstanding anything herein to the contrary, if "LIBOR" shall be less than zero, such rate shall be deemed to be zero for purposes of this Agreement.

"LIBOR Rate" shall mean, for each Interest Period for each LIBOR Rate Loan, the rate per annum determined by Agent (rounded upwards if necessary, to the next 1/100 of 1.00%) by dividing (a) LIBOR for such Interest Period by (b) one hundred percent (100%) minus the Reserve Percentage. The LIBOR Rate shall be adjusted on and as of the effective day of any change in the Reserve Percentage.

"LIBOR Rate Loans" shall mean any Loans which accrue interest by reference to the LIBOR Rate, in accordance with the terms of this Agreement.

"License Agreement" shall mean any agreement between any Loan Party and a Licensor pursuant to which such Loan Party is authorized to use any Intellectual Property in connection with the manufacturing, marketing, sale or other distribution of any Inventory of such Loan Party or otherwise in connection with such Loan Party's business operations.

"Licensor" shall mean any Person from whom any Loan Party obtains the right to use (whether on an exclusive or non-exclusive basis) any Intellectual Property in connection with such Loan Party's manufacture, marketing, sale or other distribution of any Inventory or otherwise in connection with such Loan Party's business operations.

"Licensor/Agent Agreement" shall mean an agreement between Agent and a Licensor, in form and substance reasonably satisfactory to Agent, by which Agent is given the unqualified right, vis-à-vis such Licensor, to enforce Agent's Liens with respect to and to Dispose of any Loan Party's Inventory with the benefit of any Intellectual Property applicable thereto, irrespective of such Loan Party's default under any License Agreement with such Licensor.

"Lien" shall mean any mortgage, deed of trust, pledge, hypothecation, assignment, security interest, lien (whether statutory or otherwise), delinquent Charge, claim or encumbrance, or preference, priority or other security agreement or preferential arrangement held or asserted in respect of any asset of any kind or nature whatsoever including any conditional sale or other title retention agreement, any lease having substantially the same economic effect as any of the foregoing, and the filing of, or agreement to give, any financing statement under the Uniform Commercial Code or comparable law of any jurisdiction.

"Lien Waiver Agreement" shall mean an agreement which is executed in favor of Agent and Revolving Loan Agent by a Person who owns or occupies premises at which any Collateral may be located from time to time in form and substance reasonably satisfactory to Agent.

"Liquidity" shall mean, as of any date of determination, the sum of (a) Undrawn Availability on such date, plus (b) the aggregate amount of all Qualified Cash on such date, plus (c) the aggregate amount of all PNC Other Cash on such date.

"Loan Party" or "Loan Parties" shall have the meaning set forth in the preamble to this Agreement and shall extend to all permitted successors and assigns of such Persons.

"Loans" shall mean the Term Loan.

"LTO Consortium" shall mean any Person party to a Format Development Agreement.

"LTO Program" shall mean assets (including Intellectual Property) and revenue directly related and attributable to the Linear Tape-Open ("LTO") format for which a Format Development Agreement exists.

"LTO Subsidiary" shall mean Quantum LTO Holdings, LLC, a Delaware limited liability company and wholly-owned Subsidiary of Quantum.

"Manufacturing Inventory" shall mean Inventory classified on any Loan Party's balance sheet as manufacturing inventory in accordance with GAAP.

"Material Adverse Effect" shall mean a material adverse effect on (a) the condition (financial or otherwise), results of operations, assets, business, properties or prospects of either (i) Quantum or (ii) the Loan Parties, taken as a whole, (b) the ability of either (i) Quantum or (ii) the Loan Parties, taken as a whole, to duly and punctually pay or perform the Obligations in accordance with the terms hereof, (c) Agent's Liens on the Collateral or the priority of any such Lien on all or a material portion of the Collateral or (d) the practical realization of the benefits of Agent's and each Lender's rights and remedies under this Agreement and the Other Documents.

"Material Contract" shall mean any contract, agreement, instrument, permit, lease or license, written or oral, of any Loan Party, which is material to any Loan Party's business or which the failure to comply with could reasonably be expected to result in a Material Adverse Effect.

"Material Customers" shall mean as of any date of determination, the top five (5) Customers of Quantum and its Subsidiaries for the trailing twelve (12) month period ending on the last day of the month most recently ended, as measured by royalty revenue received by Quantum and its Subsidiaries in the aggregate.

"Maturity Date" shall mean ~~<October 21>~~January 31, ~~<2021>~~2019.

"Minimum PNC Qualified Cash Amount" shall mean ~~<(a) for the period from the Third Amendment Effective Date through March 31, 2019, $5,000,000, (b) for the period from April 1, 2019 through June 30, 2019, $7,500,000, (c) for the period from July 1, 2019 through September 30, 2019, $10,000,000, and (d) at all times on and after October 1, 2019, $12,000,000.>~~$5,000,000.

"Moody's" shall mean Moody's Investors Service, Inc., or any successor.

"Multiemployer Plan" shall mean a "multiemployer plan" as defined in Section 3(37) or 4001(a)(3) of ERISA to which contributions are required or, within the preceding five plan years, were required by any Loan Party or any member of the Controlled Group.

"Multiple Employer Plan" shall mean a Plan which has two or more contributing sponsors (including any Loan Party or any member of the Controlled Group) at least two of whom are not under common control, as such a plan is described in Section 4063 or 4064 of ERISA.

"Negotiable Document" shall mean a Document that is "negotiable" within the meaning of Article 7 of the Uniform Commercial Code.

"Net Cash Proceeds" shall mean:

(a) with respect to any Disposition by any Loan Party or any of its Subsidiaries of any assets, the amount of cash proceeds received (directly or indirectly) from time to time (whether as initial consideration or through the payment of deferred consideration) by or on behalf of such Loan Party or Subsidiary in connection therewith after deducting therefrom only (i) the amount of any Indebtedness secured by any Permitted Encumbrance on any asset (other than (A) the Obligations and (B) Indebtedness assumed by the purchaser of such asset) which is required to be, and is, repaid in connection with such Disposition, (ii) reasonable fees, commissions and expenses related thereto and required to be paid by such Loan Party or such Subsidiary in connection with such Disposition, (iii) taxes paid or payable to any taxing authorities by such Loan Party or such Subsidiary in connection with such Disposition, in each case to the extent, but only to the extent, that the amounts so deducted are, at the time of receipt of such cash, actually paid or payable to a Person that is not an Affiliate of any Loan Party or any of its Subsidiaries, and are properly attributable to such transaction; and (iv) all amounts that are set aside as a reserve (A) for adjustments in respect of the purchase price of such assets, (B) for any liabilities associated with such sale or casualty, to the extent such reserve is required by GAAP, and (C) for the payment of unassumed liabilities relating to the assets sold or otherwise Disposed of at the time of, or within 30 days after, the date of such Disposition;

(b) with respect to the issuance or incurrence of any Indebtedness by any Loan Party or any of its Subsidiaries, or the issuance by any Loan Party or any of its Subsidiaries of any Equity Interests, the aggregate amount of cash received (directly or indirectly) from time to time (whether as initial consideration or through the payment or disposition of deferred consideration) by or on behalf of such Loan Party or such Subsidiary in connection with such issuance or incurrence, after deducting therefrom only (i) reasonable fees, commissions and expenses related thereto and required to be paid by such Loan Party or such Subsidiary in connection with such issuance or incurrence, (ii) taxes paid or payable to any taxing authorities by such Loan Party or such Subsidiary in connection with such issuance or incurrence, in each case to the extent, but only to the extent, that the amounts so deducted are, at the time of receipt of such cash, actually paid or payable to a Person that is not an Affiliate of any Loan Party or any of its Subsidiaries, and are properly attributable to such transaction; and

(c) with respect to any Extraordinary Receipts received by any Loan Party or any of its Subsidiaries, the amount of cash proceeds received (directly or indirectly) from time to time (whether as initial consideration or through the payment of deferred consideration) by or on behalf of such Loan Party or Subsidiary in connection therewith after deducting therefrom only (i) the amount of any Indebtedness secured by any Permitted Encumbrance on any asset (other than the Obligations) and which is required to be, and is, repaid in connection with such Extraordinary Receipt; (ii) reasonable fees, commissions and expenses related thereto and required to be paid by such Loan Party or such Subsidiary in connection with such Extraordinary Receipt; and (iii) taxes paid or payable to any taxing authorities by such Loan Party or such Subsidiary in connection with such Extraordinary Receipt, in each case to the extent, but only to the extent, that the amounts so deducted are, at the time of receipt of such cash proceeds, actually paid or payable to a Person that is not an Affiliate of any Loan Party or any of its Subsidiaries, and are properly attributable to such transaction.

"Notes" shall mean collectively, the Existing Term ~~<A >~~Loan Note and the Delayed Draw Term Loan Note.

"Notice of Borrowing" shall mean a written notification substantially in the form of Exhibit 3.2.

"Obligations" shall mean all obligations, liabilities and indebtedness (monetary (including post-petition interest, fees and other charges whether or not allowed or allowable) or otherwise) of each Loan Party under this Agreement or any Other Document owing to any Secured Party, in each case howsoever created, arising or evidenced, whether direct or indirect, absolute or contingent, now or hereafter existing, or due or to become due.

"Ordinary Course of Business" shall mean, with respect to any Loan Party or any Subsidiary of a Loan Party, the ordinary course of the business of such Loan Party or such Subsidiary, as applicable.

"Organizational Documents" shall mean, with respect to any Person, any charter, articles or certificate of incorporation, certificate of organization, registration or formation, certificate of partnership or limited partnership, bylaws, operating agreement, limited liability company agreement, or partnership agreement of such Person and any and all other applicable documents relating to such Person's formation, organization or entity governance matters (including any shareholders' or equity holders' agreement or voting trust agreement) and specifically includes, without limitation, any certificates of designation for preferred stock or other forms of preferred equity.

~~<"Original >Delayed Draw Term Loan" shall have the meaning set forth in Section 2.1(a)(ii) hereof.~~

~~<"Original >Draw Term Loan Amount" shall mean an amount equal to $<20,000,000><.>~~

"Other Documents" shall mean the Notes, the Fee Letter, any Guaranty, any Guarantor Security Agreement, any Pledge Agreement, the Intercreditor Agreement, and any and all other agreements, instruments and documents, including any subordination agreements, guaranties, pledges, powers of attorney, consents, interest or currency swap agreements or other similar agreements and all other agreements, documents or instruments heretofore, now or hereafter executed by any Loan Party and/or delivered to Agent or any Lender in respect of the transactions contemplated by this Agreement, in each case together with all amendments, modifications, supplements, renewals, extensions, restatements, substitutions and replacements thereto and thereof.

"Other Taxes" shall mean all present or future stamp or documentary taxes or any other excise or property taxes, charges or similar levies arising from any payment made hereunder or under any Other Document or from the execution, delivery or enforcement of, or otherwise with respect to, this Agreement or any Other Document.

"Parent" of any Person shall mean a corporation or other entity owning, directly or indirectly, fifty percent (50%) or more of the Equity Interests issued by such Person having ordinary voting power to elect a majority of the directors of such Person, or other Persons performing similar functions for any such Person.

"Participant" shall mean each Person who shall be granted the right by any Lender to participate in any of the Loans, commitments or other interests hereunder and who shall have entered into a participation agreement in form and substance satisfactory to such Lender.

"Participant Register" shall have the meaning set forth in Section 16.3(b) hereof.

"Payment Account" means the account specified on the signature pages hereof into which all payments by or on behalf of Borrowers to Agent under this Agreement and the Other Documents shall be made, or such other account as Agent shall from time to time specify by notice to Borrowing Agent.

"Payment Conditions" shall mean, on any applicable date of determination: (a) Liquidity shall be equal to or greater than $30,000,000 on such date, and (b) no Event of Default shall exist or shall have occurred and be continuing on such date.

"Payment Notification" shall mean a written notification substantially in the form of Exhibit 2.2.

"Payment in Full" or "Paid in Full" shall mean (a) the final payment ~~<and satisfaction>~~or repayment in full in immediately available funds of all of the Obligations, including without limitation all fees or charges that have accrued hereunder or under any Other Document and are unpaid and the obligations of the Loans Parties under Section 16.9 hereof (other than contingent indemnification Obligations which pursuant to the express terms of this Agreement or any of the Other Documents survive the termination hereof or thereof but are not then ~~<due and payable)>~~asserted and are unknown), (b) the receipt by Agent of cash collateral in order to secure any contingent Obligations for which a claim or demand for payment has been made on or prior to such time or in respect of matters or circumstances known to Agent or a Lender at such time that are reasonably expected to result in any loss, cost, damage, or expense (including attorneys' fees and legal expenses), such cash collateral to be in such amount as Agent reasonably determines is appropriate to secure such contingent Obligations, and (c) the termination of this Agreement and all of the Commitments of the Lenders. If after receipt of any payment of, or proceeds of Collateral applied to the payment of, any of the Obligations, Agent or any Lender is required to surrender or return such payment or proceeds to any Person for any reason, then the Obligations intended to be satisfied by such payment or proceeds shall be reinstated and continue as if such payment or proceeds had not been received by Agent or such Lender.

"PBGC" shall mean the Pension Benefit Guaranty Corporation established pursuant to Subtitle A of Title IV of ERISA or any successor.

"Pension Benefit Plan" shall mean at any time any "employee pension benefit plan" as defined in Section 3(2) of ERISA (including a Multiple Employer Plan, but not a Multiemployer Plan) which is covered by Title IV of ERISA or is subject to the minimum funding standards under Section 412, 430 or 436 of the Code and either (a) is maintained or to which contributions are required by Loan Party or any member of the Controlled Group or (b) has at any time within the preceding five years been maintained or to which contributions have been required by a Loan Party or any entity which was at such time a member of the Controlled Group.

"Permitted Acquisition" shall mean an acquisition by a Loan Party of the assets, Equity Interests or of any division or line of business of another Person (the "Target"); provided that:

(a) such acquisition shall not be consummated prior to the satisfaction of the Specified Convertible Subordinated Debt Condition;

(b) at least fifteen (15) Business Days prior to the anticipated closing date of the proposed acquisition, Borrowing Agent has provided Agent with written notice of the proposed acquisition,

(c) the board of directors (or other comparable governing body) of the Target shall have duly approved the acquisition;

(d) if such acquisition includes general partnership interests or any other Equity Interest that does not have a corporate (or similar) limitation on liability of the owners thereof, then such acquisition shall be effected by having such Equity Interests acquired by a corporate holding company directly or indirectly wholly-owned by a Loan Party and newly formed for the sole purpose of effecting such acquisition;

(e) the Target or assets acquired shall be used or useful in the business of the Borrowers, and Borrowing Agent shall have provided Agent all memoranda and presentations delivered to the board of directors of Quantum or the applicable Subsidiary describing the rationale for such acquisition;

(f) no Indebtedness will be incurred, assumed or would exist with respect to Quantum or its Subsidiaries as a result of such acquisition, other than Indebtedness permitted under clauses (f), (g) and (h) of the definition of "Permitted Indebtedness", and no Liens will be incurred, assumed or would exist with respect to the assets of Quantum or its Subsidiaries as a result of such acquisition, other than Permitted Encumbrances;

(g) Agent shall have received a first priority Lien in all acquired assets or Equity Interests which do not constitute Excluded Property, subject to documentation satisfactory to Agent;

(h) the Loan Parties shall have delivered to Agent, in form and substance reasonably acceptable to Agent, financial statements of the acquired entity for the two (2) most recent fiscal years then ended;

(i) in connection with the acquisition of Equity Interests, the Target shall (1) have EBITDA, calculated in accordance with GAAP immediately prior to such acquisition, of at least negative $1,000,000 (or such other minimum amount as Agent shall agree), (2) be projected to have positive EBITDA within twelve (12) months following the date of such acquisition, calculated in accordance with GAAP, and (3) be added as a Borrower or a Guarantor (as Agent shall determine in its Permitted Discretion) and be jointly and severally liable for all Obligations;

(j) Borrowing Agent shall have delivered to Agent a pro forma balance sheet, pro forma financial statements and a Compliance Certificate demonstrating by reasonably detailed calculations that, upon giving effect to such acquisition on a pro forma basis (including pro forma adjustments arising out of events which are directly attributable to such acquisition, are factually supportable, and are expected to have a continuing impact, in each case, determined as if the combination had been accomplished at the beginning of the relevant period; such eliminations and inclusions to be mutually and reasonably agreed upon by Borrowing Agent and Agent) created by adding the historical combined financial statements of Quantum and its Subsidiaries (including the combined financial statements of any other Person or assets that were the subject of a prior Permitted Acquisition during the relevant period) to the historical consolidated financial statements of the Target (or the historical financial statements related to the assets to be acquired) pursuant to the proposed acquisition, Quantum and its Subsidiaries, on a consolidated basis, (1) would have been in compliance with each of the financial covenants set forth in Section 6.5 hereof for the four (4) fiscal quarter period ended immediately prior to the proposed date of consummation of the proposed acquisition, and (2) are projected to be in compliance with each of the financial covenants set forth in Section 6.5 hereof for the four (4) fiscal quarter period ended one year after the proposed date of consummation of the proposed acquisition;

(k) if the total consideration, including the purchase price and liabilities assumed (including, without limitation, all Acquired Indebtedness, Indebtedness under Permitted Seller Notes and Permitted Earnouts), of any such acquisition shall exceed $10,000,000, Borrowing Agent shall have delivered to Agent a quality of earnings report performed by a third party firm acceptable to Agent;

(l) immediately after giving effect to the consummation of the proposed acquisition, Quantum and its Subsidiaries, on a consolidated basis, shall be in compliance on a pro forma basis with the financial covenants set forth in Section 6.5 hereof, recomputed for the most recently ended fiscal month for which financial statements are required to be delivered pursuant to Section 9.9 hereof;

(m) on the date of any such acquisition, Borrowers shall have Average Liquidity for the thirty (30) days immediately preceding the date of such acquisition of not less than $30,000,000;

(n) on the date of any such acquisition and after giving pro forma effect thereto, each of the Payment Conditions shall have been satisfied;

(o) the total consideration, including the purchase price and liabilities assumed (including, without limitation, all Acquired Indebtedness, Indebtedness under Permitted Seller Notes and Permitted Earnouts but excluding consideration in the form of issuance of Equity Interests permitted hereunder or paid with the proceeds of the issuance of Equity Interests permitted hereunder), of all such acquisitions shall not exceed $20,000,000 in the aggregate during the Term;

(p) not later than five (5) Business Days prior to the anticipated closing date of the proposed acquisition, Borrowing Agent has provided Agent with copies of the most recent drafts of the acquisition agreement and other material agreements, documents and instruments related to the proposed acquisition, including, without limitation, any related management, non-compete, employment, option or other material agreements (the "Acquisition Documents"), and, in any event, promptly following the closing date of the acquisition, Borrowing Agent shall provide Agent with a true, correct and complete copies of the Acquisition Documents, in each case duly authorized, executed and delivered by the parties thereto, together with any schedules to such Acquisition Documents;

(q) such assets shall be located in the United States or such Target shall be incorporated in a state within the United States; and

(r) no assets acquired in any such acquisition shall be included in the Formula Amount until Agent has received a field examination and/or appraisal of such assets, in form and substance acceptable to Agent.

For the purposes of calculating Liquidity and Average Liquidity under this definition, any assets being acquired in the proposed acquisition shall be included in the Formula Amount on the date of closing of such acquisition so long as Agent has received an audit or appraisal of such assets as set forth in clause (o) above and so long as such assets satisfy the applicable eligibility criteria described herein.

"Permitted Assignees" shall mean: (a) Agent, any Lender or any of their direct or indirect Affiliates; and (b) any fund that is administered or managed by Agent or any Lender, an Affiliate of Agent or any Lender or a related entity.

"Permitted Discretion" shall mean a determination made in good faith and in the exercise (from the perspective of a secured term loan lender) of commercially reasonable business judgment.

"Permitted Dispositions" shall mean:

(a) Dispositions of Equipment that is substantially worn, damaged or obsolete or no longer used or useful in the Ordinary Course of Business of the Loan Parties or their Subsidiaries and leases or subleases of Real Property that is not useful in the conduct of the business of the Loan Parties or their Subsidiaries;

(b) sales of Inventory to Customers in the Ordinary Course of Business;

(c) the use or transfer of money or Cash Equivalents in a manner that is not prohibited by the terms of this Agreement or any of the Other Documents;

(d) the licensing of patents, trademarks, copyrights, and other Intellectual Property rights (i) on a non-exclusive basis in the Ordinary Course of Business or (ii) on a non-exclusive basis (other than with respect to exclusivity for specific geographic locations), in each case under this clause (ii), in the Ordinary Course of Business to the extent consistent with past practice;

(e) the granting of Permitted Encumbrances;

(f) the sale or discount, in each case without recourse, of Receivables arising in the Ordinary Course of Business, but only in connection with the compromise or collection thereof;

(g) any involuntary loss, damage or destruction of property;

(h) any involuntary condemnation, seizure or taking, by exercise of the power of eminent domain or otherwise, or confiscation or requisition of use of property;

(i) the leasing or subleasing of assets of any Loan Party or its Subsidiaries in the Ordinary Course of Business;

(j) (i) the sale or issuance of Equity Interests (other than Disqualified Equity Interests) of Quantum, (ii) the sale or issuance of Equity Interests (other than Disqualified Equity Interests) of any wholly-owned Subsidiary of a Loan Party that is itself a Loan Party to such Loan Party and (iii) the sale or issuance of Equity Interests (other than Disqualified Equity Interests) of any Subsidiary that is not a Loan Party to any Subsidiary that is not a Loan Party;

(k) (i) the lapse of registered patents, trademarks, copyrights and other Intellectual Property of any Loan Party or its Subsidiaries to the extent not economically desirable in the conduct of its business or (ii) the abandonment of patents, trademarks, copyrights or other Intellectual Property rights so long as (in each case under clauses (i) and (ii)), (A) such patents, trademarks, copyrights or other Intellectual Property rights do not generate material revenue, (B) such lapse or abandonment would not reduce the recurring royalty revenue stream of assets not Disposed of, and (C) such lapse or abandonment is not materially adverse to the interests of Agent and the other Secured Parties;

(l) the making of Restricted Payments that are expressly permitted to be made pursuant to this Agreement;

(m) the making of Permitted Investments;

(n) Dispositions of assets acquired by any Loan Party or its Subsidiaries pursuant to a Permitted Acquisition consummated within twelve (12) months of the date of the proposed Disposition so long as (i) the consideration received for the assets to be so Disposed is at least equal to the fair market value (as determined in good faith by such Loan Party or the applicable Subsidiary) of such assets, (ii) the assets to be so Disposed are not necessary or economically desirable in connection with the business of the Loan Parties and their Subsidiaries, and (iii) the assets to be so Disposed are readily identifiable as assets acquired pursuant to the subject Permitted Acquisition;

(o) transfers of assets (i) from any Loan Party or any of its Subsidiaries to a Loan Party and (ii) from any Subsidiary of any Loan Party that is not a Loan Party to a Loan Party, in each case, to the extent made in accordance with Section 7.10 hereof;

(p) Dispositions of intangible assets not otherwise permitted in clauses (a) through (o) above, so long as (i) no Default or Event of Default then exists or would arise therefrom, (ii) such Disposition would not reduce the recurring royalty revenue stream of assets not Disposed of, (iii) such intangible assets do not generate material revenue, (iv) any such Disposition would not result in a material increase in any costs or expenses of Quantum and its Subsidiaries, (v) such Disposition is made at fair market value (as determined in good faith by Borrowing Agent or the applicable Subsidiary), and (vi) the aggregate fair market value of all such intangible assets Disposed of in any fiscal year (including the proposed Disposition) would, together with the aggregate fair market value of all assets Disposed of pursuant to clause (q) of this definition, not exceed $20,000,000; and

(q) Dispositions of fixed assets not otherwise permitted in clauses (a) through (o) above, so long as (i) such Disposition would not reduce the recurring royalty revenue stream of assets not Disposed of, (ii) no Default or Event of Default then exists or would arise therefrom, (iii) such Disposition is made at fair market value (as determined in good faith by Borrowing Agent or the applicable Subsidiary), (iv) the aggregate fair market value of all such assets Disposed of in any fiscal year (including the proposed Disposition) would, together with the aggregate fair market value of all assets Disposed of pursuant to clause (p) of this definition, not exceed $20,000,000, (v) in any such Disposition, at least 75% of the purchase price is paid to such Loan Party or Subsidiary in cash, and (vi) within five (5) Business Days of the consummation of any single Disposition or series of related Dispositions in which the aggregate fair market value of all such assets Disposed of exceeds $5,000,000, Borrowing Agent shall deliver to Agent an updated Borrowing Base Certificate.

"Permitted Earnouts" shall mean, with respect to a Loan Party, any obligations of such Loan Party arising from a Permitted Acquisition which are payable to the seller based on the achievement of specified financial results over time and are subject to subordination terms (or a Subordination Agreement in favor of Agent and Lenders) reasonably acceptable to Agent.

"Permitted Encumbrances" shall mean:

(a) Liens in favor of Agent, for the benefit of the Secured Parties, to secure the Obligations;

(b) Liens in favor of Revolving Loan Agent, for the benefit of the Revolving Loan Lenders, to secure the Revolving Loan Indebtedness;

(c) Liens for unpaid taxes, assessments or other governmental charges or levies that either (i) are not yet delinquent, or (ii) do not have priority over Agent's Liens and the underlying taxes, assessments or charges or levies are being Properly Contested;

(d) judgment Liens arising solely as a result of the existence of judgments, orders or awards that do not constitute an Event of Default under Section 10.6 hereof;

(e) Liens set forth on Schedule 7.2 hereof; provided that such Liens shall secure only the Indebtedness or other obligations which they secure on the Closing Date (and any Refinancing Indebtedness in respect thereof permitted hereunder) and shall not subsequently apply to any other property or assets of any Loan Party other than the property and assets to which they apply as of the Closing Date.

(f) the interests of lessors (and interests in the title of such lessors) under operating leases and non-exclusive licensors (and interests in the title of such licensors) under license agreements;

(g) purchase money Liens or the interests of lessors under Capital Leases to the extent that such Liens or interests secure Permitted Purchase Money Indebtedness and so long as (i) such Lien attaches only to the asset purchased or acquired and the proceeds thereof, and (ii) such Lien only secures the Indebtedness that was incurred to acquire the asset purchased or acquired or any Refinancing Indebtedness in respect thereof;

(h) Liens arising by operation of law in favor of warehousemen, landlords, carriers, mechanics, materialmen, laborers or suppliers arising in the Ordinary Course of Business and not in connection with the borrowing of money and which Liens either (i) are for sums not yet delinquent, or (ii) are being Properly Contested;

(i) Liens on amounts deposited to secure obligations of the Loan Parties and their Subsidiaries in connection with worker's compensation or other unemployment insurance;

(j) Liens on amounts deposited to secure obligations of the Loan Parties and their Subsidiaries in connection with the making or entering into of bids, tenders, or leases in the Ordinary Course of Business and not in connection with the borrowing of money;

(k) Liens on amounts deposited to secure reimbursement obligations of the Loan Parties and their Subsidiaries with respect to surety or appeal bonds obtained in the Ordinary Course of Business;

(l) with respect to any Real Property, easements, rights of way, and zoning restrictions that do not materially interfere with or impair the use or operation thereof;

(m) to the extent constituting a Permitted Disposition, licenses of patents, trademarks, copyrights and other Intellectual Property rights;

(n) Liens that are replacements of Permitted Encumbrances to the extent that the original Indebtedness is the subject of permitted Refinancing Indebtedness and so long as the replacement Liens only encumber those assets that secured the original Indebtedness;

(o) rights of setoff or bankers' liens upon deposits of funds in favor of banks or other depository institutions, solely to the extent incurred in connection with the maintenance of deposit accounts of the Loan Parties and their Subsidiaries in the Ordinary Course of Business;

(p) Liens granted in the Ordinary Course of Business on the unearned portion of insurance premiums securing the financing of insurance premiums to the extent such financing is permitted under the definition of "Permitted Indebtedness";

(q) Liens in favor of customs and revenue authorities arising as a matter of law to secure payment of customs duties in connection with the importation of goods;

(r) Liens solely on any cash earnest money deposits made by the Loan Parties and their Subsidiaries in connection with any letter of intent or purchase agreement with respect to a Permitted Acquisition;

(s) Liens that secure Indebtedness of Foreign Subsidiaries permitted under clause (q) of the definition of "Permitted Indebtedness"; and

(t) other Liens as to which the aggregate amount of the obligations secured thereby does not exceed $2,500,000.

"Permitted Indebtedness" shall mean:

(a) the Obligations (including Indebtedness in respect of the Delayed Draw Term ~~<Loans>~~ Loan);

(b) Indebtedness as of the Closing Date set forth on Schedule 7.8 hereto and any Refinancing Indebtedness in respect of such Indebtedness;

(c) Permitted Purchase Money Indebtedness and any Refinancing Indebtedness in respect of such Indebtedness; provided that the aggregate outstanding principal amount of such Indebtedness shall not exceed $5,000,000 at any time;

(d) endorsement of instruments or other payment items for deposit;

(e) Indebtedness consisting of guarantees permitted under Section 7.3 hereof;

(f) Indebtedness incurred on the date of the consummation of a Permitted Acquisition solely for the purpose of consummating such Permitted Acquisition; provided that (i) such Indebtedness shall at all times be unsecured, (ii) such Indebtedness is not incurred for working capital purposes, (iii) such Indebtedness shall not amortize or mature prior to the date that is six (6) months after the Maturity Date and such Indebtedness shall not provide for the payment of interest thereon in cash or Cash Equivalents prior to the date that is six (6) months after the Maturity Date, (iv) such Indebtedness shall be subordinated in right of payment to the Obligations on terms and conditions reasonably satisfactory to Agent; and (v) the aggregate outstanding principal amount of such Indebtedness shall not exceed $20,000,000 at any time;

(g) Acquired Indebtedness and any Refinancing Indebtedness in respect of such Acquired Indebtedness; provided that (i) such Indebtedness shall at all times be unsecured, and (ii) the aggregate outstanding principal amount of such Indebtedness shall not exceed $10,000,000 at any time;

(h) Indebtedness (x) constituting deferred purchase price obligations arising in connection with Permitted Acquisitions, (y) under Permitted Seller Notes and Permitted Earnouts arising in connection with Permitted Acquisitions, and (z) under non-compete payment obligations arising in connection with Permitted Acquisitions, provided that, (i) such Indebtedness shall at all times be unsecured, (ii) such Indebtedness described in clauses (x) and (y) above (other than, with respect to any Permitted Acquisition, deferred purchase price obligations arising in connection therewith, the payment of which are not subject to any condition or contingency other than the passage of time, in an amount not to exceed 15% of the purchase price for such Permitted Acquisition) shall be subordinated in right of payment to the Obligations on terms and conditions reasonably satisfactory to Agent and in no event shall the Loan Parties make any payments in respect of such Indebtedness unless, as of the date of any such payment and after giving effect thereto, (A) each of the Payment Conditions shall have been satisfied; and (B) Quantum and its Subsidiaries, on a consolidated basis, are projected to be in compliance with each of the financial covenants set forth in Section 6.5 hereof for the four (4) fiscal quarter period ended one year after the proposed date of such payment; and; and (iii) the aggregate outstanding principal amount of such Indebtedness shall not exceed $20,000,000 at any time;

(i) Indebtedness in respect of the Convertible Subordinated Debt and any Refinancing Indebtedness in respect thereof;provided that the aggregate outstanding principal amount of such Indebtedness shall not exceed $100,000,000 at any time;

(j) Indebtedness incurred in the Ordinary Course of Business under performance, surety, bid, statutory, or appeal bonds;

(k) Indebtedness owed to any Person providing property, casualty, liability or other insurance to any Loan Party or any of its Subsidiaries, so long as the amount of such Indebtedness is not in excess of the amount of the unpaid cost of, and shall be incurred only to defer the cost of, such insurance for the year in which such Indebtedness is incurred and such Indebtedness is outstanding only during such year;

(l) Indebtedness consisting of Interest Rate Hedges and Foreign Currency Hedges that is incurred for the bona fide purpose of hedging the interest rate, commodity or foreign currency risks associated with the operations of the Loan Parties and their Subsidiaries and not for speculative purposes;

(m) [Reserved];

(n) unsecured Indebtedness of Quantum owing to former employees, officers or directors (or any spouses, ex-spouses or estates of any of the foregoing) incurred in connection with the repurchase by Quantum of the Equity Interests of Quantum that has been issued to such Persons, so long as (i) such Indebtedness shall at all times be unsecured; (ii) such Indebtedness shall be subordinated in right of payment to the Obligations on terms and conditions reasonably acceptable to Agent; and (iii) the aggregate outstanding principal amount of such Indebtedness shall not exceed $1,000,000 at any time;

(o) Indebtedness constituting Permitted Investments;

(p) unsecured Indebtedness incurred in respect of netting services, automatic clearinghouse arrangements, overdraft protections, employee credit card programs and other cash management and similar arrangements in the ordinary course of business;

(q) Indebtedness of any Foreign Subsidiaries of Quantum; provided that (i) the aggregate outstanding principal amount of such Indebtedness shall not exceed $2,500,000 at any time, and (ii) such Indebtedness is not directly or indirectly recourse to any of the Loan Parties or of their respective assets;

(r) Indebtedness of any Loan Party or its Subsidiaries in respect of Permitted Intercompany Advances;

(s) the accrual of interest, accretion or amortization of original issue discount, or the payment of interest in kind, in each case, on Indebtedness that otherwise constitutes Permitted Indebtedness;

(t) any other Indebtedness which is unsecured (or, to the extent a Lien securing such Indebtedness constitutes a Permitted Encumbrance, secured Indebtedness) incurred by any Loan Party or any of its Subsidiaries, not otherwise permitted in clauses (a) through (s) above, and any Refinancing Indebtedness in respect of such Indebtedness; provided that the aggregate principal amount of such Indebtedness outstanding at any one time shall not exceed $5,000,000;

(u) any other unsecured Subordinated Indebtedness incurred by any Loan Party or any of its Subsidiaries (and any Refinancing Indebtedness in respect of such Subordinated Indebtedness) not otherwise permitted in clauses (a) through (t) above; provided that (i) on the date such Indebtedness is incurred and immediately after giving effect thereto, no Default or Event of Default shall exist or shall have occurred and be continuing or would result therefrom, and (ii) the aggregate principal amount of such Indebtedness outstanding at any one time shall not exceed $15,000,000; and

(v) the Revolving Loan Indebtedness; provided that the Borrowers shall not exercise their rights to increase the Revolving Loan Indebtedness under Section 2.24 of the Revolving Loan Agreement without the prior written consent of Agent.

"Permitted Intercompany Advances" shall mean any loans and/or advances made:

(a) pursuant to, and in accordance with, the Transfer Pricing Program;

(b) by a Loan Party to another Loan Party;

(c) by a Subsidiary of a Loan Party that is not a Loan Party to another Subsidiary of a Loan Party that is not a Loan Party;

(d) by a Subsidiary of a Loan Party that is not a Loan Party to a Loan Party; and

(e) by a Loan Party to a Subsidiary of a Loan Party that is not a Loan Party;provided that (i) the aggregate amount of all such loans and advances made after the Closing Date at any one time outstanding shall not exceed $2,500,000; (ii) immediately after giving effect to the making of such loan or advance, Quantum and its Subsidiaries, on a consolidated basis, shall be in compliance on a pro forma basis with the financial covenants set forth in Section 6.5 hereof, recomputed for the most recently ended fiscal month for which financial statements are required to be delivered pursuant to Section 9.9 hereof; (iii) on the date any such loan or advance is made and after giving effect thereto, each of the Payment Conditions shall have been satisfied; and (iv) in connection with any loan or advance made for purposes of funding a Permitted Acquisition, such loan or advance shall immediately be repaid in full by such Subsidiary to such Loan Party if such Permitted Acquisition is not consummated within thirty (30) days of the making of such loan or advance.

"Permitted Investments" shall mean:

(a) Investments in (i) cash and Cash Equivalents, (ii) Foreign Cash Equivalents, and (iii) readily marketable United States corporate securities that are made in compliance with the Cash Management Policy;

(b) Investments in negotiable instruments deposited or to be deposited for collection in the Ordinary Course of Business;

(c) advances made in connection with purchases of goods or services in the Ordinary Course of Business;

(d) Investments received in settlement of amounts due to any Loan Party or any of its Subsidiaries effected in the Ordinary Course of Business or owing to any Loan Party or any of its Subsidiaries as a result of an Insolvency Event involving a Customer or upon the foreclosure or enforcement of any Lien in favor of a Loan Party or its Subsidiaries;

(e) Investments owned by any Loan Party or any of its Subsidiaries on the Closing Date and set forth on Schedule 7.4 hereto;

(f) guarantees permitted under Section 7.3 hereof;

(g) Permitted Intercompany Advances, so long as, at the request of Agent, (i) the applicable loan or advance is evidenced by a promissory note on terms and conditions (including terms subordinating payment of the Indebtedness evidenced by such note to the prior Payment in Full of all of the Obligations) acceptable to Agent in its Permitted Discretion and (ii) such note has been delivered to Agent either endorsed in blank or together with an undated instrument of transfer executed in blank by the applicable the Loan Parties that are the payees on such note;

(h) Investments in the form of capital contributions and the acquisition of Equity Interests made by any Loan Party in any other Loan Party (other than capital contributions to or the acquisition of Equity Interests of Quantum);

(i) Equity Interests or other securities acquired in connection with the satisfaction or enforcement of Indebtedness or claims due or owing to a Loan Party or its Subsidiaries (in bankruptcy of Customers or suppliers or otherwise outside the Ordinary Course of Business) or as security for any such Indebtedness or claims;

(j) deposits of cash made in the Ordinary Course of Business to secure performance of operating leases;

(k) (i) non-cash loans and advances to employees, officers and directors of any Quantum or any of its Subsidiaries for the purpose of purchasing Equity Interests in Quantum, so long as the proceeds of such loans or advances are used in their entirety to purchase such Equity Interests in Quantum, and (ii) loans and advances to employees and officers of any Loan Party or any of its Subsidiaries in the Ordinary Course of Business for any other business purpose and in an aggregate amount not to exceed $1,000,000 at any one time;

(l) Permitted Acquisitions;

(m) Investments resulting from entering into (i) Interest Rate Hedges, Foreign Currency Hedges or Cash Management Products and Services, or (ii) agreements relative to Indebtedness that is permitted under clause (j) of the definition of "Permitted Indebtedness";

(n) equity Investments by any Loan Party in any Subsidiary of such Loan Party which is required by Applicable Law to maintain a minimum net capital requirement or as may be otherwise required by Applicable Law;

(o) Investments held by a Person acquired in a Permitted Acquisition to the extent that such Investments were not made in contemplation of or in connection with such Permitted Acquisition and were in existence on the date of such Permitted Acquisition;

(p) any Investment by way of (i) merger, consolidation, reorganization or recapitalization, (ii) reclassification of Equity Interests; or (iii) transfer of assets, in each case solely to the extent permitted by Section 7.1 hereof;

(q) to the extent constituting an Investment, any Restricted Payment to the extent permitted by Section 7.7 hereof; and

(r) any other Investments in an aggregate amount not to exceed $10,000,000 outstanding at any time; provided that (i) on the date any Investment is made and after giving effect thereto, no Event of Default shall have occurred and be continuing or would result therefrom, and (ii) on the date any Investment is made which would cause the aggregate amount of all Investments outstanding under this clause (r) to exceed $1,000,000, and after giving effect to such Investment, each of the other Payment Conditions shall have been satisfied.

"Permitted Purchase Money Indebtedness" shall mean, as of any date of determination, Indebtedness (other than the Obligations, but including Capitalized Lease Obligations) incurred after the Closing Date and at the time of, or within ninety (90) days after, the acquisition of any fixed assets for the purpose of financing all or any part of the acquisition cost thereof.

"Permitted Seller Note" shall mean a promissory note containing subordination terms (or subject to a subordination agreement in favor of Agent and Lenders) and other terms and conditions reasonably satisfactory to Agent, with respect to unsecured Indebtedness of any Loan Party incurred in connection with a Permitted Acquisition and payable to the seller in connection therewith (excluding Indebtedness arising from deferred purchase price obligations).

"Person" shall mean any individual, sole proprietorship, partnership, corporation, business trust, joint stock company, trust, unincorporated organization, association, limited liability company, limited liability partnership, institution, public benefit corporation, joint venture, entity or Governmental Body (whether federal, state, county, city, municipal or otherwise, including any instrumentality, division, agency, body or department thereof).

"PIK Interest" shall have the meaning set forth in the definition of "Applicable Margin".

"PIK Interest Rate" shall mean a rate per annum equal to 2.00%.

"PIK Interest Period" shall mean the period commencing on the Third Amendment Effective Date and ending on the earlier of (x) the date that the aggregate amount of Net Cash Proceeds received by Quantum from the issuance of Qualified Equity Interests after the Third Amendment Effective Date is at least $25,000,000 and (y) the first date thereafter on which financial statements delivered pursuant to Section 9.8 hereof demonstrate that Quantum and its Subsidiaries, on a consolidated basis, are in compliance with each of the financial covenants set forth in Section 6.5 hereof (as in effect immediately prior to the Third Amendment Effective Date) for the four (4) fiscal quarter period then ended; provided that for purposes of determining compliance with the financial covenants set forth in Section 6.5 hereof (as in effect immediately prior to the Third Amendment Effective Date) for purposes of this clause (y), EBITDA shall be calculated without giving effect to clause (c)(xviii) of the definition of EBITDA.

"Plan" shall mean any employee benefit plan within the meaning of Section 3(3) of ERISA (including a Pension Benefit Plan and a Multiemployer Plan, as defined herein) maintained by any Loan Party or any member of the Controlled Group or to which any Loan Party or any member of the Controlled Group is required to contribute.

"Pledge Agreement" shall mean any pledge agreement executed and delivered by any Loan Party or other Person in favor of Agent subsequent to the Closing Date to secure the Obligations.

"PNC" shall mean PNC Bank, National Association.

"PNC Other Cash" shall mean all unrestricted cash and Cash Equivalents of the Borrowers which is maintained in a Depository Account at PNC and is subject to a Control Agreement.

"PNC Qualified Cash" all unrestricted cash and Cash Equivalents of the Borrowers which is maintained in a Blocked Account at PNC and is subject to a Control Agreement.

"Prime Rate" shall means, for any period, the greatest of (a) three percent (3.00%) per annum, (b) the Federal Funds Rate plus one-half of one percent (0.50%) per annum, (c) the LIBOR Rate (which rate shall be calculated based upon an Interest Period of 1 month and shall be determined on a daily basis) plus one percent (1.00%) per annum, and (d) the rate last quoted by The Wall Street Journal as the "Prime Rate" in the United States or, if The Wall Street Journal ceases to quote such rate, the highest per annum interest rate published by the Federal Reserve Board in Federal Reserve Statistical Release H.15 (519) (Selected Interest Rates) as the "bank prime loan" rate or, if such rate is no longer quoted therein, any similar rate quoted therein (as determined by Agent) or any similar release by the Federal Reserve Board (as determined by Agent). Each change in the Reference Rate shall be effective from and including the date such change is publicly announced as being effective.

"Prime Rate Loans" shall mean Loans which accrue interest by reference to the Prime Rate, in accordance with the terms of this Agreement.

"Pro Forma Balance Sheet" shall have the meaning set forth in Section 5.5(a) hereof.

"Pro Forma Financial Statements" shall have the meaning set forth in Section 5.5(b) hereof.

"Properly Contested" shall mean, in the case of any Indebtedness, Lien or Taxes, as applicable, of any Person that are not paid as and when due or payable by reason of such Person's bona fide dispute concerning its liability to pay the same or concerning the amount thereof: (a) such Indebtedness, Lien or Taxes, as applicable, are being properly contested in good faith by appropriate proceedings promptly instituted and diligently conducted; (b) such Person has established appropriate reserves as shall be required in conformity with GAAP; (c) the non-payment of such Indebtedness or Taxes will not have a Material Adverse Effect or will not result in the forfeiture of any assets of such Person; (d) no Lien is imposed upon any of such Person's assets with respect to such Indebtedness or taxes unless such Lien (x) does not attach to any Receivables or Inventory, (y) is at all times junior and subordinate in priority to the Liens in favor of Agent (except only with respect to property Taxes that have priority as a matter of applicable state law) and, (z) enforcement of such Lien is stayed during the period prior to the final resolution or disposition of such dispute; and (e) if such Indebtedness or Lien, as applicable, results from, or is determined by the entry, rendition or issuance against a Person or any of its assets of a judgment, writ, order or decree, enforcement of such judgment, writ, order or decree is stayed pending a timely appeal or other judicial review.

"Protective Advances" shall have the meaning set forth in Section 16.2(e) hereof.

"Purchasing CLO" shall have the meaning set forth in Section 16.3(d) hereof.

"Purchasing Lender" shall have the meaning set forth in Section 16.3(c) hereof.

"Qualified Cash" shall mean, as of any date of determination, the sum of:

(a) so long as Quantum is in compliance with Section 6.14(a)(i) hereof, all unrestricted cash and Cash Equivalents of Quantum which is maintained in a Blocked Account at a Specified Domestic Blocked Account Bank;

(b) so long as Quantum is in compliance with Section 6.14(a)(ii) hereof, all unrestricted cash and Cash Equivalents of Quantum in an amount not to exceed $5,000,000 which is maintained in the Swiss Blocked Accounts; and

(c) all PNC Qualified Cash.

"Qualified Equity Interests" shall mean Equity Interests issued by Quantum (and not by one or more of its Subsidiaries) that is not a Disqualified Equity Interest.

~~<"Quality of Earnings Reporting >~~Period~~" shall mean the period commencing <upon the occurrence of a Quality of Earnings Triggering Event and ending on the >~~Delayed Draw Term Loan Commitment Termination Date.~~

~~<"Quality of Earnings Triggering Event" shall mean that EBITDA of Quantum and its Subsidiaries for the twelve (12) month period ending on June 30, 2017, as set forth in the financial statements required to be delivered to Agent pursuant to Section 9.9 with respect to the month ending on June 30, 2017, shall be less than or equal to $28,000,000.>~~

"Quantum" shall have the meaning set forth in the preamble to this Agreement.

"Quantum Board of Directors" shall have the meaning set forth in the Section 6.15 hereof.

"Quantum International" shall mean Quantum International, Inc., a Delaware corporation.

"RCRA" shall mean the Resource Conservation and Recovery Act, 42 U.S.C. §§ 6901 et seq., as same may be amended, modified or supplemented from time to time.

"Real Property" shall mean all of the real property owned, leased or operated by any Loan Party on or after the Closing Date, together with, in each case, all improvements and appurtenant fixtures, equipment, personal property, easements and other property and rights incidental to the ownership, lease or operation thereof.

"Receivables" shall mean and include, as to each Loan Party, all of such Loan Party's accounts (as defined in Article 9 of the Uniform Commercial Code) and all of such Loan Party's contract rights, instruments (including those evidencing indebtedness owed to such Loan Party by its Affiliates), documents, chattel paper (including electronic chattel paper), general intangibles relating to accounts, contract rights, instruments, documents and chattel paper, and drafts and acceptances, credit card receivables and all other forms of obligations owing to such Loan Party arising out of or in connection with the sale or lease of Inventory or the rendition of services, all supporting obligations, guarantees and other security therefor, whether secured or unsecured, now existing or hereafter created, and whether or not specifically sold or assigned to Agent hereunder.

"Recipient" shall mean (a) Agent, (b) any Lender, (c) any Participant, or (d) any other recipient of any payment to be made by or on account of any Obligations.

"Recurring Royalty Revenue" shall mean revenue received and recognized by Quantum or any of its Subsidiaries pursuant to a Format Development Agreement relating to the LTO Program.

"Refinancing Indebtedness" shall mean any financing, renewal or extension of Indebtedness so long as:

(a) such refinancing, renewal or extension does not result in an increase in the principal amount of the Indebtedness so refinanced, renewed or extended, other than by the amount of premiums paid thereon and the fees and expenses incurred in connection therewith and by the amount of unfunded commitments with respect thereto;

(b) such refinancing, renewal or extension does not result in a shortening of the average weighted maturity (measured as of the date of the refinancing, renewal or extension) of the Indebtedness so refinanced, renewed or extended, and such refinancing, renewal or extension is not on terms or conditions that, taken as a whole, are less favorable to the interests of the Secured Parties than the terms and conditions of the Indebtedness being refinanced, renewed or extended;

(c) if the Indebtedness that is refinanced, renewed or extended was Subordinated Indebtedness, then the terms and conditions of the refinancing, renewal or extension shall include subordination terms and conditions that are at least as favorable to the Secured Parties as those that were applicable to the refinanced, renewed or extended Indebtedness; and

(d) the Indebtedness that is refinanced, renewed or extended is not recourse to any Person that is liable on account of the Obligations, other than those Persons which were obligated with respect to the Indebtedness that was refinanced, renewed or extended.

"Register" shall have the meaning set forth in Section 2.2(c) hereof.

"Release" shall have the meaning set forth in Section 5.7(c)(i) hereof.

"Reportable Compliance Event" shall mean that any Covered Entity becomes a Sanctioned Person, or is charged by indictment, criminal complaint or similar charging instrument, arraigned, or custodially detained in connection with any Anti-Terrorism Law or any predicate crime to any Anti-Terrorism Law, or has knowledge of facts or circumstances to the effect that it is reasonably likely that any material aspect of its operations is in actual or probable violation of any Anti-Terrorism Law.

"Reportable ERISA Event" shall mean a reportable event described in Section 4043 of ERISA or the regulations promulgated thereunder, other than an event for which the 30-day notice period is waived.

"Required Lenders" shall mean Lenders holding at least fifty-one percent (51%) of the sum of the outstanding principal balance of the Term Loans.

"Reserve Percentage" shall mean, on any day, for any Lender, the maximum percentage prescribed by the Board of Governors of the Federal Reserve System (or any successor thereto) for determining the reserve requirements (including any basic, supplemental, marginal, or emergency reserves) that are in effect on such date with respect to eurocurrency funding (currently referred to as "eurocurrency liabilities") of that Lender, but so long as such Lender is not required or directed under applicable regulations to maintain such reserves, the Reserve Percentage shall be zero.

"Restricted Payment" shall mean (a) the declaration or payment of any dividend or the making of any other payment or distribution, directly or indirectly, on account of Equity Interests issued by any Loan Party (including any payment in connection with any merger or consolidation involving any Loan Party) or to the direct or indirect holders of Equity Interests issued by any Loan Party in their capacity as such holders (other than dividends or distributions payable in Qualified Equity Interests issued by Quantum), (b) the purchase, redemption or making of any sinking fund or similar payment, or otherwise acquisition or retirement for value (including in connection with any merger or consolidation involving any Loan Party) any Equity Interests issued by any Loan Party, or (c) the making of any payment to retire, or to obtain the surrender of, any outstanding warrants, options, or other rights to acquire Equity Interests of any Loan Party now or hereafter outstanding.

"Revolving Commitment" shall have the meaning provided in the Revolving Loan Agreement.

"Revolving Loan Agent" shall mean the "Agent" as defined in the Revolving Loan Agreement.

"Revolving Loan Agreement" shall mean that certain Revolving Credit and Security Credit Agreement dated as of the Closing Date by and among Revolving Loan Agent, the Revolving Loan Lenders and the Loan Parties, as amended, restated or otherwise modified from time to time to the extent not prohibited by the Intercreditor Agreement.

"Revolving Loan Documents" shall mean, collectively, the following (as the same may be amended, restated or otherwise modified from time to time to the extent not prohibited by the Intercreditor Agreement): (a) the Revolving Loan Agreement, all exhibits, schedules and disclosure letters referred to therein or delivered pursuant thereto, if any, (b) all amendments thereto, waivers relating thereto and other side letters or agreements affecting the terms thereof, and (c) all of the other agreements, documents and instruments executed and delivered in connection therewith or related thereto.

"Revolving Loan Indebtedness" shall mean "Obligations" (or any such similar term) (as defined in the Revolving Loan Agreement) of the Loan Parties owing to Revolving Loan Agent, Revolving Loan Lenders and the other Secured Parties (as defined in the Revolving Loan Agreement) under the Revolving Loan Documents.

"Revolving Loan Lenders" shall mean the financial institutions from time to time party to the Revolving Loan Agreement as lenders.

"S&P" shall mean Standard & Poor's Ratings Services, a Standard & Poor's Financial Services LLC business, or any successor.

"Sanctioned Country" shall mean a country subject to a sanctions program maintained under any Anti-Terrorism Law.

"Sanctioned Person" shall mean any individual person, group, regime, entity or thing listed or otherwise recognized as a specially designated, prohibited, sanctioned or debarred person, group, regime, entity or thing, or subject to any limitations or prohibitions (including but not limited to the blocking of property or rejection of transactions), under any Anti-Terrorism Law.

"Scheduled Term Loan Installment Payments" shall have the meaning set forth in Section 2.1(b) hereof.

"SEC" shall mean the Securities and Exchange Commission or any successor thereto.

"SEC Inquiry" shall mean that certain inquiry initiated by the Securities and Exchange Commission on or around January 11, 2018 regarding Quantum's accounting practices and internal controls related to revenue recognition for transactions commencing April 1, 2016.

"Second Amendment" means that certain Second Amendment to Term Loan Credit and Security Agreement, dated as of the Second Amendment effective Date, by and among Quantum, the Lenders party thereto, and Agent.

"Second Amendment Effective Date" means November 6, 2017.

"Second Delayed Draw Term Loan Amount" shall mean an amount equal to $6,600,000.

"Second Delayed Draw Term Loan Commitment Period" shall mean the period commencing after the date that the Commitments of the Lenders to make First Delayed Draw Term Loans has been reduced to zero and ending on the Second Delayed Draw Term Loan Commitment Termination Date.

"Second Delayed Draw Term Loan Commitment Termination Date" shall mean the earlier of (a) the date that the Commitments of the Lenders to make Second Delayed Draw Term Loans has been reduced to zero and (b) December 31, 2018.

"Second Delayed Draw Term Loan Draw Date" shall have the meaning set forth in Section 2.1(a)(ii) hereof.

"Secured Parties" shall mean, collectively, Agent and the Lenders and the respective successors and assigns of each of them.

"Securities Act" shall mean the Securities Act of 1933, as amended.

"Senior Net Leverage Ratio" shall mean, for any Person on any date of determination, the ratio of (a) the Adjusted Funded Debt of such Person on such date, to (b) EBITDA of such Person for the four (4) fiscal quarter period ending on or immediately prior to such date; provided that for purposes of calculating Senior Net Leverage Ratio for purposes of determining Applicable Margin, EBITDA shall be calculated without giving effect to clause (c)(xviii) of the definition of EBITDA.

"Service Inventory" shall mean Inventory consisting of (a) component parts used to repair defective products and (b) finished units provided for Customer use either permanently or on a temporary basis while a defective product is being repaired and, in each case, specified as "service parts inventories" (or with a similar description) on the balance sheets of the Loan Parties.

"Specified Adjusted Funded Debt Amount" shall mean (a) at all times prior to and on the date of the satisfaction of the Specified Convertible Subordinated Debt Condition, $20,000,000, and (b) after the date of the satisfaction of the Specified Convertible Subordinated Debt Condition, $35,000,000.

"Specified Convertible Subordinated Debt Condition" shall mean that Quantum shall have either (a) extended the Convertible Subordinated Debt Maturity Date (either through an extension or a refinancing of the Convertible Subordinated Debt which constitutes permitted Refinancing Indebtedness) to a date no earlier than the later of (x) January 21, 2022 and (y) the date which is ninety-one (91) days after the last day of the Term, in either case in accordance with the terms of the Convertible Subordinated Debt Documents, (b) converted the Convertible Subordinated Debt to Qualified Equity Interests in Quantum in a cashless exchange (with cash payment made in exchange for fractional shares) in accordance with the terms of the Convertible Subordinated Debt Documents, or (c) repaid, prepaid, repurchased, redeemed, retired or otherwise acquired the Convertible Subordinated Debt in full (in one or more transactions) in accordance with Section 7.18 hereof.

"Specified Domestic Blocked Account Banks" shall mean, collectively, the following (together with their respective successors and assigns): (a) Wells Fargo Bank, National Association, (b) Silicon Valley Bank, and (c) PNC.

"Specified Equity Issuance" shall mean an issuance of Qualified Equity Interests for the sole purpose of, and the proceeds of which shall be used only in connection with, the repayment of all or any portion of the Convertible Subordinated Debt.

"Specified Swiss Blocked Account Bank" shall mean UBS Switzerland AG, Max-Hoegger-Strasse 80, P.O. Box CH-8098, Zurich, Switzerland, and its successors and permitted assigns.

"Subordinated Indebtedness" shall mean: (a) the Convertible Subordinated Debt, (b) Indebtedness under any Permitted Seller Notes, (c) Indebtedness in respect of Permitted Earnouts, and (d) any other unsecured Indebtedness of any Loan Party or its Subsidiaries incurred from time to time that is subordinated in right of payment to the Obligations and that (i) is guaranteed by the Loan Parties, (ii) is not subject to scheduled amortization, redemption, sinking fund or similar payment and does not have a final maturity, in each case, on or before the date that is six (6) months after the Maturity Date, (iii) does not include any covenant (including without limitation any financial covenant) or agreement that is more restrictive or onerous on any Loan Party in any material respect than any comparable covenant in the Agreement; provided that with respect to any financial covenant, such covenant shall not be more restrictive or onerous on any Loan Party in any respect, and (iv) contains customary subordination (including customary payment blocks during a payment default under any "senior debt" designated thereunder) and turnover provisions and shall be limited to cross-payment default and cross-acceleration to other "senior debt" designated thereunder.

"Subordination Agreement" shall mean any subordination agreement by and among Agent, any Loan Party and any holder of Subordinated Indebtedness, as the same may be amended, modified, supplemented, renewed, restated or replaced from time to time.

"Subsidiary" shall mean of any Person a corporation or other entity of whose Equity Interests having ordinary voting power (other than Equity Interests having such power only by reason of the happening of a contingency) to elect a majority of the directors of such corporation, or other Persons performing similar functions for such entity, are owned, directly or indirectly, by such Person.

"Subsidiary Stock" shall mean (a) with respect to the Equity Interests issued to a Loan Party by any Subsidiary (other than a Foreign Subsidiary), 100% of such issued and outstanding Equity Interests, and (b) with respect to any Equity Interests issued to a Loan Party by any Foreign Subsidiary (i) 100% of such issued and outstanding Equity Interests not entitled to vote (within the meaning of Treas. Reg. Section 1.956-2(c)(2)) and (ii) 65% (or such greater percentage that could not reasonably be expected to cause any material adverse tax consequences to Quantum or any of its Subsidiaries) of such issued and outstanding Equity Interests entitled to vote (within the meaning of Treas. Reg. Section 1.956-2(c)(2)).

"Swiss Blocked Accounts" shall mean the Blocked Accounts of Quantum maintained at Specified Swiss Blocked Account Bank.

"Taxes" shall mean all present or future taxes, levies, imposts, duties, deductions, withholdings, assessments, fees or other charges imposed by any Governmental Body, including any interest, additions to tax or penalties applicable thereto.

"Term" shall have the meaning set forth in Section 13.1 hereof.

"Term A Loan" shall have the meaning set forth in Section 2.1(a)(i) hereof.

~~<"Term A Loan Commitment Percentage" shall mean, as to any Lender, (i) on >~~the Closing Date, the ~~<~~percentage set forth opposite such Lender's name on Schedule 1.1 hereof under the column ~~>~~"Term A Loan ~~<~~Commitment Percentage" (if such Lender's name is not so set forth thereon, then, on the Closing Date, such percentage for such Lender shall be deemed to be zero) and (ii) on any date following the Closing Date, the percentage equal to the principal amount ~~>~~of the Term A Loan ~~<~~held by such Lender on such date divided by the aggregate ~~>~~principal amount ~~<~~of ~~>~~Term A Loan ~~<~~on such date.~~>~~

"Term B Loan" shall have the meaning set forth in Section 2.1(a)(i) hereof.

"Term C Loan" shall have the meaning set forth in Section 2.1(a)(i) hereof.

"Term Loan" shall mean, collectively, the Term A Loan, the ~~<~~Original~~>~~Term B Loan, the Term C Loan, each First Delayed Draw Term Loan, when funded, each Second Delayed Draw Term Loan, when funded, and~~<~~the Incremental~~>~~each Third Delayed Draw Term Loan, when funded.

~~<"Term Loan Commitment Percentage" shall mean, as to any Lender, the percentage equal to the principal amount of the Term Loan held by such Lender on such date divided by the aggregate principal amount of Term Loan on such date.~~>~~

"Term Priority Collateral" shall have the meaning given to such term in the Intercreditor Agreement.

"Termination Event" shall mean: (a) a Reportable ERISA Event with respect to any Plan; (b) the withdrawal of any Loan Party or any member of the Controlled Group from a Pension Benefit Plan or Multiemployer Plan during a plan year in which such entity was a "substantial employer" as defined in Section 4001(a)(2) of ERISA or a cessation of operations that is treated as such a withdrawal under Section 4062(e) of ERISA; (c) the providing of notice of intent to terminate a Pension Benefit Plan or Multiemployer Plan in a distress termination described in Section 4041(c) of ERISA; (d) the commencement of proceedings by the PBGC to terminate a Plan; (e) any event or condition (i) which might constitute grounds under Section 4042 of ERISA for the termination of, or the appointment of a trustee to administer, any Pension Benefit Plan or Multiemployer Plan, or (ii) that may result in the termination of a Multiemployer Plan pursuant to Section 4041A of ERISA; (f) the partial or complete withdrawal, within the meaning of Section 4203 or 4205 of ERISA, of any Loan Party or any member of the Controlled Group from a Multiemployer Plan; (g) notice that a Multiemployer Plan is subject to Section 4245 of ERISA; or (h) the imposition of any liability under Title IV of ERISA, other than for PBGC premiums due but not delinquent, upon any Loan Party or any member of the Controlled Group.

"Third Amendment" means that certain Third Amendment to Term Loan Credit and Security Agreement, dated as of the Third Amendment effective Date, by and among Quantum, the Lenders party thereto, and Agent.

"Third Amendment Effective Date" means February 14, 2018.

"Third Delayed Draw Term Loan" shall have the meaning set forth in Section 2.1(a)(ii) hereof.

"Third Delayed Draw Term Loan Amount" shall mean an amount equal to $6,700,000.

"Third Delayed Draw Term Loan Commitment Period" shall mean the period commencing after the date that the Commitments of the Lenders to make Second Delayed Draw Term Loans has been reduced to zero and ending on the Third Delayed Draw Term Loan Commitment Termination Date.

"Third Delayed Draw Term Loan Commitment Termination Date" shall mean the earlier of (a) the date that the Commitments of the Lenders to make Third Delayed Draw Term Loans has been reduced to zero and (b) December 31, 2018.

"Third Delayed Draw Term Loan Draw Date" shall have the meaning set forth in Section 2.1(a)(ii) hereof.

"Total Leverage Ratio" shall mean, for any Person on any date of determination, the ratio of (a) Funded Debt of such Person on such date to (b) EBITDA of such Person for the four (4) fiscal quarter period ending on or immediately prior to such date.

"Toxic Substance" shall mean and include any material present on any Real Property owned or leased by any Loan Party (including the Leasehold Interests) which has been shown to have significant adverse effect on human health or which is subject to regulation under the Toxic Substances Control Act (TSCA), 15 U.S.C. §§ 2601 et seq., applicable state law, or any other applicable Federal or state laws now in force or hereafter enacted relating to toxic substances. "Toxic Substance" includes but is not limited to asbestos, polychlorinated biphenyls (PCBs) and lead-based paints.

"Transactions" shall mean the transactions under or contemplated by this Agreement, the Other Documents and the Revolving Loan Documents to occur on the Closing Date.

"Transferee" shall have the meaning set forth in Section 16.3(d) hereof.

"Transfer Pricing Program" shall mean the transactions between Quantum and any of its Subsidiaries or between any Subsidiaries of Quantum pursuant to which Quantum, directly or indirectly, reimburses expenses incurred by its Subsidiaries in the operation of the business, in each case, in accordance with applicable law, in the Ordinary Course of Business and in a manner consistent with past practice.

"Undrawn Availability" shall have the meaning provided for in the Revolving Loan Credit Agreement.

"Unfunded Capital Expenditures" shall mean, as to any Loan Party, without duplication, Capital Expenditures funded (a) from such Loan Party's internally generated cash flow or (b) with the proceeds of an Advance. Notwithstanding the foregoing, for purposes of calculating the Fixed Charge Coverage Ratio of Quantum and its Subsidiaries for any fiscal period ending on December 31, 2016, March 31, 2017, June 30, 2017 and September 30, 2017: (a) the Unfunded Capital Expenditures of Quantum and its Subsidiaries for the fiscal quarter ending on March 31, 2016 shall be deemed to be $1,710,550; (b) the Unfunded Capital Expenditures of Quantum and its Subsidiaries for the fiscal quarter ending on June 30, 2016 shall be deemed to be $1,631,630; and (c) the Unfunded Capital Expenditures of Quantum and its Subsidiaries for the fiscal quarter ending on September 30, 2016 shall be deemed to be $2,175,836.

"Uniform Commercial Code" shall have the meaning set forth in Section 1.3 hereof.

"USA PATRIOT Act " shall mean the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001, Public Law 107-56, as the same has been, or shall hereafter be, amended, modified, supplemented, renewed, extended or replaced.

"Write-Down and Conversion Powers" shall mean, with respect to any EEA Resolution Authority, the write-down and conversion powers of such EEA Resolution Authority from time to time under the Bail-In Legislation for the applicable EEA Member Country, which write-down and conversion powers are described in the EU Bail-In Legislation Schedule.

1.3 Uniform Commercial Code Terms. All terms used herein and defined in the Uniform Commercial Code as adopted in the State of New York from time to time (the "Uniform Commercial Code") shall have the meaning given therein unless otherwise defined herein. Without limiting the foregoing, the terms "accounts", "chattel paper" (and "electronic chattel paper" and "tangible chattel paper"), "commercial tort claims", "deposit accounts", "financial asset", "fixtures", "general intangibles", "goods", "instruments", "letter-of-credit rights", "payment intangibles", "proceeds", "promissory note" "securities", "software" and "supporting obligations" as and when used in the description of Collateral shall have the meanings given to such terms in Articles 8 or 9 of the Uniform Commercial Code. To the extent the definition of any category or type of collateral is expanded by any amendment, modification or revision to the Uniform Commercial Code, such expanded definition will apply automatically as of the date of such amendment, modification or revision.

1.4 Certain Matters of Construction. The terms "herein", "hereof" and "hereunder" and other words of similar import refer to this Agreement as a whole and not to any particular section, paragraph or subdivision. All references herein to Articles, Sections, Exhibits and Schedules shall be construed to refer to Articles and Sections of, and Exhibits and Schedules to, this Agreement, except where the context clearly requires otherwise. Any pronoun used

shall be deemed to cover all genders. Wherever appropriate in the context, terms used herein in the singular also include the plural and vice versa. All references to statutes and related regulations shall include any amendments of same and any successor statutes and regulations. Unless otherwise provided, all references to any instruments or agreements, including references to any of the Other Documents, shall include any and all modifications, supplements or amendments thereto, any and all restatements or replacements thereof and any and all extensions or renewals thereof. Except as otherwise expressly provided for herein, all references herein to the time of day shall mean the time in Chicago, Illinois. Whenever the words "including" or "include" shall be used, such words shall be understood to mean "including, without limitation" or "include, without limitation". A Default or an Event of Default shall be deemed to exist at all times during the period commencing on the date that such Default or Event of Default occurs to the date on which such Default or Event of Default is waived in writing pursuant to this Agreement or, in the case of a Default, is cured within any period of cure expressly provided for in this Agreement; and an Event of Default shall "continue" or be "continuing" until such Event of Default has been waived in writing by Required Lenders. Any Lien referred to in this Agreement or any of the Other Documents as having been created in favor of Agent, any agreement entered into by Agent pursuant to this Agreement or any of the Other Documents, any payment made by or to or funds received by Agent pursuant to or as contemplated by this Agreement or any of the Other Documents, or any act taken or omitted to be taken by Agent, shall, unless otherwise expressly provided, be created, entered into, made or received, or taken or omitted, for the benefit or account of Agent and Lenders. Wherever the phrase "to the Borrowers' knowledge" or "to the Loan Parties' knowledge" or words of similar import relating to the knowledge or the awareness of any Borrower or any Loan Party are used in this Agreement or Other Documents, such phrase shall mean and refer to (i) the actual knowledge of a senior officer of any Loan Party or (ii) the knowledge that a senior officer would have obtained if he/she had engaged in a good faith and diligent performance of his/her duties. All covenants hereunder shall be given independent effect so that if a particular action or condition is not permitted by any of such covenants, the fact that it would be permitted by an exception to, or otherwise within the limitations of, another covenant shall not avoid the occurrence of a default if such action is taken or condition exists. In addition, all representations and warranties hereunder shall be given independent effect so that if a particular representation or warranty proves to be incorrect or is breached, the fact that another representation or warranty concerning the same or similar subject matter is correct or is not breached will not affect the incorrectness of a breach of a representation or warranty hereunder.

II LOANS, PAYMENTS.

2.1 Term Loan.

(a) Term Loan Amounts.

~~(i) <On the terms and subject to the conditions set forth herein, the Lenders hereby agree to make to Quantum on the Closing Date a term loan in an original principal amount equal to $50,000,000 (the "Term A Loan"). Each Lender's obligation to fund the Term A Loan shall be limited to such Lender's Term Loan Commitment Percentage of the Term A Loan, and no Lender shall have any obligation~~

~~to fund any portion of the Term A Loan required to be funded by any other Lender, but not so funded, and no Lender shall be relieved of its obligation to fund the Term A Loan because another Lender has failed to fund>~~. ~~Borrowers shall not have any right to reborrow any portion of the <Term A >Loan which is repaid or prepaid from time to time.<The Commitments of the Lenders to make the Term A Loan shall expire concurrently with the making of the Term A Loan on the Closing Date.>~~

(i) On the Closing Date, the Lenders made to Quantum a term loan in an original principal amount equal to $50,000,000 (the "Term A Loan"). As of the Fourth Amendment Effective Date, but prior to giving effect to the making of any First Delayed Draw Term Loan, the outstanding principal balance of the Term A Loan is $52,681,899.14, with such outstanding principal balance held by the Lenders on the Fourth Amendment Effective Date as set forth in the Schedule 1.1 hereto. On or around the Second Amendment Effective Date, the Lenders made to Quantum a term loan in an original principal amount equal to $20,000,000 (the "Term B Loan"). As of the Fourth Amendment Effective Date, but prior to giving effect to the making of any First Delayed Draw Term Loan, the outstanding principal balance of the Term B Loan is $19,648,966.42, with such outstanding principal balance held by the Lenders on the Fourth Amendment Effective Date as set forth in the Schedule 1.1 hereto. On or around the Second Amendment Effective Date, the Lenders made to Quantum a term loan in an original principal amount equal to $20,000,000 (the "Term C Loan"; and, together with the Term A Loan and the Term B Loan, collectively the "Existing Term Loan"). As of the Fourth Amendment Effective Date, but prior to giving effect to the making of any First Delayed Draw Term Loan, the outstanding principal balance of the Term C Loan is $19,150,266.42, with such outstanding principal balance held by the Lenders on the Fourth Amendment Effective Date as set forth in the Schedule 1.1 hereto. Borrowers shall not have any right to reborrow any portion of the Existing Term Loan which is repaid or prepaid from time to time.

(ii) On the terms and subject to the conditions set forth herein, at the election of, and on ~~<a >~~Business ~~<Day>~~Days during the First Delayed Draw Term Loan Commitment Period identified by, Borrowing Agent (each such date, ~~<the>~~a "First Delayed Draw Term Loan Draw Date"), so long as, in each instance, each of the Delayed Draw Funding Conditions shall have been satisfied, the Lenders hereby agree to make to Quantum on ~~<the>~~First Delayed Draw Term Loan Draw ~~<Date (A) a>~~Dates delayed draw term ~~<loan>~~loans up to an aggregate original principal amount, for all such delayed draw term loans, equal to the ~~<Original>~~First Delayed Draw Term Loan Amount (~~<the "Original>~~each, a "First Delayed Draw Term Loan"~~<)>~~; and ~~<(B) a >~~collectively, the "First Delayed Draw Term Loans"). Any First Delayed Draw Term Loan shall be in an amount of at least $1,000,000 and integral multiples of $100,000 in excess thereof. On the terms and subject to the conditions set forth herein, at the election of, and on Business Days during the Second Delayed Draw Term Loan Commitment Period identified by, Borrowing Agent (each such date, a "Second Delayed Draw Term Loan Draw Date"), so long as, in each instance, each of the Delayed Draw Funding Conditions shall have been satisfied, the Lenders hereby agree to make to Quantum on Second Delayed Draw Term Loan Draw Dates delayed draw

term ~~<loan>~~loans up to an aggregate original principal amount for all such delayed draw term loans, equal to the ~~<Incremental>~~Second Delayed Draw Term Loan Amount (~~<the "Incremental>~~each, a "Second Delayed Draw Term Loan"; and~~<, when funded, together with the Original>~~collectively, the "Second Delayed Draw Term Loans"). Any Second Delayed Draw Term Loan~~<, collectively the ">~~ shall be in an amount of at least $1,000,000 and integral multiples of $100,000 in excess thereof. On the terms and subject to the conditions set forth herein, at the election of, and on Business Days during the Third Delayed Draw Term Loan Commitment Period identified by, Borrowing Agent (each such date, a "Third Delayed Draw Term Loan Draw Date"), so long as, in each instance, each of the Delayed Draw Funding Conditions shall have been satisfied, the Lenders hereby agree to make to Quantum on Third Delayed Draw Term Loan Draw Dates delayed draw term loans up to an aggregate original principal amount, for all such delayed draw term loans, equal to the Third Delayed Draw Term Loan Amount (each, a "Third Delayed Draw Term Loan"~~<), in each case, to a Blocked Account>~~; and collectively, the "Third Delayed Draw Term Loans"). Any Third Delayed Draw Term Loan shall be in an amount of at least $1,000,000 and integral multiples of $100,000 in excess thereof.. Each Lender's obligation to fund ~~<the Original>~~each First Delayed Draw Term Loan, each Second Delayed Draw Term Loan and ~~<the Incremental>~~each Third Delayed Draw Term Loan shall be limited to such Lender's Delayed Draw Term Loan Commitment Percentage of ~~<the Original>~~such First Delayed Draw Term Loan, such Second Delayed Draw Term Loan and ~~<the Incremental>~~such Third Delayed Draw Term Loan, as applicable, and no Lender shall have any obligation to fund any portion of ~~<the Original>~~any First Delayed Draw Term Loan, any Second Delayed Draw Term Loan or ~~<the Incremental>~~any Third Delayed Draw Term Loan required to be funded by any other Lender, but not so funded, and no Lender shall be relieved of its obligation to fund ~~<the Original>~~any First Delayed Draw Term Loan, any Second Delayed Draw Term Loan or ~~<the Incremental>~~any Third Delayed Draw Term Loan because another Lender has failed to fund. When funded, ~~<the>~~each First Delayed Draw Term Loan, each Second Delayed Draw Term Loan and each Third Delayed Draw Term Loan shall become part of, and have all of the terms and conditions applicable to (including without limitation in respect of pricing, repayments and maturity), the Term Loan for all purposes hereunder and under the Other Documents and shall be secured by the Collateral in all respects. Borrowers shall not have any right to reborrow any portion of the Delayed Draw Term Loan which is repaid or prepaid from time to time. The Commitments of the Lenders to make ~~<the Original >~~First Delayed Draw Term Loans, Second Delayed Draw Term Loans and Third Delayed Draw Term Loans shall be permanently and concurrently reduced by the original principal amount of, and upon the making of, each First Delayed Draw Term Loan, each Second Delayed Draw Term Loan and ~~<the Incremental >Delayed Draw Term Loan shall <expire concurrently with the making of the Original >Delayed Draw Term Loan <and the Incremental>~~each Third Delayed Draw Term Loan, ~~<as applicable>~~respectively, on the applicable Delayed Draw Term Loan Draw Date.

(iii) The Borrowing Agent shall deliver to Agent a Notice of Borrowing, not later than 10:00 a.m. (Chicago time) on the Closing Date or the applicable Delayed Draw Term Loan Draw Date, as applicable. Such Notice of Borrowing shall be irrevocable and shall specify (x) the principal amount of the proposed Loan, (y) whether the proposed Loan is requested to be a Prime Rate Loan or a LIBOR Rate Loan and, in the case of a LIBOR Rate Loan, the initial Interest Period with respect thereto, and (z) wire instructions for the account to which funds to the Borrowers should be deposited. Agent and the Lenders may act without liability upon the basis of written notice believed by the Agent in good faith to be from the Borrowing Agent. Each Borrower hereby waives the right to dispute the Agent's record of the terms of any such Notice of Borrowing. Agent and each Lender shall be entitled to rely conclusively on the Borrowing Agent's authority to request a Loan on behalf of the Borrowers until Agent receives written notice to the contrary. The Agent and the Lenders shall have no duty to verify the authenticity of the signature appearing on any written Notice of Borrowing.

(iv) All Loans under this Agreement shall be made by the Lenders, to the account specified by Agent, no later than 3:00 p.m. (Chicago time) on the borrowing date of the proposed Loan, simultaneously and proportionately to their Commitment, it being understood that no Lender shall be responsible for any default by any other Lender in that other Lender's obligations to make a Loan requested hereunder, nor shall the Commitment of any Lender be increased or decreased as a result of the default by any other Lender in that other Lender's obligation to make a Loan requested hereunder, and each Lender shall be obligated to make the Loans required to be made by it by the terms of this Agreement regardless of the failure by any other Lender. Promptly upon receipt of all funds requested in the Notice of Borrowing, the Agent will make the proceeds of such Loans available to the Borrowers by causing an amount, in immediately available funds, equal to the proceeds of all such Loans received by the Agent to the account provided by the Borrowing Agent in the Notice of Borrowing for such purpose.

(b) Scheduled Term Loan Payments.

~~(i) <The principal amount of the Term Loan (other than the Incremental >Delayed Draw Term <Loan) shall be paid in installments on the dates shown below in an amount equal to the product of (i) the percentage set forth in Column B below shown opposite each date as set forth in Column A below times (ii) the sum of (x) >the original principal amount of <the Term A Loan plus (ii) commencing the last Business Day of the first full Fiscal Quarter after the Delayed >Term Loan Draw Date, <the original principal amount of the Original >Delayed Draw Term Loan <as of such date, as adjusted in accordance with Section 2.3(f) hereof:>~~

~~Column A~~ ~~Date of Payment~~	~~Column B~~ ~~Percentage of Original Principal Amount to be Paid~~
~~March 31 2018~~	~~1.250%~~
~~June 30, 2018~~	~~1.250%~~
~~September 30, 2018~~	~~1.250%~~
~~December 31, 2018~~	~~1.250%~~

Column A Date of Payment	Column B Percentage of Original Principal Amount to be Paid
March 31 2019	1.250%
June 30, 2019	1.250%
September 30, 2019	1.250%
December 31, 2019	1.250%
March 31 2020	1.250%
June 30, 2020	1.250%
September 30, 2020	1.250%
December 31, 2020	1.250%
March 31 2021	1.250%
June 30, 2021	1.250%
September 30, 2021	1.250%
Maturity Date	The remaining principal balance of the Term Loan

(i) [Reserved].

(ii) <The principal amount of the Incremental >Delayed Draw Term Loan shall be <paid in installments on the dates and in the amounts shown below:>

Date of Payment	Installment Amount to be Paid
June 30, 2018	$1,000,000
September 30, 2018	$1,000,000
December 31, 2018	$1,000,000
March 31 2019	$1,000,000
June 30, 2019	$2,500,000
September 30, 2019	$2,500,000
December 31, 2019	$2,500,000
March 31 2020	$2,500,000
June 30, 2020	The remaining principal balance of the Incremental Delayed Draw Term Loan, together with all accrued and unpaid interest thereon

(ii) [Reserved].

(iii) <Notwithstanding the foregoing, the>The outstanding principal amount of the Term Loan, together with all accrued and unpaid interest thereon and all other Obligations accrued and unpaid, shall be due and payable on the Maturity Date. Notwithstanding the foregoing, all Loans shall be subject to earlier repayment upon (x) acceleration upon the occurrence of an Event of Default under this Agreement or (y) termination of this Agreement.

(c) Optional Prepayments. Subject to ~~<Section 7.8 hereof, >~~the provisions of the Intercreditor Agreement and the Fee Letter, Borrowers may, upon ~~<the receipt by any Loan Party of the Net Cash Proceeds from the issuance or sale of any Indebtedness or any equity securities (other than (i) Permitted Indebtedness, (ii) Net Cash Proceeds from the issuance of Qualified Equity Interests to members of the management or employees of any Loan Party, (iii) Net Cash Proceeds of the issuance of Equity Interests to any Loan Party, and (iv) Specified Equity Issuances to the extent that the Net Cash Proceeds received therefrom have been deposited in an account pledged solely to Agent and held in such account until the date of satisfaction of clause (c) of the Specified Convertible Subordinated Debt Condition (at which such time, such Net Cash Proceeds can be released to repay the Convertible Subordinated Debt in accordance with Section 7.18 hereof or released to the Borrowers)), Borrowers shall prepay the Loans in an amount equal to one hundred percent (100%) of such Net Cash Proceeds promptly, but in no event more than one (1) Business Day following the receipt thereof, and until the date of payment, such proceeds shall be held in trust for Agent; provided that, so long as no Default or Event of Default has occurred and is continuing, such percentage shall be reduced to (x) 50% with respect to the first $40,000,000 of Net Cash Proceeds received from the issuance of Qualified Equity Interests during the Term and (y) 0% with respect to the next (but only the next) $10,000,000 of Net Cash Proceeds received from the issuance of Qualified Equity Interests during the Term. Such prepayments shall be applied to the Loans in accordance with Section 2.3(f) hereof. The foregoing shall not be deemed to be implied consent to any issuance or sale of any Indebtedness or any equity securities otherwise prohibited by the terms and conditions hereof.>~~at least ten Business Days prior written notice to Agent, prepay the principal of the Term Loan, in whole or in part. Each prepayment made pursuant to this Section 2.1(c) shall be accompanied by the payment of accrued interest to the date of such payment on the amount prepaid.

2.2 General Provisions Regarding Payment; Register.

(a) All payments to be made by Borrowers under any Other Document, including payments of principal and interest on the Notes, and all fees, expenses, indemnities and reimbursements, shall be made without set off or counterclaim, in lawful money of the United States of America and in immediately available funds. If any payment hereunder becomes due and payable on a day other than a Business Day, such payment shall be extended to the next succeeding Business Day and, with respect to payments of principal, interest thereon shall be payable at the then applicable rate during such extension. Borrowers shall make all payments in immediately available funds to the Payment Account before 1:00 p.m. (Chicago time) on the date when due; provided that all payments received by Agent after 1:00 p.m. (Chicago time) on any Business Day may (in Agent's discretion) be credited as if received on the next succeeding Business Day. Any optional or mandatory prepayment of the Term Loan shall be accompanied by timely delivery to Agent of an appropriately completed Payment Notification, as provided in Section 2.3(g) hereof. In the absence of receipt by Agent of an appropriately completed Payment Notification on or prior to such prepayment, each Borrower and each Lender hereby fully authorizes and directs Agent, notwithstanding any contrary application provisions contained herein, to apply payments and/or prepayments received from any

Borrower against the outstanding Term Loan in accordance with the provisions of Section 2.3(f) hereof; *provided*, that if Agent at any time determines that payments received by Agent were in respect of a mandatory prepayment event, Agent shall apply such payments in accordance with the provisions of Section 2.3(f) hereof, and shall be fully authorized by each Borrower and each Lender to make any corresponding Register reversals in respect thereof. Notwithstanding anything to the contrary contained herein, any Payment Notification may state that such Payment Notification is conditioned upon the effectiveness of a Payment in Full of the Indebtedness or the consummation of a Change in Control in connection with another transaction may be conditioned on the closing of such other transaction.

(b) Agent shall maintain on its books an account (the "Borrower Account") to record Loans and other extensions of credit made by the Lenders hereunder or under any Other Document, and all payments thereon made by any Borrower. All entries in the Borrower Account shall be made in accordance with Agent's customary accounting practices as in effect from time to time. The balance in the Borrower Account, as recorded on Agent's most recent printout or other written statement, shall be conclusive and binding evidence of the amounts due and owing to Agent by Borrowers absent clear and convincing evidence to the contrary; *provided* that any failure to so record or any error in so recording shall not limit or otherwise affect Borrowers' duty to pay all amounts owing hereunder or under any Other Document. Unless Borrowing Agent notifies Agent in writing of any objection to any such printout or statement (specifically describing the basis for such objection) within thirty (30) days after the date of receipt thereof, it shall be deemed final, binding and conclusive upon Borrowers in all respects as to all matters reflected therein

(c) Agent, acting as a non-fiduciary agent of the Loan Parties, shall maintain at its address a copy of each Assignment Agreement delivered to it and a register (the "Register") for the recordation of the names and addresses of each Lender and the outstanding principal, accrued and unpaid interest and other fees due hereunder. The entries in the Register shall be conclusive, in the absence of manifest error, and each Loan Party, Agent and Lenders may treat each Person whose name is recorded in the Register as the owner of the Loans recorded therein for the purposes of this Agreement. The Register shall be available for inspection by Borrowing Agent or any Lender at any reasonable time and from time to time upon reasonable prior notice.

2.3 Mandatory Prepayments; Voluntary Commitment Reductions and Prepayments.

(a) Subject to Section 7.1 hereof, the provisions of the Intercreditor Agreement and the Fee Letter, upon the receipt by any Loan Party of the Net Cash Proceeds of any Disposition of any Collateral which constitutes Term Priority Collateral pursuant to clauses (h), (n), (p) or (q) of the definition of "Permitted Dispositions", Borrowers shall prepay the Loans in an amount equal to the Net Cash Proceeds of such Disposition promptly, but in no event more than one (1) Business Day following the receipt thereof, and until the date of payment, such proceeds shall be held in trust for Agent. Notwithstanding the foregoing, (A) so long as no Default or Event of Default has occurred and is continuing, on the date any Loan Party or any of its Subsidiaries receives

Net Cash Proceeds of any such Disposition, such Net Cash Proceeds may, at the option of Borrowing Agent, be applied to invest in property or assets used or useful in the business of any Borrower, provided that (x) Agent has a Lien on such property or assets, (y) Borrowing Agent delivers to Agent within ten (10) days after the date of receipt of such Net Cash Proceeds a certificate stating that such Net Cash Proceeds shall be used to acquire property or assets used or useful in the business of any Borrower within one hundred eighty (180) days after the date of receipt of such Net Cash Proceeds (which certificate shall set forth an estimate of the Net Cash Proceeds to be so expended), (B) pending any such reinvestment or payment of expenses described in clause (A) above, such Net Cash Proceeds shall be deposited in an account pledged solely to Agent, and (C) any Net Cash Proceeds applied to repair, refurbish or replace Collateral pursuant to and in accordance with this Section 2.3(b) shall not be deemed Capital Expenditures for purposes of this Agreement. Such prepayments shall be applied to the Loans in accordance with Section 2.3(f) hereof. The foregoing shall not be deemed to be implied consent to any Disposition otherwise prohibited by the terms and conditions hereof.

(b) Subject to Section 6.6 hereof, the provisions of the Intercreditor Agreement and the Fee Letter, upon the receipt by any Loan Party of any Extraordinary Receipts which constitute Term Priority Collateral in an aggregate amount equal to or in excess of $500,000 in any fiscal year, the Borrowers shall prepay the Loans in an amount equal to the amount of such Extraordinary Receipts promptly, but in no event more than one (1) Business Day following the receipt thereof, and until the date of payment, such proceeds shall be held in trust for Agent. Such prepayments shall be applied to the Loans in the manner described in Section 2.3(f) hereof. Notwithstanding the foregoing, (A) so long as no Default or Event of Default has occurred and is continuing, on the date any Loan Party or any of its Subsidiaries receives Extraordinary Receipts which constitute Term Priority Collateral consisting of insurance proceeds from one or more policies covering, or proceeds from any judgment, settlement, condemnation or other cause of action in respect of, the loss, damage, taking or theft of any property or assets, such Extraordinary Receipts may, at the option of Borrowing Agent, be applied to repair, refurbish or replace such property or assets or acquire replacement property or assets for the property or assets so lost, damaged or stolen or other property or assets used or useful in the business of any Borrower for the property or assets so disposed, provided that (x) Agent has a Lien on such replacement (or repaired or restored) property or assets, (y) Borrowing Agent delivers to Agent within ten (10) days after the date of receipt of such Extraordinary Receipts a certificate stating that such Extraordinary Receipts shall be used to repair or refurbish such property or assets or to acquire such replacement property or assets for the property or assets so lost, damaged or stolen or such other property or assets used or useful in the business of any Borrower within one hundred eighty (180) days after the date of receipt of such Extraordinary Receipts (which certificate shall set forth an estimate of the Extraordinary Receipts to be so expended), (B) pending any such reinvestment or payment of expenses described in clause (A) above, such Extraordinary Receipts shall be deposited in an account pledged solely to Agent, and (C) any Extraordinary Receipts applied to repair, refurbish or replace Collateral pursuant to and in accordance with this Section 2.3(b) shall not be deemed Capital Expenditures for purposes of this Agreement.

(c) Subject to Section 7.8 hereof, the provisions of the Intercreditor Agreement and the Fee Letter, upon the receipt by any Loan Party of the Net Cash Proceeds from the issuance or sale of any Indebtedness or any equity securities (other than (i) Permitted Indebtedness, (ii) Net Cash Proceeds from the issuance of Qualified Equity Interests to members of the management or employees of any Loan Party, (iii) Net Cash Proceeds of the issuance of Equity Interests to any Loan Party, and (iv) Specified Equity Issuances to the extent that the Net Cash Proceeds received therefrom have been deposited in an account pledged solely to Agent and held in such account until the date of satisfaction of clause (c) of the Specified Convertible Subordinated Debt Condition (at which such time, such Net Cash Proceeds can be released to repay the Convertible Subordinated Debt in accordance with Section 7.18 hereof or released to the Borrowers)~~<, and (v) so long as no Default or Event of Default has occurred and is continuing, Net Cash Proceeds from the issuance of Qualified Equity Interests up to an aggregate amount, for all such issuances under this clause (v), equal to $30,000,000>~~), Borrowers shall prepay the Loans in an amount equal to one hundred percent (100%) of such Net Cash Proceeds promptly, but in no event more than one (1) Business Day following the receipt thereof, and until the date of payment, such proceeds shall be held in trust for Agent. Such prepayments shall be applied to the Loans in accordance with Section 2.3(f) hereof. The foregoing shall not be deemed to be implied consent to any issuance or sale of any Indebtedness or any equity securities otherwise prohibited by the terms and conditions hereof.

(d) Subject to the provisions of the Intercreditor Agreement and the Fee Letter, if, at any time, (i) the outstanding principal balance of the Term A Loan minus $5,000,000 exceeds (ii) an amount equal to 90% multiplied by the net orderly liquidation value of the LTO Program (as determined by the most recent appraisal conducted by an independent appraisal firm of reputable standing satisfactory to Agent), Borrowers shall prepay the Loans in an amount equal to one hundred percent (100%) of such excess promptly, but in no event more than one (1) Business Day following the determination of such excess. Such prepayments shall be applied to the Loans in accordance with Section 2.3(f) hereof.

~~<(e) Subject to the provisions of the Intercreditor Agreement and the Fee Letter, on or before the fifth (5th) Business Day following the date on which audited financial statements are required to be delivered pursuant to Section 9.7 hereof (the "Excess Cash Flow Due Date"), beginning with respect to the fiscal year ending March 31, 2019 and for each fiscal year thereafter, Borrowers shall prepay the Loans in an amount equal to an amount equal to fifty percent (50%) of Excess Cash Flow for such fiscal year minus voluntary prepayments of the Term Loans to the extent made during the applicable fiscal year of measurement (such amount not to be less than zero); provided further that, in the event Borrowers are unable to make any mandatory prepayment described in this Section 2.3(e) on any Excess Cash Flow Due Date due the failure to satisfy the conditions in Section 7.17(b) of the Revolving Loan Credit Agreement (as in~~

~~effect on the date hereof) on such date, then Borrowers shall make such prepayment on or before the fifth (5th) Business Day following delivery of the first monthly financial statements delivered thereafter to Agent pursuant to Section 9.9 hereof that demonstrates that the conditions in Section 7.17(b) of the Revolving Loan Credit Agreement (as in effect on the date hereof) have been satisfied. Such prepayments shall be applied to the Loans in accordance with Section 2.3(f) hereof.>~~

(e) [Reserved].

(f) Any prepayment of a LIBOR Rate Loan on a day other than the last day of an Interest Period therefor shall include interest on the principal amount being repaid and shall be subject to Section 3.2(d) hereof. All prepayments of a Loan shall be applied first to that portion of such Loan comprised of Prime Rate Loans and then to that portion of such Loan comprised of LIBOR Rate Loans, in direct order of Interest Period maturities. Subject to the provisions of the Intercreditor Agreement and the Fee Letter, all prepayments under Section 2.1(c) hereof and clauses (a), (b), (c) (solely with respect to prepayments arising from the issuance of any Indebtedness) and (d) of this Section 2.3 shall be applied pro rata to the Term Loan to the remaining installments thereof on a pro rata basis. Subject to the provisions of the Intercreditor Agreement and the Fee Letter, all prepayments under clauses (c) (solely with respect to prepayments arising from the issuance or sale of any equity securities) and (e) of this Section 2.3 shall be applied, first, pro rata, against the remaining ~~<installments of >~~principal due on the ~~<Incremental >~~Delayed Draw Term Loan ~~< in the inverse order of maturity (for the avoidance of doubt, the payment required to be made on June 30, 2020 shall constitute an installment)>~~, and, second, pro rata against the remaining ~~<installments of >~~principal due on ~~<Term A Loan and >~~the ~~<Original Delayed Draw>~~Existing Term Loan ~~< on a pro rata basis (>~~ ~~for the avoidance of doubt, any~~ ~~<amount that is due and payable on the Maturity Date shall constitute an installment)>.~~

(g) Borrowing Agent shall deliver to Agent an appropriately completed Payment Notification by 10:00 a.m. (Chicago time) on the date of payment of each mandatory prepayment pursuant to this Section 2.3 and each optional prepayment pursuant to Section 2.1(c) and Agent shall promptly notify each Lender of such notice.

~~<(h) Subject to the provisions of the Intercreditor Agreement and the Fee Letter, if the Lenders have made to Borrowers the Delayed Draw Term Loan in accordance with Section 2.1(a)(ii) hereof and the Convertible Subordinated Debt has not been paid in full in accordance with Section 7.18 hereof on or prior to the Convertible Subordinated Debt Maturity Date, Borrowers shall repay in full the Delayed Draw Term Loan promptly, but in no event more than one (1) Business Day following the Convertible Subordinated Debt Maturity Date. Such prepayments shall be applied to the Loans in accordance with Section 2.3(f) hereof. >~~

2.4 Use of Proceeds.

(a) Borrowers shall apply the proceeds of (i) the Term A Loan to (x) repay the Indebtedness owing to Existing Agent and Existing Lenders under the Existing Loan Documents, (y) pay fees and expenses relating to the Transactions, and (z) provide for their working capital needs and other general corporate purposes, ~~<and >~~(ii) the ~~<Delayed Draw >~~Term B Loan and the Term C Loan solely to repay a portion of the Convertible Subordinated Debt (to the extent permitted under Section 7.18 hereof) and for no other purposes, and (iii) the Delayed Draw Term Loan to provide for their working capital needs and other general corporate purposes.

(b) Without limiting the generality of Section 2.4(a) above, neither the Loan Parties nor any other Person which may in the future become party to this Agreement or the Other Documents as a Loan Party, intends to use nor shall they use any portion of the proceeds of the Term Loan, directly or indirectly, for any purpose in violation in any material respect of Applicable Law.

III INTEREST AND FEES.

3.1 Interest.

(a) From and following the Closing Date, depending upon Borrowers' election from time to time, subject to the terms hereof, to have portions of the Loans accrue interest determined by reference to the Prime Rate or the LIBOR Rate, the Loans and the other Obligations shall bear interest at the applicable rates set forth below:

(i) If a Prime Rate Loan, or any other Obligation other than a LIBOR Rate Loan, then at the sum of the Prime Rate plus the Applicable Margin for Prime Rate Loans.

(ii) If a LIBOR Rate Loan, then at the sum of the LIBOR Rate plus the Applicable Margin for LIBOR Rate Loans.

(b) All interest and fees under this Agreement and each Other Document shall be calculated on the basis of a 360-day year for the actual number of days elapsed. The date of funding of a Prime Rate Loan and the first day of an Interest Period with respect to a LIBOR Rate Loan shall be included in the calculation of interest. The date of payment of a Prime Rate Loan and the last day of an Interest Period with respect to a LIBOR Rate Loan shall be excluded from the calculation of interest. If a Loan is repaid on the same day that it is made, one (1) days' interest shall be charged. Interest on all Prime Rate Loans is payable (in cash or PIK Interest, as applicable) in arrears on the last Business Day of each fiscal quarter and on the maturity of such Loans, whether by acceleration or otherwise. Interest on LIBOR Rate Loans shall be payable (in cash or PIK Interest, as applicable) on the last day of the applicable Interest Period, unless the Interest Period is greater than three (3) months, in which case interest will be payable on the last day of each three (3) month interval. In addition, interest on LIBOR Rate Loans is due on the maturity of such Loans, whether by acceleration or otherwise. For the avoidance of doubt, any PIK Interest shall be compounded on each interest payment date and added to the outstanding principal amount of the Term A Loan and, once paid, shall be treated as principal amount of the Term A Loan for all purposes of this Agreement. Following any such increase in the principal amount of the Term A Loan, interest will accrue on such increased amount.

(c) At the election of Agent or Required Lenders, after the occurrence of an Event of Default and for so long as it continues, the Loans and other Obligations shall bear interest at rates that are two percent (2.0%) in excess of the rates otherwise payable under this Agreement. Furthermore, at the election of Agent or Required Lenders during any period in which any Event of Default is continuing (x) as the Interest Periods for LIBOR Rate Loans then in effect expire, such Loans shall be converted into Prime Rate Loans and (y) the LIBOR election will not be available to Borrowers.

3.2 LIBOR Provisions.

(a) Subject to the provisions of Section 3.1(c) hereof, Borrowing Agent may request that the Term Loan be made as LIBOR Rate Loans, that outstanding portions of the Term Loan be converted to LIBOR Rate Loans and that all or any portion of a LIBOR Rate Loan be continued as a LIBOR Rate Loan upon expiration of the applicable Interest Period. Any such request will be made by submitting a Notice of Borrowing to Agent. Upon the expiration of an Interest Period, in the absence of a new Notice of Borrowing submitted to Agent not less than by 11:00 a.m. (Chicago time) three (3) Business Days prior to the end of such Interest Period, the LIBOR Rate Loan then maturing shall be automatically converted to a LIBOR Rate Loan with a one month Interest Period. There may be no more than six (6) LIBOR Rate Loans outstanding at any one time. Loans which are not requested as LIBOR Rate Loans in accordance with this Section 3.2(a) shall be Prime Rate Loans. Agent will promptly notify Lenders, by written notice, of each Notice of Borrowing received by Agent prior to the first day of the Interest Period of the LIBOR Rate Loan requested thereby.

(b) In the event, prior to commencement of any Interest Period relating to a LIBOR Rate Loan, Agent shall determine in good faith or be notified in good faith and in writing by Required Lenders that adequate and reasonable methods do not exist for ascertaining LIBOR, Agent shall promptly provide notice of such determination to Borrowing Agent and Lenders (which shall be conclusive and binding on Borrowers and Lenders). In such event (1) any request for a LIBOR Rate Loan or for a conversion to or continuation of a LIBOR Rate Loan shall be automatically withdrawn and shall be deemed a request for a Prime Rate Loan, (2) each LIBOR Rate Loan will automatically, on the last day of the then current Interest Period relating thereto, become a Prime Rate Loan and (3) the obligations of Lenders to make LIBOR Rate Loans shall be suspended until Agent or Required Lenders determine that the circumstances giving rise to such suspension no longer exist, in which event Agent shall so notify Borrowing Agent and Lenders.

(c) Notwithstanding any other provisions hereof, if any law, rule, regulation, treaty or directive or interpretation or application thereof shall make it unlawful for any Lender to make, fund or maintain LIBOR Rate Loans, such Lender shall promptly give notice of such circumstances to Agent, Borrowing Agent and the other Lenders. In such an event, (1) the commitment of such Lender to make LIBOR Rate Loans or convert Prime Rate Loans to LIBOR Rate Loans shall be immediately suspended and (2) such Lender's outstanding LIBOR Rate Loans shall be converted automatically to Prime Rate Loans on the last day of the Interest Period thereof or at such earlier time as may be required by law.

(d) Upon (i) any failure of any Borrower in making any borrowing of, conversion into or continuation of any LIBOR Rate Loan following Borrowing Agent's delivery to Agent of any applicable Notice of Borrowing (in each case other than any such failure that arises as a result of a Lender failing to fund such LIBOR Rate Loan or as a result of a notice delivered pursuant to Section 3.8 hereof) or (ii) any payment of a LIBOR Rate Loan on any day that is not the last day of the Interest Period applicable thereto (regardless of the source of such prepayment and whether voluntary, by acceleration or otherwise), Borrowers shall pay Agent, for the benefit of all Lenders that funded or were prepared and required to fund any such LIBOR Rate Loan, an amount equal to the amount of any losses, expenses and liabilities (including, without limitation, any loss (including interest paid) in connection with the re-employment of such funds but excluding any loss of interest rate margin that would have been earned on the repaid amounts) that any Lender may sustain as a result of such default or such payment. For purposes of calculating amounts payable to a Lender under this paragraph, each Lender shall be deemed to have actually funded its relevant LIBOR Rate Loan through the purchase of a deposit bearing interest at LIBOR in an amount equal to the amount of that LIBOR Rate Loan and having a maturity and repricing characteristics comparable to the relevant Interest Period; *provided*, *however*, that each Lender may fund each of its LIBOR Rate Loans in any manner it sees fit, and the foregoing assumption shall be utilized only for the calculation of amounts payable under this subsection.

~~3.3 <Non-Use Fee><>< Borrowers shall pay to Agent, for the account of each Lender (other than a Defaulting Lender) with a Commitment to make Delayed Draw Term Loans, a non-use fee, for the period from the Closing Date to the earlier of (i) Delayed Draw Term Loan Commitment Completion Date and (ii) the Delayed Draw Term Loan Commitment Termination Date, in an amount equal to a rate per annum of 0.50% of such Lender's Delayed Draw Term Loan Commitment Percentage of the Commitment of all Lenders to make the Delayed Draw Term Loans as of such date. Such non-use fee shall be payable in arrears on the last Business Day of each fiscal quarter and on the Maturity Date for any period then ending for which such non-use fee shall not have previously been paid. The non-use fee shall be computed for the actual number of days elapsed on the basis of a year of 360 days.>~~

3.3 [Reserved].

3.4 Fee Letter. Borrowers shall pay the amounts required to be paid in the Fee Letter in the manner and at the times required by the Fee Letter.

3.5 [Reserved].

3.6 Maximum Charges. In no event whatsoever shall interest and other charges charged hereunder exceed the highest rate permissible under Applicable Law. In the event interest and other charges as computed hereunder would otherwise exceed the highest rate permitted under Applicable Law: (i) the interest rates hereunder will be reduced to the maximum rate permitted under Applicable Law; (ii) such excess amount shall be first applied to any unpaid principal balance owed by Borrowers; and (iii) if then remaining excess amount is greater than the previously unpaid principal balance, Lenders shall promptly refund such excess amount to Borrowers and the provisions hereof shall be deemed amended to provide for such permissible rate.

3.7 Increased Costs. In the event that any Change in Law or compliance by any Lender (for purposes of this Section 3.7, the term "Lender" shall include Agent, any Lender and any corporation or bank controlling Agent or any Lender and the office or branch where Agent or any Lender makes or maintains any LIBOR Rate Loans) with any request or directive (whether or not having the force of law) from any central bank or other financial, monetary or other authority, shall:

(a) subject Agent or any Lender to any tax of any kind whatsoever with respect to this Agreement or any LIBOR Rate Loan, or change the basis of taxation of payments to Agent or such Lender in respect thereof (except for Indemnified Taxes or Other Taxes and the imposition of, or any change in the rate of, any Excluded Taxes payable by Agent or such Lender);

(b) impose, modify or deem applicable any reserve, special deposit, assessment, compulsory loan, insurance charge or similar requirement against assets held by, or deposits in or for the account of, advances or loans by, or other credit extended by, any office of Agent or any Lender, including pursuant to Regulation D of the Board of Governors of the Federal Reserve System; or

(c) impose on Agent or any Lender or the London interbank LIBOR market any other condition, loss or expense (other than Taxes) affecting this Agreement or any Other Document or any Loans made by any Lender;

and the result of any of the foregoing is to increase the cost to Agent or any Lender of making, converting to, continuing, renewing or maintaining its Loans hereunder by an amount that Agent or such Lender deems to be material or to reduce the amount of any payment (whether of principal, interest or otherwise) in respect of any of the Loans by an amount that Agent or such Lender deems to be material, then, in any case Borrowers shall promptly pay Agent or such Lender, upon its demand, such additional amount as will compensate Agent or such Lender for such additional cost or such reduction, as the case may be, provided that the foregoing shall not apply to increased costs which are reflected in the LIBOR Rate, as the case may be. Agent or such Lender shall certify the amount of such additional cost or reduced amount to Borrowing Agent, and such certification shall be conclusive absent manifest error. Failure or delay on the part of Agent or any Lender to demand compensation pursuant to this Section shall not constitute a waiver of the right of Agent or any Lender to demand such compensation; provided that Borrowers shall not be required to compensate Agent or any Lender pursuant to this Section for any reductions in return incurred more than 270 days prior to the date that Agent or such Lender notifies Borrowing Agent of such law, rule, regulation or guideline giving rise to such reductions and of the intention of Agent or such Lender to claim compensation therefor; provided further that if such claim arises by reason of the adoption of or change in any law, rule, regulation or guideline that is retroactive, then the 270 day period referred to above shall be extended to include the period of retroactive effect thereof.

3.8 Basis for Determining Interest Rate Inadequate or Unfair. In the event that:

(a) Agent shall have determined that reasonable means do not exist for ascertaining the LIBOR Rate applicable pursuant to Section 3.2 hereof for any Interest Period; or

(b) Agent shall have determined that Dollar deposits in the relevant amount and for the relevant maturity are not available in the London interbank LIBOR market, with respect to an outstanding LIBOR Rate Loan, a proposed LIBOR Rate Loan, or a proposed conversion of a Prime Rate Loan into a LIBOR Rate Loan; or

(c) Agent shall have determined that (or any Lender shall have notified Agent that) the making, maintenance or funding of any LIBOR Rate Loan has been made impracticable or unlawful by compliance by Agent or such Lender in good faith with any Applicable Law or any interpretation or application thereof by any Governmental Body or with any request or directive of any such Governmental Body (whether or not having the force of law); or

(d) the Required Lenders shall have notified Agent that the LIBOR Rate will not adequately and fairly reflect the cost to the Lenders of the establishment or maintenance of any LIBOR Rate Loan,

then Agent shall give Borrowing Agent prompt written notice of such notice or determination. If such notice is given, (i) any such requested LIBOR Rate Loan shall be made as a Prime Rate Loan, unless Borrowing Agent shall notify Agent in writing (including by electronic transmission) no later than 10:00 a.m. (Chicago time) two (2) Business Days prior to the date of such proposed borrowing, that its request for such borrowing shall be cancelled or made as an unaffected type of LIBOR Rate Loan, (ii) any Prime Rate Loan or LIBOR Rate Loan which was to have been converted to an affected type of LIBOR Rate Loan shall be continued as or converted into a Prime Rate Loan, or, if Borrowing Agent shall notify Agent, no later than 10:00 a.m. (Chicago time) two (2) Business Days prior to the proposed conversion, shall be maintained as an unaffected type of LIBOR Rate Loan, and (iii) any outstanding affected LIBOR Rate Loans shall be converted into a Prime Rate Loan, or, if Borrowing Agent shall notify Agent, no later than 10:00 a.m. (Chicago time) two (2) Business Days prior to the last Business Day of then current Interest Period applicable to such affected LIBOR Rate Loan, shall be converted into an unaffected type of LIBOR Rate Loan, on the last Business Day of then current Interest Period for such affected LIBOR Rate Loans (or sooner, if any Lender cannot continue to lawfully maintain such affected LIBOR Rate Loan). Until such notice has been withdrawn, Lenders shall have no obligation to make an affected type of LIBOR Rate Loan or maintain outstanding affected LIBOR Rate Loans and no Borrower shall have the right to convert a Prime Rate Loan or an unaffected type of LIBOR Rate Loan into an affected type of LIBOR Rate Loan.

3.9 Capital Adequacy.

(a) In the event that Agent or any Lender shall have determined that any Change in Law, any change in any guideline regarding capital adequacy or any change in the interpretation or administration thereof by any Governmental Body, central bank or comparable agency charged with the interpretation or administration thereof, or compliance by Agent or any Lender (for purposes of this Section 3.9, the term "Lender" shall include Agent or any Lender and any corporation or bank controlling Agent or any Lender and the office or branch where Agent or any Lender (as so defined) makes or maintains any LIBOR Rate Loans) with any request or directive regarding capital adequacy (whether or not having the force of law) of any such authority, central bank or comparable agency, has or would have the effect of reducing the rate of return on Agent's or any Lender's capital as a consequence of its obligations hereunder to a level below that which Agent or such Lender could have achieved but for such adoption, change or compliance (taking into consideration Agent's and such Lender's policies with respect to capital adequacy) by an amount deemed by Agent or any Lender to be material, then, from time to time, Borrowers shall pay upon demand to Agent or such Lender such additional amount or amounts as will compensate Agent or such Lender for such reduction. In determining such amount or amounts, Agent or such Lender may use any reasonable averaging or attribution methods. The protection of this Section 3.9 shall be available to Agent and each Lender regardless of any possible contention of invalidity or inapplicability with respect to the Applicable Law, rule, regulation, guideline or condition.

(b) A certificate of Agent or such Lender setting forth such amount or amounts as shall be necessary to compensate Agent or such Lender with respect to Section 3.9(a) hereof when delivered to Borrowing Agent shall be conclusive absent manifest error. Failure or delay on the part of Agent or any Lender to demand compensation pursuant to this Section shall not constitute a waiver of the right of Agent or any Lender to demand such compensation; provided that Borrowers shall not be required to compensate Agent or any Lender pursuant to this Section for any reductions in return incurred more than 270 days prior to the date that Agent or such Lender notifies Borrowing Agent of such law, rule, regulation or guideline giving rise to such reductions and of the intention of Agent or such Lender to claim compensation therefor; provided further that if such claim arises by reason of the adoption of or change in any law, rule, regulation or guideline that is retroactive, then the 270 day period referred to above shall be extended to include the period of retroactive effect thereof.

3.10 Taxes.

(a) Any and all payments by or on account of any Obligations hereunder or under any Other Document shall be made free and clear of and without reduction or withholding for any Indemnified Taxes or Other Taxes; provided that if Borrowers shall be required by Applicable Law to deduct any Indemnified Taxes (including any Other Taxes) from such payments, then (i) the sum payable shall be increased as necessary so that after making all required deductions (including deductions applicable to additional sums payable under this Section) the applicable Recipient receives

an amount equal to the sum it would have received had no such deductions been made,provided that Borrowers shall not be required to increase any such amounts to the extent that the increase in such amount payable results from such Recipient's own willful misconduct or gross negligence (as finally determined by a court of competent jurisdiction), (ii) Borrowers shall make such deductions and (iii) Borrowers shall timely pay the full amount deducted to the relevant Governmental Body in accordance with Applicable Law.

(b) Without limiting the provisions of Section 3.10(a) above, Borrowers shall timely pay any Other Taxes to the relevant Governmental Body in accordance with Applicable Law.

(c) Each Borrower shall indemnify each Recipient within ten (10) Business Days after demand therefor, for the full amount of any Indemnified Taxes or Other Taxes (including Indemnified Taxes or Other Taxes imposed or asserted on or attributable to amounts payable under this Section) paid by such Recipient and any penalties, interest and reasonable and documented expenses arising therefrom or with respect thereto, whether or not such Indemnified Taxes or Other Taxes were correctly or legally imposed or asserted by the relevant Governmental Body. A certificate as to the amount of such payment or liability delivered to Borrowers by any Recipient (with a copy to Agent), or by Agent on its own behalf or on behalf of a Recipient shall be conclusive absent manifest error.

(d) As soon as practicable after any payment of Indemnified Taxes or Other Taxes by any Borrower to a Governmental Body, Borrowers shall deliver to Agent the original or a certified copy of a receipt issued by such Governmental Body evidencing such payment, a copy of the return reporting such payment or other evidence of such payment reasonably satisfactory to Agent.

(e) Any Recipient that is entitled to an exemption from or reduction of withholding tax under the law of the jurisdiction in which any Borrower is resident for tax purposes, or under any treaty to which such jurisdiction is a party, with respect to payments hereunder or under any Other Document shall deliver to Borrowers (with a copy to Agent), at the time or times prescribed by Applicable Law or reasonably requested by Borrowers or Agent, such properly completed and executed documentation prescribed by Applicable Law as will permit such payments to be made without withholding or at a reduced rate of withholding. In addition, any Recipient, if requested by Borrowers or Agent, shall deliver such other documentation prescribed by Applicable Law or reasonably requested by the Borrowers or Agent as will enable Borrowers or Agent to determine whether or not such Recipient is subject to backup withholding or information reporting requirements. Without limiting the generality of the foregoing, in the event that any Borrower is resident for tax purposes in the United States of America, (x) any Recipient that is not a Foreign Lender shall deliver to Borrowers and Agent two (2) duly completed valid copies of IRS Form W-9 demonstrating that such Person is exempt from United States federal backup withholding tax, and (y) any Foreign Lender shall deliver to Borrowers and Agent (in such number of copies as shall be requested by the recipient) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the request of Borrowers or Agent, but only if such Foreign Lender is legally entitled to do so), whichever of the following is applicable:

(i) duly completed valid copies of IRS Form W-8BEN or W-8BEN-E claiming eligibility for benefits of an income tax treaty to which the United States of America is a party,

(ii) duly completed valid copies of IRS Form W-8ECI,

(iii) in the case of a Foreign Lender claiming the benefits of the exemption for portfolio interest under Section 881(c) of the Code, (x) a certificate to the effect that such Foreign Lender is not (A) a "bank" within the meaning of Section 881(c)(3)(A) of the Code, (B) a "10 percent shareholder" of Borrowers within the meaning of Section 881(c)(3)(B) of the Code, or (C) a "controlled foreign corporation" described in Section 881(c)(3)(C) of the Code and (y) duly completed valid copies of IRS Form W-8BEN or W-8BEN-E, or

(iv) any other form prescribed by Applicable Law as a basis for claiming exemption from or a reduction in United States federal withholding tax duly completed together with such supplementary documentation as may be prescribed by Applicable Law to permit the Borrowers to determine the withholding or deduction required to be made.

(f) If a payment made to a Recipient under this Agreement or any Other Document would be subject to U.S. federal withholding Taxes imposed by FATCA if such Person were to fail to comply with the applicable reporting requirements of FATCA (including those contained in Section 1471(b) or 1472(b) of the Code, as applicable), such Recipient shall deliver to Agent and Borrowers (A) a certification signed by the chief financial officer, principal accounting officer, treasurer or controller of such Person, and (B) other documentation reasonably requested by Agent or any Borrower sufficient for Agent and Borrowers to comply with their obligations under FATCA and to determine that such Recipient has complied with such applicable reporting requirements.

(g) Each Recipient agrees that if any form or certification it previously delivered pursuant to this Section 3.10 expires or becomes obsolete or inaccurate in any respect, it shall update such form or certification or promptly notify the Borrowers and Agent in writing of its legal inability to do so.

(h) If any Recipient determines, in its sole discretion, that it has received a refund of any Indemnified Taxes or Other Taxes as to which it has been indemnified by Borrowers or with respect to which Borrowers have paid additional amounts pursuant to this Section, it shall pay to Borrowers an amount equal to such refund (but only to the extent of indemnity payments made, or additional amounts paid, by Borrowers under this Section with respect to the Indemnified Taxes or Other Taxes giving rise to such refund), net of all reasonable and documented out-of-pocket expenses of such Recipient and without interest (other than any interest paid by the relevant

Governmental Body with respect to such refund), provided that Borrowers, upon the request of the Recipient, agree to repay the amount paid over to Borrowers (plus any penalties, interest or other charges imposed by the relevant Governmental Body) to such Recipient in the event such Recipient is required to repay such refund to such Governmental Body. This Section shall not be construed to require any Recipient to make available its tax returns (or any other information relating to its taxes that it deems confidential) to Borrowers or any other Person.

3.11 Replacement of Lenders. If any Lender (an "Affected Lender") (a) makes demand upon Borrowers for (or if Borrowers are otherwise required to pay) amounts pursuant to Section 3.7, 3.9 or 3.10 hereof, (b) is unable to make or maintain LIBOR Rate Loans as a result of a condition described in Section 3.2(b) hereof, (c) is a Defaulting Lender, (d) denies any consent requested by Agent pursuant to Section 16.2(b) hereof, or (e) gives a notice described in Section 3.8(c) hereof, Borrowers may, by notice in writing to Agent and such Affected Lender (i) request the Affected Lender to cooperate with Borrowers in obtaining a replacement Lender satisfactory to Agent and Borrowers (the "Replacement Lender"); (ii) request the non-Affected Lenders to acquire and assume all of the Affected Lender's Loans and its Delayed Draw Term Loan Commitment Percentage as provided herein, but none of such Lenders shall be under any obligation to do so; or (iii) propose a Replacement Lender subject to approval by Agent in its good faith business judgment. If any satisfactory Replacement Lender shall be obtained, and/or if any one or more of the non-Affected Lenders shall agree to acquire and assume all of the Affected Lender's Loans and its Delayed Draw Term Loan Commitment Percentage, then such Affected Lender shall assign, in accordance with Section 16.3 hereof, all of its Loans and its Delayed Draw Term Loan Commitment Percentage and other rights and obligations under this Agreement and the Other Documents to such Replacement Lender or non-Affected Lenders, as the case may be, in exchange for payment of the principal amount so assigned and all interest and fees accrued on the amount so assigned, *plus* all other Obligations then due and payable to the Affected Lender.

3.12 Designation of a Different Lending Office. If any Lender requests compensation under Sections 3.7 or 3.9 hereof, or requires Borrowers to pay any Indemnified Taxes, Other Taxes or additional amounts to any Lender or any Governmental Body for the account of any Lender pursuant to Section 3.10 hereof, then such Lender shall (at the request of Borrowing Agent) use reasonable efforts to designate a different lending office for funding or booking its Loans hereunder or to assign its rights and obligations hereunder to another of its offices, branches or affiliates, if, in the judgment of such Lender, such designation or assignment (a) would eliminate or reduce amounts payable pursuant to Sections 3.7, 3.9, or 3.10 hereof, as the case may be, in the future, and (b) would not subject such Lender to any unreimbursed cost or expense and would not otherwise be disadvantageous to such Lender. Borrowers hereby agree to pay all reasonable and documented costs and expenses incurred by any Lender in connection with any such designation or assignment.

IV COLLATERAL: GENERAL TERMS

4.1 Security Interest in the Collateral. To secure the prompt payment and performance to Agent and each Lender (and each other holder of any Obligations) of the Obligations, each Loan Party hereby assigns, pledges and grants to Agent for its benefit and for the ratable benefit of each Lender and each other Secured Party, a continuing security interest in and to and Lien on all of its Collateral, whether now owned or existing or hereafter created, acquired or arising and wheresoever located. Each Loan Party shall provide Agent with written notice of all commercial tort claims in an aggregate amount in excess of $500,000 promptly upon the occurrence of any events giving rise to any such claims (regardless of whether legal proceedings have yet been commenced), such notice to contain a brief description of the claims, the events out of which such claims arose and the parties against which such claims may be asserted and, if applicable in any case where legal proceedings regarding such claims have been commenced, the case title together with the applicable court and docket number. Upon delivery of each such notice, such Loan Party shall be deemed to thereby grant to Agent a security interest and lien in and to such commercial tort claims described therein and all proceeds thereof. Each Loan Party shall provide Agent with written notice promptly upon becoming the beneficiary under any letter of credit or otherwise obtaining any right, title or interest in any letter of credit rights in an aggregate amount in excess of $500,000, and at Agent's request shall take such actions as Agent may reasonably request for the perfection of Agent's security interest therein.

4.2 Perfection of Security Interest. Each Loan Party shall take all action that may be necessary, or that Agent may reasonably request, so as at all times to maintain the validity, perfection, enforceability and priority of Agent's security interest in and Lien on the Collateral or to enable Agent to protect, exercise or enforce its rights hereunder and in the Collateral, including, but not limited to, (i) immediately discharging all Liens other than Permitted Encumbrances, (ii) using commercially reasonable efforts to obtain Lien Waiver Agreements, (iii) delivering to Agent, endorsed or accompanied by such instruments of assignment as Agent may specify, and stamping or marking, in such manner as Agent may specify, any and all chattel paper, instruments, letters of credits and advices thereof and documents evidencing or forming a part of the Collateral, (iv) using commercially reasonable efforts to enter into warehousing, lockbox, customs and freight agreements and other custodial arrangements reasonably satisfactory to Agent, and (v) executing and delivering financing statements, Control Agreements, instruments of pledge, mortgages, notices and assignments, in each case in form and substance reasonably satisfactory to Agent, relating to the creation, validity, perfection, maintenance or continuation of Agent's security interest and Lien under the Uniform Commercial Code or other Applicable Law. By its signature hereto, each Loan Party hereby authorizes Agent to file against such Loan Party, one or more financing, continuation or amendment statements pursuant to the Uniform Commercial Code in form and substance satisfactory to Agent (which statements may have a description of collateral which is broader than that set forth herein, including without limitation a description of Collateral as "all assets" and/or "all personal property" of any Loan Party). All documented charges, expenses and fees Agent may incur in doing any of the foregoing, and any local taxes relating thereto, shall be at the sole expense of the Borrowers and payable by the Borrowers to Agent not later than ten (10) Business Days after written demand.

4.3 Preservation of Collateral. Following the occurrence of a Default or Event of Default, in addition to the rights and remedies set forth in Section 11.1 hereof, Agent: (a) may at any time take such steps as Agent deems necessary to protect Agent's interest in and to preserve the Collateral, including the hiring of security guards or the placing of other security protection measures as Agent may deem appropriate; (b) subject to the rights of the applicable landlords, may employ and maintain at any of any Loan Party's premises a custodian who shall have full authority to do all acts necessary to protect Agent's interests in the Collateral; (c) may lease warehouse facilities to which Agent may move all or part of the Collateral; (d) subject to the rights of the applicable lessors, may use any Loan Party's owned or leased lifts, hoists, trucks and other facilities or Equipment for handling or removing the Collateral; and (e) subject to the rights of the applicable landlords, shall have, and is hereby granted, a right of ingress and egress to the places where the Collateral is located, and may proceed over and through any of the Loan Parties' owned or leased property. Each Loan Party shall cooperate fully with all of Agent's efforts to preserve the Collateral and will take such actions to preserve the Collateral as Agent may direct. All of Agent's expenses of preserving the Collateral, including any expenses relating to the bonding of a custodian, shall be at the sole expense of the Borrowers and payable by the Borrowers to Agent for its benefit and for the ratable benefit of Lenders not later than ten (10) Business Days after written demand.

4.4 Ownership and Location of Collateral.

(a) With respect to the Collateral, at the time the Collateral becomes subject to Agent's security interest: (i) each Loan Party shall be fully authorized and able to sell, transfer, pledge and/or grant a Lien upon each and every item of its respective Collateral to Agent; and, except for Permitted Encumbrances, the Collateral shall be free and clear of all Liens whatsoever; (ii) all signatures and endorsements of each Loan Party that appear on such documents and agreements shall be genuine and each Loan Party shall have full capacity to execute same; and (iii) each Loan Party's Equipment and each Loan Party's Inventory (other than (A) Inventory in transit, (B) Service Inventory and (C) Inventory at any location where the value of all Inventory at such location is less than $1,000,000) shall be located as set forth on Schedule 4.4 hereto, as such Schedule may be updated from time to time in accordance with the terms hereof, and shall not be removed from such locations without the prior written consent of Agent except with respect to the sale of Inventory in the Ordinary Course of Business and Equipment to the extent permitted in Section 7.1(b) hereof.

(b) (i) There is no location at which any Loan Party has any Inventory (except for (A) Inventory in transit, (B) Service Inventory and (C) Inventory at any location where the value of all Inventory at such location is less than $1,000,000) or other Collateral other than those locations listed on Schedule 4.4 hereto; (ii) Schedule 4.4 hereto, as such Schedule may be updated from time to time in accordance with the terms hereof, contains a correct and complete list, as of the ~~<Closing>~~Fourth Amendment Effective Date, of the legal names and addresses of each warehouse at which Inventory of any Loan Party is stored, and none of the receipts received by any Loan Party from any warehouse states that the goods covered thereby are to be delivered to bearer or to the order of a named Person or to a named Person and such named Person's assigns; (iii) Schedule 4.4 hereto sets forth a correct and complete list as of the ~~<Closing>~~Fourth Amendment Effective Date of (A) each place of business of each Loan Party and (B) the chief executive office of each Loan Party; and (iv) Schedule 4.4 hereto sets forth a correct and complete list as of the ~~<Closing>~~Fourth Amendment Effective Date of the location, by state and street address, of all Real Property owned or leased by each Loan Party, identifying which Real Properties are owned and which are leased, together with the names and addresses of any landlords or other third parties in possession, custody or control of any Collateral.

4.5 Defense of Agent's and Lenders' Interests . Until (a) the Payment in Full of all of the Obligations and (b) the termination of this Agreement, Agent's interests in the Collateral shall continue in full force and effect. During such period no Loan Party shall, without Agent's prior written consent, pledge, sell (except for Dispositions otherwise permitted in Section 7.1(b) hereof), assign, transfer, create or suffer to exist a Lien upon or encumber or allow or suffer to be encumbered in any way except for Permitted Encumbrances, any part of the Collateral. Each Loan Party shall use commercially reasonable efforts to defend Agent's interests in the Collateral against any and all Persons whatsoever. At any time following demand by Agent for payment of all Obligations following the occurrence and during the continuance of an Event of Default, Agent shall have the right to take possession of the indicia of the Collateral and the Collateral in whatever physical form contained, including: labels, stationery, documents, instruments and advertising materials. If Agent exercises this right to take possession of the Collateral, the Loan Parties shall, upon demand, assemble it in the best manner possible and make it available to Agent at a place reasonably convenient to Agent. In addition, with respect to all Collateral, Agent and Lenders shall be entitled to all of the rights and remedies set forth herein and further provided by the Uniform Commercial Code or other Applicable Law. Each Loan Party shall, and Agent may, at its option, instruct all suppliers, carriers, forwarders, warehousers or others receiving or holding cash, checks, Inventory, documents or instruments in which Agent holds a security interest to deliver same to Agent and/or subject to Agent's order and if they shall come into any Loan Party's possession, they, and each of them, shall be held by such Loan Party in trust as Agent's trustee, and such Loan Party will immediately deliver them to Agent in their original form together with any necessary endorsement.

4.6 Inspection of Premises. At all reasonable times and from time to time as often as Agent shall elect in its Permitted Discretion, Agent and each Lender shall have full access to and the right to audit, check, inspect and make abstracts and copies from each Loan Party's books, records, audits, correspondence and all other papers relating to the Collateral and the operation of each Loan Party's business. Agent, any Lender and their agents may enter upon any premises of any Loan Party at any time during business hours and at any other reasonable time, and from time to time as often as Agent shall elect in its Permitted Discretion, for the purpose of inspecting the Collateral and any and all books and records pertaining thereto and to the operation of such Loan Party's business. Notwithstanding the foregoing, (a) no more than one (1) such inspection shall be conducted at the expense of the Borrowers during any consecutive twelve (12) month period in which a Cash Dominion Period does not exist, (b) during a Cash Dominion Period, no more than two (2) such inspections shall be conducted at the expense of the Borrowers during any consecutive twelve (12) month period, and (c) if an Event of Default shall exist, then notwithstanding anything to the contrary in the foregoing clauses (a) and (b), there shall be no limitation on the number or frequency of such inspections which may be conducted at the expense of the Borrowers.

4.7 Appraisals. Agent may, in its Permitted Discretion, (a) at any time after the Closing Date and from time to time, engage the services of an independent appraisal firm or firms of reputable standing, satisfactory to Agent, for the purpose of appraising the then current value of the Loan Parties' assets (including without limitation Intellectual Property and the LTO Program), and (b) at any time after the Third Amendment Effective Date, engage the services of an independent financial advisor, and such financial advisor shall at all times thereafter be granted by Borrowers and their Subsidiaries with full access to, and shall at all times thereafter have the right to audit, check and inspect, the books, records, audits, correspondence and all other papers relating to the operation of each Loan Party's business~~<, and (c) at any time during the Quality of Earnings Reporting Period, engage the services of a third party firm acceptable to Agent in its Permitted Discretion, for the purpose of performing a quality of earnings report>~~. Absent the occurrence and continuance of an Event of Default at such time, Agent shall consult with Borrowing Agent as to the identity of any such firms; provided, that it is agreed by the parties hereto that (x) Gordon Brothers Asset Advisors, LLC shall be deemed to be an acceptable firm for purposes of appraising the value of the LTO Program and (y) FTI Consulting, Inc. shall be deemed to be an acceptable financial advisor. All of the fees and out-of-pocket costs and expenses of any appraisals and reports conducted, or engagement made, pursuant to this Section 4.7 shall be paid for when due, in full and without deduction, off-set or counterclaim by Borrowers~~<; provided, that Borrowers shall not be responsible to pay or reimburse Agent for any such fees and out-of-pocket costs and expenses of an independent financial advisor engaged pursuant to the foregoing clause (b) of this Section 4.7 to the extent incurred or accrued after the last day of the month in which Agent receives financial statements and the related Compliance Certificate required by Section 9.8 hereof demonstrating that >Quantum and its Subsidiaries, on a consolidated basis, <are in compliance with each of the financial covenants >set forth in Section 6.5 <hereof (as in effect immediately prior to the Third Amendment Effective Date) for the four (4) > fiscal quarter <period then ended; provided further, that for purposes of determining compliance with the financial covenants set forth in Section 6.5 hereof (as in effect immediately prior to the Third Amendment Effective Date) for purposes of this proviso, EBITDA shall be calculated without giving effect to clause (e)(xviii) of the definition of EBITDA>~~. Notwithstanding the foregoing, (i) no more than one (1) quality of earnings report shall be performed at the expense of the Borrowers during the Term, (ii) no more than two (2) appraisals of Intellectual Property (which shall include, without limitation, appraisals of the LTO Program) shall be conducted at the expense of the Borrowers during any consecutive twelve (12) month period, and (iii) if an Event of Default shall exist, then notwithstanding anything to the contrary in the foregoing clause (ii), there shall be no limitation on the number or frequency of appraisals which may be conducted at the expense of the Borrowers.

4.8 Receivables; Deposit Accounts and Securities Accounts

(a) The Receivables are and shall be bona fide and valid accounts representing a bona fide indebtedness incurred by the Customers therein named, for fixed sums as set forth in the invoices relating thereto (provided immaterial or unintentional invoice errors shall not be deemed to be a breach hereof) with respect to an absolute sale or lease and delivery of goods upon stated terms of the Loan Parties, or work, labor or services theretofore rendered by the Loan Parties as of the date the applicable Receivables were created.

(b) Each Customer, to each Loan Party's knowledge, as of the date each Receivable is created, is able to pay all Receivables on which the Customer is obligated in full when due. With respect to such Customers of any Loan Party who are not solvent, such Loan Party has set up on its books and in its financial records bad debt reserves adequate to cover such Receivables.

(c) Each Loan Party's chief executive office is located as set forth on Schedule 4.4 hereto, as such Schedule may be updated from time to time in accordance with the terms hereof. Until written notice is given to Agent by Borrowing Agent of any other office at which any Loan Party keeps its records pertaining to Receivables, all such records shall be kept at such executive office.

(d) The Loan Parties shall instruct their Customers to deliver all remittances upon Receivables (whether paid by check or by wire transfer of funds) to such Blocked Accounts and/or Depository Accounts (and any associated lockboxes) as Revolving Agent or, subject to the terms of the Intercreditor Agreement, Agent shall designate from time to time as contemplated by Section 4.8(h) hereof or as otherwise agreed to from time to time by Revolving Agent or, subject to the terms of the Intercreditor Agreement, Agent. Notwithstanding the foregoing, to the extent any Loan Party directly receives any remittances upon Receivables, such Loan Party shall, at such Loan Party's sole cost and expense, but on Revolving Agent's and Agent's behalf and for Revolving Agent's and, subject to the terms of the Intercreditor Agreement, Agent's account, collect as Revolving Agent's and, subject to the terms of the Intercreditor Agreement, Agent's property and in trust for Revolving Agent and, subject to the terms of the Intercreditor Agreement, Agent all amounts received on Receivables, and shall not commingle such collections with any Loan Party's funds or use the same except to pay the Obligations, and shall as soon as possible and in any event no later than one (1) Business Day after the receipt thereof (i) in the case of remittances paid by check, deposit all such remittances in their original form (after supplying any necessary endorsements) and (ii) in the case of remittances paid by wire transfer of funds, transfer all such remittances, in each case, into such Blocked Accounts and/or Depository Accounts. Each Loan Party shall deposit in the Blocked Account and/or Depository Account or, upon request by Revolving Agent or, subject to the terms of the Intercreditor Agreement, Agent, deliver to Revolving Agent or, subject to the terms of the Intercreditor Agreement, Agent, in original form and on the date of receipt thereof, all checks, drafts, notes, money orders, acceptances, cash and other evidences of Indebtedness. Prior to the occurrence of a Cash Dominion Triggering Event, payments made by a Loan Party's Customers remitted directly to Revolving Agent or Agent will be deposited by Revolving Agent or Agent, as the case may be, in the Blocked Accounts, and Customer remittances shall only be treated as a repayment of Advances or, subject to the terms of the Intercreditor Agreement, Loans, if the Borrowers so elect in a written notice to Revolving Agent or Agent, as applicable.

(e) At any time following the occurrence and during the continuance of an Event of Default, Revolving Agent or, subject to the terms of the Intercreditor Agreement, Agent shall have the right to send notice of the assignment of, and Revolving Agent's and Agent's security interests in and Liens on, the Receivables to any and all Customers or any third party holding or otherwise concerned with any of the Collateral, and thereafter, Revolving Agent or, subject to the terms of the Intercreditor Agreement, Agent shall have the sole right to collect the Receivables, take possession of the Collateral, or both. Agent's actual and documented collection expenses, including, but not limited to, stationery and postage, telephone, facsimile, telegraph, secretarial and clerical expenses and the salaries of any collection personnel used for collection, shall be at the sole expense of Borrowers and payable by the Borrowers to Agent not later than ten (10) Business Days after written demand.

(f) Subject to the terms of the Intercreditor Agreement, Agent shall have the right to receive, endorse, assign and/or deliver in the name of Agent or any Loan Party any and all checks, drafts and other instruments for the payment of money relating to the Receivables, and each Loan Party hereby waives notice of presentment, protest and non-payment of any instrument so endorsed. Each Loan Party hereby constitutes, subject to the terms of the Intercreditor Agreement, Agent or Agent's designee as such Loan Party's attorney with power (i) at any time: (A) to endorse such Loan Party's name upon any notes, acceptances, checks, drafts, money orders or other evidences of payment or Collateral; (B) to sign such Loan Party's name on any invoice or bill of lading relating to any of the Receivables, drafts against Customers, assignments and verifications of Receivables; (C) to send verifications of Receivables to any Customer; (D) to sign such Loan Party's name on all financing statements or any other documents or instruments deemed necessary or appropriate by Agent to preserve, protect, or perfect Agent's interest in the Collateral and to file same; and (E) to receive, open and dispose of all mail addressed to any Loan Party at any post office box/lockbox maintained by Agent for the Loan Parties or at any other business premises of Agent; and (ii) at any time following the occurrence and during the continuance of an Event of Default: (A) to demand payment of the Receivables; (B) to enforce payment of the Receivables by legal proceedings or otherwise; (C) to exercise all of such Loan Party's rights and remedies with respect to the collection of the Receivables and any other Collateral; (D) to sue upon or otherwise collect, extend the time of payment of, settle, adjust, compromise, extend or renew the Receivables; (E) to settle, adjust or compromise any legal proceedings brought to collect Receivables; (F) to prepare, file and sign such Loan Party's name on a proof of claim in bankruptcy or similar document against any Customer; (G) to prepare, file and sign such Loan Party's name on any notice of Lien, assignment or satisfaction of Lien or similar document in connection with the Receivables; (H) to accept the return of goods represented by any of the Receivables; (I) to change the address for delivery of mail addressed to any Loan Party to such address as Agent may designate; and (J) to do all other acts and things necessary to carry out the provisions of this Agreement. All acts of said attorney or designee are hereby ratified and approved, and said attorney or designee shall not be liable for any acts of omission or commission nor for any error of judgment or mistake of fact or of law, unless done maliciously or with gross (not mere) negligence (as determined by a court of competent jurisdiction in a final non-appealable judgment); this power being coupled with an interest is irrevocable while any of the Obligations remain unpaid.

(g) Neither Agent nor any Lender shall, under any circumstances or in any event whatsoever, have any liability for any error or omission or delay of any kind occurring in the settlement, collection or payment of any of the Receivables or any instrument received in payment thereof, or for any damage resulting therefrom.

(h) All proceeds of Collateral shall be deposited by the Loan Parties into either (i) a lockbox account, dominion account or such other "blocked account" (each a "Blocked Account" and collectively the "Blocked Accounts") established at a Specified Domestic Blocked Account Bank, Specified Swiss Blocked Account Bank or such other bank or banks as may be acceptable to Agent in its Permitted Discretion (each such bank, a "Blocked Account Bank" and collectively, "Blocked Account Banks") pursuant to an arrangement with such Blocked Account Bank as may be acceptable to Agent in its Permitted Discretion or (ii) depository accounts ("Depository Accounts") established at Agent for the deposit of such proceeds. Each applicable Loan Party shall deliver or cause to be delivered to Agent a Control Agreement, in form and substance reasonably satisfactory to Agent, among such Loan Party, Agent, Revolving Loan Agent and each bank at which each Blocked Account, each Depository Account and any other deposit account or securities account (other than any Swiss Blocked Account or any Excluded Account) of such Loan Party is maintained that is sufficient to give Agent "control" (for purposes of Articles 8 and 9 of the Uniform Commercial Code) over such Blocked Accounts, Depository Accounts and other deposit accounts and securities accounts. At any time during a Cash Dominion Period, subject to the terms of the Intercreditor Agreement, Agent or Revolving Loan Agent shall have the sole and exclusive right to direct, and Agent is hereby authorized to, subject to the terms of the Intercreditor Agreement, give instructions pursuant to such Control Agreements directing, the disposition of funds in the Blocked Accounts and Depository Accounts (any such instructions, an "Activation Notice") to Agent on a daily basis, by wire transfer to a deposit account maintained by Agent, which such funds may, if an Event of Default has occurred and is continuing, be applied by Agent to repay the Obligations. Prior to the occurrence of a Cash Dominion Triggering Event, the Loan Parties shall retain the right to direct the disposition of funds in the Blocked Accounts and Agent shall not deliver an Activation Notice. In the event that Agent issues an Activation Notice, Agent agrees to rescind such Activation Notice at such time that no Cash Dominion Period shall exist (it being understood that, notwithstanding any such rescission, Agent shall have the right and is authorized to issue an additional Activation Notice if a subsequent Cash Dominion Triggering Event shall have occurred or a Cash Dominion Period shall exist at any time thereafter). All funds deposited in the Blocked Accounts or Depository Accounts shall immediately become subject to the security interest of Agent, for its own benefit and the ratable benefit of the other Secured Parties, and Borrowing Agent shall use commercially reasonable efforts to obtain the agreement by each Blocked Account Bank to waive any offset rights against the funds so deposited. Neither Agent nor any Lender assumes any responsibility for such blocked account arrangements, including any claim of accord and satisfaction or release with respect to deposits accepted by any Blocked Account Bank thereunder. Agent shall apply all funds received by it from the Blocked Accounts and/or Depository Accounts to the satisfaction of the Obligations in such order as Agent shall determine in its sole discretion.

(i) No Loan Party will, without Agent's consent, compromise or adjust any material amount of the Receivables (or extend the time for payment thereof) or accept any material returns of merchandise or grant any additional discounts, allowances or credits thereon except for those compromises, adjustments, returns, discounts, credits and allowances as have been heretofore customary in the Ordinary Course of Business of such Loan Party.

(j) All deposit accounts (including all Blocked Accounts and Depository Accounts), securities accounts and investment accounts of each Loan Party and its Subsidiaries as of the ~~<Closing>~~Fourth Amendment Effective Date are set forth on Schedule 4.8(j) hereto. No Loan Party shall open any new deposit account, securities account or investment account (other than an Excluded Account) with a bank, depository institution or securities intermediary other than Agent unless (i) the Loan Parties shall have provided written notice thereof to Agent within five (5) Business Days and (ii) if required by Agent in its sole discretion, such bank, depository institution or securities intermediary, each applicable Loan Party, Agent and Revolving Loan Agent shall within thirty (30) days following Agent's request, enter into a Control Agreement in form and substance reasonably satisfactory to Agent and sufficient to give Agent "control" (for purposes of Articles 8 and 9 of the Uniform Commercial Code) over such account.

(k) The aggregate amount on deposit in the Swiss Blocked Accounts shall not exceed $6,000,000 for any period of five (5) or more consecutive Business Days, on any date of determination.

4.9 Inventory. To the extent Inventory held for sale or lease has been produced by any Loan Party, it has been and will be produced by such Loan Party in all material respects in accordance with the Federal Fair Labor Standards Act of 1938, as amended, modified or supplemented, and all rules, regulations and orders thereunder.

4.10 Maintenance of Equipment. The Loan Parties' Equipment shall be maintained in good operating condition and repair (reasonable wear and tear excepted) and all necessary replacements of and repairs thereto shall be made. No Loan Party shall use or operate its Equipment in violation in any material respect of any law, statute, ordinance, code, rule or regulation.

4.11 Exculpation of Liability. Nothing set forth herein shall be construed to constitute Agent or any Lender as any Loan Party's agent for any purpose whatsoever, nor shall Agent or any Lender be responsible or liable for any shortage, discrepancy, damage, loss or destruction of any part of the Collateral wherever the same may be located and regardless of the cause thereof. Neither Agent nor any Lender, whether by anything herein or in any assignment or otherwise, assume any of any Loan Party's obligations under any contract or agreement assigned to Agent or such Lender, and neither Agent nor any Lender shall be responsible in any way for the performance by any Loan Party of any of the terms and conditions thereof.

4.12 Financing Statements. Except as respects the financing statements filed by Agent, financing statements described on Schedule 7.2 hereto, and financing statements filed in connection with Permitted Encumbrances, no financing statement covering any of the Collateral or any proceeds thereof is or will be on file in any public office.

4.13 Investment Property Collateral.

(a) Each Loan Party has the right to transfer the Investment Property free of any Liens other than Permitted Encumbrances and will use commercially reasonable efforts to defend its title to the Investment Property against the contrary claims of all Persons. Each Loan Party shall (i) ensure that each operating agreement, limited partnership agreement and any other similar agreement permits Agent's Lien on the Equity Interests of wholly-owned Subsidiaries (other than Foreign Subsidiaries) arising thereunder, foreclosure of Agent's Lien and admission of any transferee as a member, limited partner or other applicable equity holder thereunder and (ii) use commercially reasonable efforts to provide that each operating agreement, limited partnership agreement and any other similar agreement with respect to any other Person permits Agent's Lien on the Investment Property of such Loan Party arising thereunder, foreclosure of Agent's Lien and admission of any transferee as a member, limited partner or other applicable equity holder thereunder.

(b) Each Loan Party shall, if the Investment Property includes securities or any other financial or other asset maintained in a securities account, cause the custodian with respect thereto to execute and deliver a notification and Control Agreement or other applicable agreement reasonably satisfactory to Agent in order to perfect and protect Agent's Lien in such Investment Property.

(c) Except as set forth in Article XI hereof or in the Pledge Agreement, (i) the Loan Parties will have the right to exercise all voting rights with respect to the Investment Property and (ii) the Loan Parties will have the right to receive all cash dividends and distributions, interest and premiums declared and paid on the Investment Property to the extent otherwise permitted under this Agreement or under any of the Other Documents. In the event any additional Equity Interests are issued to any Loan Party as a stock dividend or distribution or in lieu of interest on any of the Investment Property, as a result of any split of any of the Investment Property, by reclassification or otherwise, then any certificates evidencing any such additional shares will be delivered to Agent within fifteen (15) Business Days (or such later date as Agent shall agree in its Permitted Discretion) and such shares will be subject to this Agreement and a part of the Investment Property to the same extent as the original Investment Property.

4.14 Provisions Regarding Certain Investment Property Collateral. The operating agreement or limited partnership agreement (as applicable) of any Subsidiary (other than a Foreign Subsidiary) of any Loan Party hereafter formed or acquired that is a limited liability company or a limited partnership, shall contain the following language (or language to the same effect): "Notwithstanding anything to the contrary set forth herein, no restriction upon any transfer of {membership interests} {partnership interests} set forth herein shall apply, in any way, to the pledge by any {member} {partner} of a security interest in and to its {membership interests} {partnership interests} to TCW Asset Management Company LLC, as agent for certain lenders, or its successors and assigns in such capacity (any such person, "Agent"), or to any foreclosure upon or subsequent disposition of such {membership interests} {partnership interests} by Agent. Any transferee or assignee with respect to such foreclosure or disposition shall automatically be admitted as a {member} {partner} of the Company and shall have all of the rights of the {member} {partner} that previously owned such {membership interests} {partnership interests}."

V REPRESENTATIONS AND WARRANTIES.

Each Loan Party represents and warrants as follows:

5.1 Authority. Each Loan Party has full power, authority and legal right to enter into this Agreement and the Other Documents to which it is a party and to perform all its respective Obligations hereunder and thereunder. This Agreement and the Other Documents to which it is a party have been duly executed and delivered by each Loan Party, and this Agreement and the Other Documents to which it is a party constitute the legal, valid and binding obligation of such Loan Party enforceable in accordance with their terms, except as such enforceability may be limited by any applicable bankruptcy, insolvency, moratorium or similar laws affecting creditors' rights generally. The execution, delivery and performance of this Agreement and of the Other Documents to which it is a party (a) are within such Loan Party's corporate or company powers, as applicable, have been duly authorized by all necessary corporate or company action, as applicable, are not in contravention of law or the terms of such Loan Party's Organizational Documents or to the conduct of such Loan Party's business or of any Material Contract or undertaking to which such Loan Party is a party or by which such Loan Party is bound, including without limitation the Revolving Loan Documents, (b) will not conflict with or violate any material provisions of any law or regulation, or any judgment, order or decree of any Governmental Body, (c) will not require the Consent of any Governmental Body, any party to a Material Contract or any other Person, except (i) any Consents of any party to a Material Contract or any other Person (other than a Governmental Body) with respect to which the failure to obtain could not reasonably be expected, individually or in the aggregate to have a Material Adverse Effect, (ii) any immaterial Consents of any Governmental Body, or (iii) those Consents set forth on Schedule 5.1 hereto, all of which will have been duly obtained, made or compiled prior to the Closing Date and which are in full force and effect and (d) will not conflict with, nor result in any breach in any of the provisions of or constitute a default under or result in the creation of any Lien except Permitted Encumbrances upon any asset of such Loan Party under the provisions of any material agreement, instrument, or other document to which such Loan Party is a party or by which it or its property is a party or by which it may be bound, including without limitation, the Revolving Loan Documents.

5.2 Formation and Qualification.

(a) Each Loan Party is duly incorporated or formed, as applicable, and in good standing under the laws of the state of its incorporation or formation, as applicable, in each case as listed on Schedule 5.2(a) hereto, as such Schedule may be updated from time to time in accordance with the terms hereof, and each Loan Party is qualified to do business and is in good standing in the other states listed on Schedule 5.2(a) hereto, as such Schedule may be updated from time to time in accordance with the terms hereof, which constitute all states in which the failure to so qualify could reasonably be expected to have a Material Adverse Effect. Each Loan Party has delivered to Agent true and complete copies of its Organizational Documents and will promptly notify Agent of any amendment or changes thereto.

(b) Schedule 5.2(b) hereto, as such Schedule may be updated from time to time in accordance with the terms hereof, sets forth (i) a true, complete and correct list of the Subsidiaries of each Loan Party and (ii) a true, complete and correct list of all Equity Interests held by each Loan Party in each of its Subsidiaries.

(c) No Immaterial Subsidiary (i) owns or generates any Receivables or Inventory, (b) has revenues in any fiscal year in excess of $250,000 (other than, in the case of Quantum International, revenue generated through foreign branch offices pursuant to the Transfer Pricing Program) or (c) receives or generates any royalty revenue.

5.3 Survival of Representations and Warranties. All representations and warranties of such Loan Party in this Agreement and the Other Documents to which it is a party shall be true in all material respects at the time of such Loan Party's execution of this Agreement and the Other Documents to which it is a party (except that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof), and shall survive the execution, delivery and acceptance thereof by the parties thereto and the closing of the transactions described therein or related thereto.

5.4 Tax Returns. Each Loan Party's federal tax identification number is set forth on Schedule 5.4 hereto, as such Schedule may be updated from time to time in accordance with the terms hereof. Each Loan Party has filed all federal, and all material state and local tax returns and other material reports that it is required by law to file and has paid all taxes, assessments, fees and other governmental charges that are due and payable in excess of $1,000,000 in the aggregate, except for those taxes, assessments, fees and other governmental charges that are being Properly Contested. The provision for taxes on the books of each Loan Party is adequate for all years not closed by applicable statutes, and for its current fiscal year, and no Loan Party has any knowledge of any deficiency or additional assessment in connection therewith not provided for on its books.

5.5 Financial Statements.

(a) The pro forma balance sheet of Quantum and its Subsidiaries, on a consolidated basis (the "Pro Forma Balance Sheet"), delivered to Agent prior to the Closing Date reflects the consummation of the Transactions and fairly reflects the financial condition of the Quantum and its Subsidiaries, on a consolidated basis, as of the Closing Date after giving effect to the Transactions, and has been prepared in accordance with GAAP. The Pro Forma Balance Sheet has been certified by the Chief Executive Officer, Chief Financial Officer or Treasurer of Borrowing Agent as fairly reflecting the financial condition of Quantum and its Subsidiaries as of the date that it was delivered. All financial statements referred to in this Section 5.5(a), including the related schedules and notes thereto, have been prepared in accordance with GAAP, except as may be disclosed in such financial statements.

(b) The twelve (12) month cash flow and balance sheet projections of Quantum and its Subsidiaries, on a consolidated basis (the "Closing Date Projections" and together with the Pro Forma Balance Sheet, collectively, the "Pro Forma Financial Statements"), delivered to Agent prior to the Closing Date were reviewed by the Chief Executive Officer, Chief Financial Officer or Treasurer of Quantum, are based on underlying assumptions which such officer believed to be reasonable on the date such Closing Date Projections were delivered.

(c) The audited consolidated and consolidating balance sheets of Quantum and its Subsidiaries (and such other Persons described therein) as of March 31, 2016, and the related statements of income, changes in stockholder's equity, and changes in cash flow for the period ended on such date, all accompanied by reports thereon containing opinions by independent certified public accountants, copies of which have been delivered to Agent, have been prepared in accordance with GAAP, consistently applied (except for changes described in such financial statements) and present fairly the financial position of the Loan Parties at such date and the results of their operations for such period. The unaudited consolidated and consolidating balance sheets of Quantum and its Subsidiaries (and such other Persons described therein) as of September 30, 2016, and the related statements of income, and changes in cash flow for the period ended on such date, copies of which have been delivered to Agent, present fairly the financial position of the Loan Parties at such date and the results of their operations at such date.

(d) Since March 31, 2016, there has been no change in the condition, financial or otherwise, of the Loan Parties as shown on the consolidated balance sheet as of such date and no change in the aggregate value of machinery, Equipment and Real Property owned by the Loan Parties, except changes in the Ordinary Course of Business, none of which individually or in the aggregate has been materially adverse.

5.6 Entity Names. Except as set forth on Schedule 5.6 hereto, as such Schedule may be updated from time to time in accordance with the terms hereof, no Loan Party has been known by any other company or corporate name, as applicable, in the past five (5) years and does not sell Inventory under any other name, nor has any Loan Party been the surviving corporation or company, as applicable, of a merger or consolidation or acquired all or substantially all of the assets of any Person during the preceding five (5) years.

5.7 O.S.H.A. Environmental Compliance; Flood Insurance.

(a) Except as set forth on Schedule 5.7 hereto, as such Schedule may be updated from time to time in accordance with the terms hereof, each Loan Party is in compliance in all material respects with, and its facilities, business, assets, property, leaseholds, Real Property and Equipment are in compliance with the Federal Occupational Safety and Health Act, and Environmental Laws and there are no outstanding citations, notices or orders of non-compliance issued to any Loan Party or relating to its business, assets, property, leaseholds or Equipment under any such laws, rules or regulations which could reasonably be expected to have a Material Adverse Effect.

(b) Except as set forth on Schedule 5.7 hereto, as such Schedule may be updated from time to time in accordance with the terms hereof, each Loan Party has been issued all required material federal, state and local licenses, certificates or permits (collectively, "Approvals") relating to all applicable Environmental Laws and all such Approvals are current and in full force and effect.

(c) Except as set forth on Schedule 5.7 hereto, as such Schedule may be updated from time to time in accordance with the terms hereof, and except as could reasonably be expected to have a Material Adverse Effect: (i) there have been no releases, spills, discharges, leaks or disposal (collectively referred to as "Releases") of Hazardous Materials at, upon, under or migrating from or onto any Real Property owned, leased or occupied by any Loan Party, except for those Releases which are in full compliance with Environmental Laws; (ii) there are no underground storage tanks or polychlorinated biphenyls on any Real Property owned, leased or occupied by any Loan Party, except for such underground storage tanks or polychlorinated biphenyls that are present in compliance with Environmental Laws; (iii) all of the Real Property owned, leased or occupied by any Loan Party has never been used by any Loan Party to dispose of Hazardous Materials, except as authorized by Environmental Laws; and (iv) no Hazardous Materials are managed by any Loan Party on any Real Property owned, leased or occupied by any Loan Party, excepting such quantities as are managed in accordance with all applicable manufacturer's instructions and compliance with Environmental Laws and as are necessary for the operation of the commercial business of any Loan Party or of its tenants.

(d) All Real Property owned by the Loan Parties is insured pursuant to policies and other bonds which are valid and in full force and effect and which provide adequate coverage from reputable and financially sound insurers in amounts sufficient to insure the assets and risks of each such Loan Party in accordance with prudent business practice in the industry of such Loan Party. Each Loan Party has taken all actions required under the Flood Laws and/or requested by Agent to assist in ensuring that each Lender is in compliance in all material respects with the Flood Laws applicable to the Collateral, including, but not limited to, providing Agent with the address and/or GPS coordinates of each structure located upon any Real Property that will be subject to a mortgage or deed of trust in favor of Agent, and, to the extent required by Applicable Law, obtaining flood insurance for such property, structures and contents prior to such property, structures and contents becoming Collateral.

5.8 Solvency; No Litigation, Violation, Indebtedness or Default; ERISA Compliance.

(a) (i) The Loan Parties, taken as a whole, are, and after giving effect to the Transactions, will be, solvent, able to pay their debts as they mature, (ii) the Loan Parties, taken as a whole, have, and after giving effect to the Transactions, will have, capital sufficient to carry on their existing businesses and all businesses in which they are about to engage, (iii) as of the ~~<Closing>~~Fourth Amendment Effective Date, the fair present saleable value of the assets of the Loan Parties, taken as a whole, calculated on a going concern basis, are in excess of the amount of their liabilities, and (iv) subsequent to the ~~<Closing>~~Fourth Amendment Effective Date, the fair saleable value of the assets of the Loan Parties, taken as a whole (calculated on a going concern basis), will be in excess of the amount of their liabilities.

(b) Schedule 5.8(b) hereto, as such Schedule may be updated from time to time in accordance with the terms hereof, sets forth a complete and accurate description, with respect to all litigation, arbitration, actions or proceedings with asserted liabilities in excess of, or that could reasonably be expected to result in liabilities in excess of, $1,000,000 that, as of the ~~<Closing>~~Fourth Amendment Effective Date, is pending or, to the knowledge of the Loan Parties, threatened in writing against a Loan Party or any of its Subsidiaries, of (i) the parties to such actions, suits, or proceedings, (ii) the nature of the dispute that is the subject of such actions, suits, or proceedings, (iii) the procedural status, as of the ~~<Closing>~~Fourth Amendment Effective Date, with respect to such actions, suits, or proceedings, and (iv) whether any liability of the Loan Parties' and their Subsidiaries in connection with such actions, suits, or proceedings is covered by insurance.

(c) No Loan Party has any outstanding Indebtedness other than the Obligations, except for (i) Indebtedness disclosed in Schedule 7.8 hereto and (ii) Indebtedness otherwise permitted under Section 7.8 hereof.

(d) No Loan Party is in violation of any applicable statute, law, rule, regulation or ordinance in any respect which could reasonably be expected to have a Material Adverse Effect, nor is any Loan Party in violation of any order of any court, Governmental Body or arbitration board or tribunal which could reasonably be expected to have a Material Adverse Effect,.

(e) No Loan Party or any member of the Controlled Group maintains or is required to contribute to any Pension Benefit Plan or Multiemployer Plan other than those listed on Schedule 5.8(e) hereto. Except as would not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect, each Plan is in compliance in all material respects with the applicable provisions of ERISA, the Code and other Applicable Laws. (i) Each Loan Party and each member of the Controlled Group has met all applicable minimum funding requirements under Section 302 of ERISA and Section 412 of the Code in respect of each Plan, and each Pension Benefit Plan or

Multiemployer Plan is in compliance with Sections 412, 430 and 436 of the Code and Sections 206(g), 302 and 303 of ERISA, without regard to waivers and variances; (ii) each Plan which is intended to be a qualified plan under Section 401(a) of the Code as currently in effect has been determined by the Internal Revenue Service to be qualified under Section 401(a) of the Code and the trust related thereto is exempt from federal income tax under Section 501(a) of the Code or an application for such a determination is currently being processed by the Internal Revenue Code; (iii) neither any Loan Party nor any member of the Controlled Group has incurred any liability to the PBGC other than for the payment of premiums, and there are no premium payments which have become due which are unpaid; (iv) no Pension Benefit Plan or Multiemployer Plan has been terminated by the plan administrator thereof nor by the PBGC, and there is no occurrence which would cause the PBGC to institute proceedings under Title IV of ERISA to terminate any Plan; (v) the current value of the assets of each Pension Benefit Plan or Multiemployer Plan exceeds the present value of the accrued benefits and other liabilities of such Plan and neither any Loan Party nor any member of the Controlled Group knows of any facts or circumstances which would materially change the value of such assets and accrued benefits and other liabilities; (vi) neither any Loan Party nor any member of the Controlled Group has breached any of the responsibilities, obligations or duties imposed on it by ERISA with respect to any Pension Benefit Plan or Multiemployer Plan; (vii) neither any Loan Party nor any member of the Controlled Group has incurred any liability for any excise tax arising under Section 4971, 4972 or 4980B of the Code, and no fact exists which could give rise to any such liability; (viii) neither any Loan Party nor any member of the Controlled Group nor any fiduciary of, nor any trustee to, any Pension Benefit Plan or Multiemployer Plan, has engaged in a "prohibited transaction" described in Section 406 of ERISA or Section 4975 of the Code nor taken any action which would constitute or result in a Termination Event with respect to any such Pension Benefit Plan or Multiemployer Plan which is subject to ERISA; (ix) no Termination Event has occurred or is reasonably expected to occur; (x) there exists no Reportable ERISA Event; (xi) neither any Loan Party nor any member of the Controlled Group has engaged in a transaction that could be subject to Section 4069 or 4212(c) of ERISA; (xii) neither any Loan Party nor any member of the Controlled Group maintains or is required to contribute to any Plan which provides health, accident or life insurance benefits to former employees, their spouses or dependents, other than in accordance with Section 4980B of the Code or similar applicable law; (xiii) neither any Loan Party nor any member of the Controlled Group has withdrawn, completely or partially, within the meaning of Section 4203 or 4205 of ERISA, from any Multiemployer Plan so as to incur liability under the Multiemployer Pension Plan Amendments Act of 1980 and there exists no fact which would reasonably be expected to result in any such liability; and (xiv) to the knowledge of the Company, no Plan fiduciary (as defined in Section 3(21) of ERISA) has any liability for breach of fiduciary duty or for any failure in connection with the administration or investment of the assets of a Plan.

5.9 Intellectual Property. As of the ~~<Closing>~~ Fourth Amendment Effective Date, Schedule 5.9 hereto, as such Schedule may be updated from time to time in accordance with the terms hereof, provides a complete and correct list of: (a) all registered copyrights owned by each Loan Party; (b) all patents owned by each Loan Party and all applications for Patents

owned by such Loan Party; (c) all registered trademarks owned by each Loan Party, all applications for registration of trademarks owned by such Loan Party; and (d) all Intellectual Property licenses entered into by each Loan Party pursuant to which (i) such Loan Party has provided any license in Intellectual Property owned or controlled by such Loan Party to any other Person (other than non-exclusive software licenses granted in the ordinary course of business) with a value in excess of $1,000,000 or (ii) any Person has granted to such Loan Party any license in Intellectual Property owned or controlled by such Person that is material to the business of such Loan Party, including any Intellectual Property that is incorporated in any Inventory, software, or other product marketed, sold, licensed, or distributed by such Loan Party (other than non-exclusive software licenses granted in the ordinary course of business). Other than as set forth on Schedule 5.9 hereto, no Loan Party owns any copyrights, patents or trademarks, the failure to register which could be materially adverse to the conduct of the business of the Loan Parties taken as a whole. Each Loan Party owns exclusively or holds licenses in all Intellectual Property that is necessary in or material to the conduct of its business, and all employees and contractors of each Loan Party who were involved in the creation or development of any Intellectual Property for such Loan Party that is necessary in or material to the business of such Loan Party have signed agreements containing assignment of such employer's or contractor's rights in any Intellectual Property to such Loan Party and obligations of confidentiality. To each Loan Party's knowledge, (a) such Loan Party is not currently infringing or misappropriating any Intellectual Property rights of any Person, and (b) no product manufactured, used, distributed, licensed, or sold by or service provided by such Loan Party is currently infringing or misappropriating any Intellectual Property rights of any Person, in each case, except where such infringement either individually or in the aggregate could not reasonably be expected to result in a Material Adverse Effect.

5.10 Licenses and Permits. Except as set forth in Schedule 5.10 hereto, as such Schedule may be updated from time to time in accordance with the terms hereof, each Loan Party (a) is in compliance with and (b) has procured and is now in possession of, all material licenses or permits required by any applicable federal, state, provincial or local law, rule or regulation for the operation of its business in each jurisdiction wherein it is now conducting or proposes to conduct business and where the failure to be in compliance or to procure such licenses or permits could reasonably be expected to have a Material Adverse Effect.

5.11 [Reserved].

5.12 No Default. No Default or Event of Default has occurred.

5.13 No Burdensome Restrictions. No Loan Party is party to any contract or agreement the performance of which could reasonably be expected to have a Material Adverse Effect. Each Loan Party has heretofore delivered to Agent true and complete copies of all Material Contracts to which it is a party or to which it or any of its properties is subject. No Loan Party has agreed or consented to cause or permit in the future (upon the happening of a contingency or otherwise) any of its property, whether now owned or hereafter acquired, to be subject to a Lien which is not a Permitted Encumbrance.

5.14 No Labor Disputes. No Loan Party is involved in any labor dispute; there are no strikes or walkouts or union organization of any Loan Party's employees in existence or, to the knowledge of the Loan Parties, threatened in writing, and no collective bargaining contract is scheduled to expire during the Term other than as set forth on Schedule 5.14 hereto.

5.15 Margin Regulations. No Loan Party is engaged, nor will it engage, principally or as one of its important activities, in the business of extending credit for the purpose of "purchasing" or "carrying" any "margin stock" within the respective meanings of each of the quoted terms under Regulation U of the Board of Governors of the Federal Reserve System as now and from time to time hereafter in effect. No part of the proceeds of any Loans will be used for "purchasing" or "carrying" "margin stock" as defined in Regulation U of such Board of Governors.

5.16 Investment Company Act. No Loan Party is an "investment company" registered or required to be registered under the Investment Company Act of 1940, as amended, nor is it controlled by such a company.

5.17 Swaps. No Loan Party is a party to, nor will it be a party to, any swap agreement whereby such Loan Party has agreed or will agree to swap interest rates or currencies unless same provides that damages upon termination following an event of default thereunder are payable on an unlimited "two-way basis" without regard to fault on the part of either party.

5.18 Business and Property of the Loan Parties. Upon and after the Closing Date, the Loan Parties do not propose to engage in any business other than as permitted pursuant to Section 7.9 hereof. On the ~~<Closing>~~Fourth Amendment Effective Date, each Loan Party will own all the property and possess all of the rights and Consents necessary for the conduct of the business of such Loan Party.

5.19 [Reserved].

5.20 [Reserved]

5.21 Equity Interests. The authorized and outstanding Equity Interests of each Loan Party, and each legal and beneficial holder thereof as of the ~~<Closing>~~Fourth Amendment Effective Date, are as set forth on Schedule 5.21 hereto, as such Schedule may be updated from time to time in accordance with the terms hereof. All of the Equity Interests of each Loan Party have been duly and validly authorized and issued and are fully paid and non-assessable and have been sold and delivered to the holders hereof in compliance with, or under valid exemption from, all federal and state laws and the rules and regulations of each Governmental Body governing the sale and delivery of securities. Except for the rights and obligations set forth on Schedule 5.21 hereto, as such Schedule may be updated from time to time in accordance with the terms hereof, there are no subscriptions, warrants, options, calls, commitments, rights or agreement by which any Loan Party or any of the shareholders of any Loan Party is bound relating to the issuance, transfer, voting or redemption of shares of its Equity Interests or any pre-emptive rights held by any Person with respect to the Equity Interests of the Loan Parties. Except as set forth on Schedule 5.21 hereto, as such Schedule may be updated from time to time in accordance with the terms hereof, the Loan Parties have not issued any securities convertible into or exchangeable for shares of its Equity Interests or any options, warrants or other rights to acquire such shares or securities convertible into or exchangeable for such shares.

5.22 Commercial Tort Claims. The Loan Parties do not have any commercial tort claim with a value in excess of $500,000, except as set forth on Schedule 5.22 hereto, as such Schedule may be updated from time to time in accordance with the terms hereof.

5.23 Letter of Credit Rights. As of the ~~<Closing>~~Fourth Amendment Effective Date, the Loan Parties do not have letter of credit rights in respect of any letter of credit with a value in excess of $500,000, except as set forth on Schedule 5.23 hereto, as such Schedule may be updated from time to time in accordance with the terms hereof.

5.24 Material Contracts. Schedule 5.24 hereto, as such Schedule may be updated from time to time in accordance with the terms hereof, sets forth all Material Contracts of the Loan Parties. All Material Contracts are in full force and effect and no defaults currently exist thereunder which could reasonably be expected to have a Material Adverse Effect. No Loan Party has (i) received any notice of termination or non-renewal of any Material Contract, or (ii) exercised any option to terminate or not to renew any Material Contract, except, in each case, any such termination which could not reasonably be expected to have a Material Adverse Effect.

5.25 Investment Property Collateral. (i) There are no restrictions on the pledge or transfer of any of the Subsidiary Stock other than restrictions referenced on the face of any certificates evidencing such Subsidiary Stock, restrictions under Applicable Law or restrictions stated in the Organizational Documents of any Loan Party with respect thereto, as applicable; (ii) each Loan Party is the legal owner of the Investment Property Collateral pledged by it hereunder, which is registered in the name of such Loan Party, a custodian or a nominee; (iii) the Investment Property Collateral is free and clear of any Liens except for Permitted Encumbrances which, in the case of any Investment Property Collateral constituting certificated securities, do not have priority over the Liens of Agent thereon; and (iv) the pledge of and grant of the security interest in the Investment Property Collateral is effective to vest in Agent a valid security interest therein.

5.26 Convertible Subordinated Debt Documents. As of the Closing Date, (i) Agent has received true, correct and complete copies of the Convertible Subordinated Debt Documents; and (ii) none of the Convertible Subordinated Debt Documents has been amended or supplemented, nor have any of the provisions thereof been waived, except pursuant to a written agreement or instrument which has heretofore been delivered to Agent. The subordination provisions with respect to the Convertible Subordinated Debt contained in the Convertible Subordinated Debt Documents are legal, valid and binding obligations of each Person a party thereto, and enforceable against such Person in accordance with their terms. No "Event of Default" (as defined in the Convertible Subordinated Debt Documents) has occurred and is continuing. As of the Closing Date, the outstanding principal amount owing under the Convertible Subordinated Debt Documents is $70,000,000. The Obligations constitute "Specified Senior Indebtedness" under the Convertible Subordinated Debt Documents.

5.27 Revolving Loan Documents. Agent has received true, correct and complete copies of the Revolving Loan Documents. None of the Revolving Loan Documents has been amended or supplemented, nor have any of the provisions thereof been waived, except pursuant to a written agreement or instrument which has heretofore been delivered to Agent.

5.28 Disclosure. All factual information taken as a whole (other than forward-looking information and projections and information of a general economic nature and general information about Borrower's industry) furnished by or on behalf of a Loan Party or its Subsidiaries in writing to Agent or any Lender (including all information contained in the Schedules hereto or in the Other Documents) for purposes of or in connection with this Agreement or the Other Documents, and all other such factual information taken as a whole (other than forward-looking information and projections and information of a general economic nature and general information about Quantum's industry) hereafter furnished by or on behalf of a Loan Party or its Subsidiaries in writing to Agent or any Lender will be, true and accurate, in all material respects, on the date as of which such information is dated or certified and not incomplete by omitting to state any fact necessary to make such information (taken as a whole) not misleading in any material respect at such time in light of the circumstances under which such information was provided.

VI AFFIRMATIVE COVENANTS.

Each Loan Party shall, and shall cause each of its Subsidiaries to, until the Payment in Full of the Obligations and the termination of this Agreement:

6.1 Compliance with Laws. Comply in all material respects with all Applicable Laws with respect to the Collateral or any part thereof or to the operation of its business the non-compliance with which could reasonably be expected to have a Material Adverse Effect (except to the extent any separate provision of this Agreement shall expressly require compliance with any particular Applicable Laws pursuant to another standard). Each Loan Party may, however, contest or dispute any Applicable Laws in any reasonable manner, provided that any related Lien is inchoate or stayed and sufficient reserves are established in accordance with GAAP.

6.2 Conduct of Business and Maintenance of Existence and Assets. (a) Conduct continuously and operate actively its business according to good business practices and maintain all of its properties useful or necessary in its business in good working order and condition (reasonable wear and tear excepted and except as may be disposed of in accordance with the terms of this Agreement), and use commercially reasonable efforts to enforce and protect the validity of any Intellectual Property right or other right included in the Collateral where the failure to do so could reasonably be expected to have a Material Adverse Effect; (b) keep in full force and effect its existence and comply in all material respects with the laws and regulations governing the conduct of its business where the failure to do so could reasonably be expected to have a Material Adverse Effect; and (c) make all such reports and pay all such franchise and other taxes and license fees and do all such other acts and things as may be lawfully required to maintain its rights, licenses, leases, powers and franchises under the laws of the United States or any political subdivision thereof where the failure to do so could reasonably be expected to have a Material Adverse Effect.

6.3 Books and Records. Keep proper books of record and account in which entries that are full, true and correct in all material respects will be made of all dealings or transactions of or in relation to its business and affairs (including without limitation accruals for taxes, assessments, Charges, levies and claims, allowances against doubtful Receivables and accruals for depreciation, obsolescence or amortization of assets), all in accordance with, or as required by, GAAP.

6.4 Payment of Taxes. Pay, when due, all material taxes, assessments and other Charges lawfully levied or assessed upon it or any of the Collateral, including real and personal property taxes, assessments and charges and all franchise, income, employment, social security benefits, withholding, and sales taxes, except to the extent that such Loan Party or Subsidiary has Properly Contested such taxes, assessments or charges. If any material tax by any Governmental Body is or may be imposed on or as a result of any transaction between any Loan Party or any of its Subsidiaries and Agent or any Lender which Agent or any Lender may be required to withhold or pay or if any material taxes, assessments, or other Charges remain unpaid after the date fixed for their payment, or if any claim shall be made which, in Agent's opinion, may possibly create a valid Lien on the Collateral, Agent may without notice to the Loan Parties or their Subsidiaries pay the taxes, assessments or other Charges and each Loan Party hereby indemnifies and holds Agent and each Lender harmless in respect thereof. Agent will not pay any taxes, assessments or Charges to the extent that any applicable Loan Party or any applicable Subsidiary has Properly Contested those taxes, assessments or Charges. The amount of any payment by Agent under this Section 6.4 shall be at the sole expense of Borrowers and payable by the Borrowers to Agent not later than ten (10) Business Days after written demand.

6.5 Financial Covenants.

(a) [Reserved].

(b) ~~(a) <Fixed Charge Coverage Ratio>~~Minimum EBITDA. Maintain as of the end of each fiscal quarter, ~~<a Fixed Charge Coverage Ratio for>~~EBITDA of Quantum and its Subsidiaries, on a consolidated basis, of not less than the ~~<ratio>~~amount set forth below for each ~~<four (4) consecutive >~~fiscal quarter period then ended set forth below:

Fiscal Quarter Ending	Minimum ~~<Fixed Charge Coverage Ratio>~~EBITDA
~~December 31, 2017~~	~~1.25 to 1.00~~
~~<March 31>~~ September 30, 2018~~< and each fiscal quarter ending thereafter>~~	~~<1.00 to 1.00>~~$4,600,000

~~<(b) Senior Net Leverage Ratio. Maintain as of the end of each fiscal quarter, a Senior Net Leverage Ratio for Quantum and its Subsidiaries, on a consolidated basis, of not greater than the ratio set forth below for each four (4) consecutive fiscal quarter period then ended set forth below:>~~

~~Fiscal Quarter Ending~~	~~Maximum Senior Net Leverage Ratio~~
December 31, ~~<2017>~~ 2018	~~<4.50 to 1.00>~~ $8,500,000
~~March 31, 2018 and each fiscal quarter ending thereafter through and including the fiscal quarter ending March 31, 2019~~	~~4.25 to 1.00~~
~~June 30, 2019~~	~~3.75 to 1.00~~
~~September 30, 2019~~	~~3.25 to 1.00~~
~~December 31, 2019 and each fiscal quarter ending thereafter~~	~~3.00 to 1.00~~

~~(c) <Total Leverage Ratio. Maintain as of the end of each fiscal quarter, a Total Leverage Ratio for >Quantum and its Subsidiaries, on a consolidated basis, <of not greater than the ratio set forth below for each four (4) consecutive fiscal quarters then ended set forth below:>~~

~~Fiscal Quarter Ending~~	~~Maximum Total Leverage Ratio~~
~~December 31, 2017~~	~~5.50 to 1.00~~
~~March 31, 2018 and each fiscal quarter ending thereafter through and including the fiscal quarter ending March 31, 2019~~	~~4.75 to 1.00~~
~~June 30, 2019 and each fiscal quarter ending thereafter through and including the fiscal quarter ending December 31, 2019~~	~~3.75 to 1.00~~
~~March 31, 2020 and each fiscal quarter ending thereafter~~	~~3.50 to 1.00~~

(c) [Reserved].

(d) Minimum PNC Qualified Cash. Maintain at all times PNC Qualified Cash in an amount of not less than the Minimum PNC Qualified Cash Amount.

6.6 Insurance.

(a) (i) Keep all its insurable properties and properties in which such Loan Party has an interest insured against such hazards, and for such amounts, as is customary in the case of companies engaged in businesses similar to such Loan Party's including business interruption insurance and, if applicable, the hazards of fire, flood and sprinkler leakage; (ii) maintain a bond in such amounts as is customary in the case of companies engaged in businesses similar to such Loan Party insuring against larceny, embezzlement or other criminal misappropriation of insured's officers and employees who may either singly or jointly with others at any time have access to the assets or funds of such Loan Party either directly or through authority to draw upon such funds or to direct generally the disposition of such assets; (iii) maintain public and product liability insurance against claims for personal injury, death or property damage suffered by others; (iv) maintain all such worker's compensation or similar insurance as may be required under the laws of any state or jurisdiction in which such Loan Party is engaged in business; (v) deliver to Agent (A) copies of all policies and evidence of the maintenance of such policies by the renewal thereof at least thirty (30) days before any expiration date, and (B) appropriate loss payable endorsements in form and substance satisfactory to Agent, naming Agent as an additional insured and mortgagee and/or lender loss payee (as applicable) as its interests may appear with respect to all insurance coverage referred to in clauses (i) and (iii) above, and providing (I) that all proceeds thereunder shall be payable to Agent, (II) no such insurance shall be affected by any act or neglect of the insured or owner of the property described in such policy, and (III) that such policy and loss payable clauses may not be cancelled, amended or terminated unless at least thirty (30) days prior written notice is given to Agent (or in the case of non-payment, at least ten (10) days prior written notice). In the event of any loss thereunder, the carriers named therein hereby are directed by Agent and the applicable Loan Party to make payment for such loss to Agent and not to such Loan Party and Agent jointly. If any insurance losses are paid by check, draft or other instrument payable to any Loan Party and Agent jointly, Agent may endorse such Loan Party's name thereon and do such other things as Agent may deem advisable to reduce the same to cash.

(b) Each Loan Party shall take all actions required under the Flood Laws and/or reasonably requested by Agent to assist in ensuring that each Lender is in compliance with the Flood Laws applicable to the Collateral, including, but not limited to, providing Agent with the address and/or GPS coordinates of each structure on any Real Property that will be subject to a mortgage or deed of trust in favor of Agent, and, to the extent required, obtaining flood insurance for such property, structures and contents prior to such property, structures and contents becoming Collateral, and thereafter maintaining such flood insurance in full force and effect for so long as required by the Flood Laws.

(c) Agent is hereby authorized to adjust and compromise claims under insurance coverage referred to in Sections 6.6(a)(i) and (iii) and 6.6(b) above. Any surplus shall be paid by Agent to the Loan Parties or applied as may be otherwise required by law. Any deficiency thereon shall be paid by the Loan Parties to Agent, on demand.

(d) If any Loan Party fails to obtain insurance as hereinabove provided, or to keep the same in force, Agent, if Agent so elects, may obtain such insurance and pay the premium therefor on behalf of such Loan Party, which payments shall be at the sole expense of the Borrowers and payable by the Borrowers to Agent not later than ten (10) Business Days after written demand.

6.7 Payment of Indebtedness and Leasehold Obligations. Pay, discharge or otherwise satisfy (i) at or before maturity (subject, where applicable, to specified grace periods) all of its material Indebtedness, except when the amount or validity thereof is currently being Properly Contested, subject at all times to any applicable subordination arrangement in favor of Agent and the Lenders and (ii) when due its material rental obligations under all leases under which it is a tenant, and shall otherwise comply, in all material respects, with all other terms of such leases and keep them in full force and effect.

6.8 Environmental Matters.

(a) Ensure that all of the Real Property owned or leased by it and all operations and businesses conducted thereon are in compliance and remain in compliance with all Environmental Laws and it shall manage any and all Hazardous Materials on any Real Property owned or leased by it in compliance with Environmental Laws, except where the failure to comply could not reasonably be expected to result in a Material Adverse Effect.

(b) Establish and maintain an environmental management and compliance system to assure and monitor continued compliance with all applicable Environmental Laws.

(c) Respond promptly to any Hazardous Discharge or Environmental Complaint and take all necessary action in order to safeguard the health of any Person and to avoid subjecting the Collateral or Real Property to any Lien. If any Loan Party or any of its Subsidiaries shall fail to respond promptly to any Hazardous Discharge or Environmental Complaint or any Loan Party or any of its Subsidiaries shall fail to comply with any of the requirements of any Environmental Laws, Agent on behalf of Lenders may, but without the obligation to do so, for the sole purpose of protecting Agent's interest in the Collateral: (i) give such notices or (ii) enter onto the applicable Real Property (or authorize third parties to enter onto such Real Property) and take such actions as Agent (or such third parties as directed by Agent) deems reasonably necessary or advisable, to remediate, remove, mitigate or otherwise manage with any such Hazardous Discharge or Environmental Complaint. All reasonable and documented costs and expenses incurred by Agent and Lenders (or such third parties) in the exercise of any such rights, including any sums paid in connection with any judicial or administrative investigation or proceedings, fines and penalties, together with interest thereon from the date expended at the Default Rate for Prime Rate Loans shall be paid upon demand by the Loan Parties, and until paid shall be added to and become a part of the Obligations secured by the Liens created by the terms of this Agreement or any other agreement between Agent, any Lender and any Loan Party.

(d) Promptly upon the written request of Agent from time to time in its Permitted Discretion if a Default or Event of Default has occurred and is continuing, the Loan Parties shall provide Agent, at the Loan Parties' expense, with an environmental site assessment or environmental compliance audit report prepared by an environmental engineering firm acceptable in the reasonable opinion of Agent, to assess with a reasonable degree of certainty the existence of a Hazardous Discharge and the potential costs in connection with abatement, remediation and removal of any Hazardous Materials found on, under, at or within all of the Real Property owned or leased by any Loan Party. Agent hereby acknowledges that any report or investigation of such Hazardous Discharge proposed and acceptable to the responsible Governmental Body shall be acceptable to Agent. If such estimates, individually or in the aggregate, exceed $2,000,000, Agent shall have the right to require the Loan Parties to post a bond, letter of credit or other security reasonably satisfactory to Agent to secure payment of these costs and expenses.

6.9 Standards of Financial Statements. Cause all financial statements referred to in Sections 9.7, 9.9, 9.10, 9.11, 9.12 and 9.13 hereof as to which GAAP is applicable to fairly present the financial condition or operating condition (subject, in the case of interim financial statements, to normal year-end and audit adjustments) and to be prepared in reasonable detail and in accordance with GAAP applied consistently throughout the periods reflected therein (except as disclosed therein).

6.10 Federal Securities Laws. Promptly notify Agent in writing if any Loan Party (other than Quantum) or any of its Subsidiaries (a) is required to file periodic reports under the Exchange Act, (b) registers any securities under the Exchange Act or (c) files a registration statement under the Securities Act.

6.11 Execution of Supplemental Instruments. Execute and deliver to Agent from time to time, upon demand, such supplemental agreements, statements, assignments and transfers, or instructions or documents relating to the Collateral, and such other instruments as Agent may request in its Permitted Discretion in order that the provisions of this Agreement may be carried into effect.

6.12 Government Receivables. Take all steps necessary to protect Agent's interest in the Collateral under the Federal Assignment of Claims Act, the Uniform Commercial Code and all other applicable state or local statutes or ordinances and deliver to Agent appropriately endorsed, any instrument or chattel paper connected with any Receivables in an aggregate amount in excess of $500,000 arising out of any contract between any Loan Party and the United States, any state or any department, agency or instrumentality of any of them.

6.13 [Reserved].

6.14 Post-Closing Covenants.

(a) Blocked Accounts.

(i) On or prior to November 15, 2016 (or such later date as Agent shall agree in its Permitted Discretion), Quantum shall deliver to Agent, in form and substance reasonably satisfactory to Agent, a Control Agreement among Quantum, Agent, Revolving Loan Agent and each Specified Domestic Blocked Account Bank with respect to each of the Blocked Accounts and each of the other deposit accounts and securities accounts of the Loan Parties maintained at such Specified Domestic Blocked Account Banks, duly authorized, executed and delivered by Quantum, Agent, Term Loan Agent and each applicable Specified Domestic Blocked Account Bank.

(ii) On or prior to December 31, 2016 (or such later date as Agent shall agree in its Permitted Discretion), Quantum shall deliver to Agent, in form and substance reasonably satisfactory to Agent: (A) a bank account pledge agreement by Quantum in favor of Agent and Revolving Loan Agent to be governed by the laws of Switzerland with respect to the Swiss Blocked Accounts, duly authorized, executed and delivered by Quantum, Agent and Revolving Loan Agent, (B) a notice of pledge in respect of the Swiss Blocked Accounts by Agent, Revolving Loan Agent and Quantum to Specified Swiss Blocked Account Bank to be governed by the laws of Switzerland, duly authorized, executed and delivered by Quantum, Agent and Revolving Loan Agent and duly acknowledged by Specified Swiss Blocked Account Bank, and (C) such other agreements, documents or instruments as Agent shall reasonably request in order to perfect the Lien of Agent in the Specified Swiss Blocked Accounts; provided that (x) in the event that Quantum shall fail to comply with the covenants set forth in this Section 6.14(a)(ii) on or prior to December 31, 2016 (or such later date as Agent shall agree in its Permitted Discretion), the cash maintained in the Blocked Account of Quantum maintained in the Swiss Blocked Accounts shall cease to be included in the calculation of Qualified Cash until such time as the covenants set forth in this Section 6.14(a)(ii) have been satisfied; and (y) the failure of Quantum to comply with the covenants set forth in this Section 6.14(a)(ii) shall not result in a Default or an Event of Default.

(iii) On or prior to March 31, 2017 (or such later date as Agent shall agree in its Permitted Discretion), all of the Blocked Accounts and all of the other deposit accounts and securities accounts of the Loan Parties maintained at PNC or any other bank (including without limitation each Blocked Account maintained at each Specified Domestic Blocked Account Bank but excluding each Excluded Account and each Swiss Blocked Account) shall be subject to a Control Agreement.

(b) Intellectual Property Security Interest Releases. Quantum shall use commercially reasonable efforts to deliver to Agent, on or prior to the date that is sixty (60) days following the Closing Date (or such later date as Agent shall agree in its Permitted Discretion), evidence, in form and substance reasonably satisfactory to Agent, that all security interests assigned to each of Keybank National Association, as Administrative Agent, and Credit Suisse, have been released as reflected in the public records of the United States Patent and Trademark Office or the Copyright Office, as applicable.

(c) Pledged Equity Interests. Quantum shall use commercially reasonable efforts to deliver to Agent, on or prior to the date that is sixty (60) days following the Closing Date (or such later date as Agent shall agree in its Permitted Discretion), an original stock certificate representing the Equity Interests of Plures Technologies, Inc., a Delaware corporation, issued to Quantum, together with an original stock power executed in blank.

(d) Insurance Endorsements. On or prior to the date that is ten (10) Business Days following the Closing Date (or such later date as Agent shall agree in its Permitted Discretion), Quantum shall deliver to Agent appropriate loss payable endorsements, in form and substance satisfactory to Agent, naming Agent as an additional insured and/or lender loss payee (as applicable) as its interests may appear with respect to all insurance coverage required by clauses (i) and (iii) of Section 6.6(a) of this Agreement, and providing (x) that all proceeds thereunder shall be payable to Agent, (y) no such insurance shall be affected by any act or neglect of the insured or owner of the property described in such policy, and (z) that such policy and loss payable clauses may not be cancelled, amended or terminated unless at least thirty (30) days prior written notice is given to Agent (or in the case of non-payment, at least ten (10) days prior written notice).

6.15 Board Observation Rights. Agent shall have the right to either (a) appoint a single observer to the governing body of Quantum (the "Quantum Board of Directors") who shall be entitled to attend (or at the option of such observer, monitor by telephone) all meetings of the Quantum Board of Directors (other than any portions of any meetings of the Quantum Board of Directors that constitute executive sessions or relate to this Agreement or which involve the exchange of privileged attorney-client information or work product), but shall not be entitled to vote, or (b) receive all Quantum Board of Directors meeting materials, Quantum Board of Directors notices and other materials (in each case other than any portions of such reports or materials that contain confidential information (including with respect to executive sessions) relating to this Agreement or attorney-client privileged information or work product) as and when provided to the members of the Quantum Board of Directors. To the extent Agent elects to appoint an observer in accordance with this section 6.15, Borrowers shall reimburse Agent for a reasonable and documented out-of-pocket travel expenses incurred by any such observer in connection with attendance at or participation in meetings to the extent consistent with Quantum's policies of reimbursing directors generally for such expenses.

6.16 LTO Program.

(a) Subject to Section 6(b) of the Fourth Amendment, ensure that (a) all of the rights and interests under, in and to the LTO Program, the Recurring Royalty Revenue, all Format Development Agreements and any other contracts related to the foregoing, and (b) all Intellectual Property necessary to, and primarily used in, the LTO Program, are owned by, in the name of and registered under, as applicable, LTO Subsidiary; and

(b) Upon the occurrence of any Default or Event of Default, and at the reasonable request of Agent, promptly transfer to LTO Subsidiary any additional rights or interests relating to the LTO Program, including without limitation any Intellectual Property used in the LTO Program and any employees engaged in work relating to, or servicing, the LTO Program.

6.17 Repayment Transaction Status Report. Cause, no less frequently than once each week, the President or Chief Financial Officer of Quantum and the Investment Banker (as defined in the Fourth Amendment) to either (a) have a teleconference (at times during each such week that are mutually convenient for the Loan Parties and Agent) with Agent and each Lender that elects to participate in such teleconference to discuss the then current status of the Repayment Transaction (as defined in the Fourth Amendment) or (b) provide a written process update (which may be delivered via email) in reasonable detail regarding the current status of the Repayment Transaction (as defined in the Fourth Amendment).

VII NEGATIVE COVENANTS.

No Loan Party nor any of its Subsidiaries shall, until the Payment in Full of the Obligations and the termination of this Agreement:

7.1 Merger, Consolidation, Acquisition and Sale of Assets.

(a) Enter into any merger, consolidation or other reorganization with or into any other Person, permit any other Person to consolidate with or merge with it, or acquire all or substantially all of the assets or Equity Interests of any Person, or of any division or line of business of any Person, except that:

(i) any Loan Party may merge, consolidate or reorganize with another Loan Party or a Subsidiary of a Loan Party or acquire the assets or Equity Interests of another Loan Party or a Subsidiary of a Loan Party so long as (A) in each case, Borrowing Agent shall provide Agent with notice of such merger, consolidation, reorganization or acquisition within five (5) Business Days following the consummation thereof or, to the extent that such merger, consolidation, reorganization or acquisition does not affect the priority or perfection of Agent's Liens, concurrently with the delivery of the monthly financial statements required to be delivered to Agent pursuant to Section 9.9 hereof, (B) in connection with any merger, consolidation or reorganization to which Quantum is a party, Quantum must be the surviving entity of such merger, consolidation or reorganization, (C) in connection with any merger, consolidation or reorganization to which a Borrower is, and Quantum is not, a party, the surviving entity of such merger, consolidation or reorganization must be, or concurrently with the consummation of such merger, consolidation or reorganization become, a Borrower, (D) in connection with any merger, consolidation or reorganization to which a Guarantor is, and a Borrower is not, a party, the surviving entity of such merger, consolidation or reorganization must be, or concurrently with the

consummation of such merger, consolidation or reorganization become, a Guarantor, and (E) Borrowing Agent shall deliver to Agent true, correct and complete copies of all of the material agreements, documents and instruments related to such merger, consolidation, reorganization or acquisition concurrently with the delivery of the monthly financial statements required to be delivered to Agent pursuant to Section 9.9 hereof,

(ii) any Subsidiary of a Loan Party that is not a Loan Party may merge, consolidate or reorganize with another Subsidiary of a Loan Party that is not a Loan Party or acquire the assets or Equity Interests of another Subsidiary of a Loan Party that is not a Loan Party so long as such Subsidiary shall deliver to Agent true, correct and complete copies of all of the relevant agreement, documents and instruments evidencing such merger, consolidation or reorganization concurrently with the delivery of the monthly financial statements required to be delivered to Agent pursuant to Section 9.9 hereof,

(iii) a Loan Party may make Permitted Investments, and

(iv) a Loan Party may make Permitted Acquisitions;

(b) Dispose of any of its properties or assets, except for Permitted Dispositions; or

(c) Liquidate, wind up or dissolve itself (or suffer any liquidation or dissolution), except for:

(i) the liquidation or dissolution of Immaterial Subsidiaries,

(ii) the liquidation or dissolution of a Borrower (other than Quantum) so long as all of the assets (including any interest in any Equity Interests) of such liquidating or dissolving Borrower are transferred to a Borrower that is not liquidating or dissolving,

(iii) the liquidation or dissolution of a Loan Party (other than a Borrower) or any of its wholly-owned Subsidiaries so long as all of the assets (including any interest in any Equity Interests) of such liquidating or dissolving Loan Party or Subsidiary are transferred to a Loan Party that is not liquidating or dissolving, and

(iv) the liquidation or dissolution of a Subsidiary of a Loan Party that is not a Loan Party so long as all of the assets of such liquidating or dissolving Subsidiary are transferred to a Loan Party or a Subsidiary of a Loan Party that is not liquidating or dissolving.

7.2 Creation of Liens. Create or suffer to exist any Lien upon or against any of its property or assets now owned or hereafter created or acquired, except Permitted Encumbrances.

7.3 Guarantees. Become liable upon the obligations or liabilities of any Person by assumption, endorsement or guaranty thereof or otherwise (other than to Lenders) except (a) the endorsement of checks in the Ordinary Course of Business, (b) as disclosed on Schedule 7.3 hereto, (c) unsecured guarantees incurred in the Ordinary Course of Business with respect to surety and appeal bonds, performance bonds, bid bonds, appeal bonds, completion guarantee and similar obligations, (d) unsecured guarantees arising with respect to customary indemnification obligations to purchasers in connection with Permitted Dispositions, and (e) guarantees with respect to other Permitted Indebtedness, to the extent that the Person that is obligated under such guaranty could have incurred such underlying Indebtedness.

7.4 Investments. Purchase or acquire obligations or Equity Interests of, or any other interest in, any Person, other than Permitted Investments.

7.5 Loans. Make advances, loans or extensions of credit to any Person, including any Parent, Subsidiary or Affiliate, other than any advance, loan or extension of credit constituting a Permitted Investment.

7.6 Capital Expenditures. Contract for, purchase or make any expenditure or commitments for Capital Expenditures in any fiscal year in an aggregate amount for all Loan Parties in excess of (a) for the calendar year ending December 31, 2018, $12,000,000, and (b) for each calendar year ending thereafter, $15,000,000.

7.7 Restricted Payments. Declare, pay or make any Restricted Payment, except

that:

(a) Quantum may make Restricted Payments to former employees, officers or directors of Quantum (or any spouses, ex-spouses or estates of any of the foregoing) on account of redemptions of Equity Interests of Quantum held by such Persons, provided that (i) such Restricted Payments are permitted by Applicable Law; (ii) no Event of Default or Default shall have occurred or would occur after giving pro forma effect to any such Restricted Payment; and (iii) the aggregate amount of such Restricted Payments (whether in exchange for cash or the issuance of Indebtedness permitted pursuant to clause (n) of the definition of "Permitted Indebtedness") shall not exceed $1,000,000 during the term of this Agreement;

(b) Quantum may make Restricted Payments to former employees, officers or directors of Quantum (or any spouses, ex-spouses or estates of any of the foregoing), solely in the form of forgiveness of Indebtedness of such Persons owing to Quantum on account of repurchases of the Equity Interests of Quantum held by such Persons; provided (i) such Restricted Payments are permitted by Applicable Law; (ii) no Event of Default or Default shall have occurred or would occur after giving pro forma effect to any such Restricted Payment; and (iii) such Indebtedness was incurred by such Persons solely to acquire Equity Interests of Quantum;

(c) Quantum may permit the Convertible Subordinated Debt to convert into Qualified Equity Interests in accordance with the terms of the Convertible Subordinated Debt Documents; provided that (i) such conversion is permitted by Applicable Law; and (ii) no Event of Default or Default shall have occurred or would occur after giving pro forma effect to such conversion;

(d) Quantum may exchange Qualified Equity Interests for other Qualified Equity Interests in a cashless exchange (other than respect to cash payment made in exchange for fractional shares); provided that (i) such exchange is permitted by Applicable Law; and (ii) no Event of Default or Default shall have occurred or would occur after giving pro forma effect to such exchange; and

(e) a Subsidiary of Quantum may make Restricted Payments to Quantum or any other Loan Party and a Subsidiary of Quantum that is not a Loan Party may make Restricted Payments to another Subsidiary of Quantum that is not a Loan Party; provided that, in each case such Restricted Payment is permitted by Applicable Law.

7.8 Indebtedness. Create, incur, assume or suffer to exist any Indebtedness other than Permitted Indebtedness.

7.9 Nature of Business. Substantially change the nature of the business in which it is presently engaged, nor except as specifically permitted hereby purchase or invest, directly or indirectly, in any assets or property other than in the Ordinary Course of Business for assets or property which are useful in, necessary for and are to be used in its business as presently conducted; provided, that the foregoing shall not prevent Borrowers and their Subsidiaries from engaging in any business that is reasonably related or ancillary to its or their business or is a reasonable extension of its or their business.

7.10 Transactions with Affiliates. Directly or indirectly, purchase, acquire or lease any property from, or sell, transfer or lease any property to, or otherwise enter into any transaction or deal with, any Affiliate, except for

(a) transactions (other than the payment of management, consulting, monitoring or advisory fees) between any Loan Party or its Subsidiaries, on the one hand, and any Affiliate of such Loan Party or Subsidiary, on the other hand, so long as (i) if such transactions involve one or more payments by such Loan Party or Subsidiary in excess of $5,000,000 for any single transaction or series of related transactions, such transactions are fully disclosed to Agent prior to the consummation thereof, and (ii) such transactions are no less favorable, taken as a whole, to the Loan Parties and their Subsidiaries than would be obtained in an arm's length transaction with a non-Affiliate;

(b) any indemnity provided for the benefit of directors (or comparable managers) of such Loan Party or its applicable Subsidiary, so long as such indemnity has been approved by the board of directors of such Loan Party or Subsidiary in accordance with Applicable Law;

(c) the payment of reasonable compensation, severance or employee benefit arrangements to employees, officers and outside directors of such Loan Party or its Subsidiaries in the Ordinary Course of Business and consistent with industry practice, so long as such payment has been approved by the board of directors of such Loan Party or Subsidiary in accordance with Applicable Law;

(d) transactions permitted by Section 7.1 or Section 7.7 hereof;

(e) transactions pursuant to, and made in accordance with, the Transfer Pricing Program;

(f) Permitted Intercompany Advances;

(g) transactions permitted under clause (j) of the definition of "Permitted Dispositions";

(h) Investments permitted under clauses (h) and (n) of the definition of "Permitted Investments"; and

(j) Indebtedness owing to Affiliates permitted under clause (n) of the definition of "Permitted Indebtedness" or loans or advances to Affiliates permitted under clause (k) of the definition of "Permitted Investments".

7.11 Reserved.

7.12 Subsidiaries.

(a) Form any Subsidiary unless: (i) if such Subsidiary is either a Foreign Subsidiary or an Immaterial Subsidiary, Borrowing Agent provides Agent with written notice of the formation of such Subsidiary and, if requested by Agent, true, correct and complete copies of the Organizational Documents of such Subsidiary and all of the material agreements, documents and instruments related to such formation concurrently with the delivery of the monthly financial statements required to be delivered to Agent pursuant to Section 9.9 hereof with respect to the month in which such formation occurs, (ii) if such Subsidiary is a Domestic Subsidiary, (A) Borrowing Agent provides Agent with written notice of the formation of such Subsidiary and, if requested by Agent, true, correct and complete copies of the Organizational Documents of such Subsidiary and all of the material agreements, documents and instruments related to such formation within fifteen (15) Business Days following the date of such formation, and (B) at Agent's discretion, or if requested by Borrowing Agent, (x) such Subsidiary expressly joins in this Agreement as a Borrower or a Guarantor and becomes jointly and severally liable for the obligations of the Loan Parties hereunder and under the Other Documents, and (y) executes a joinder to this Agreement and/or a Guaranty and a Guarantor Security Agreement in favor of Agent and such Other Documents related thereto as Agent shall reasonably request in connection therewith.

(b) Enter into any partnership, joint venture or similar arrangement which does not constitute a Permitted Investment.

(c) Permit any Immaterial Subsidiary to (i) own or generate any Receivables or Inventory, (ii) have revenues in any fiscal year in excess of $250,000 (other than, in the case of Quantum International, revenue generated through foreign branch offices pursuant to the Transfer Pricing Program) or (iii) receive or generate any royalty revenue, unless Borrowing Agent causes such Immaterial Subsidiary to become a Borrower or a Guarantor hereunder and under the Other Documents by providing to Agent the agreements, documents and instruments required to be delivered pursuant to Section 7.12(a)(ii) hereof.

7.13 Fiscal Year and Accounting Changes. Change its fiscal year from March 31 or make any change to its method of accounting (except as required by GAAP).

7.14 Reserved.

7.15 Amendment of Organizational Documents.

(a) Change (i) its legal name or its form of legal entity (e.g., converting from a corporation to a limited liability company or vice versa)without providing Agent with (A) written notice of such change within five (5) Business Days following such change, and (B) true, correct and complete copies of all of the agreements, documents and instruments related to such name change, or (ii) its jurisdiction of organization or become (or attempt or purport to become) organized in more than one jurisdiction.

(b) Amend, modify or waive any term or material provision of its Organizational Documents if the effect thereof, either individually or in the aggregate, could reasonably be expected to be materially adverse to the interests of Agent and the Lenders; provided that such Loan Party shall provide Agent with true, correct and complete copies of any amendment, modification or waiver concurrently with the delivery of the monthly financial statements required to be delivered to Agent pursuant to Section 9.9 hereof with respect to the month in which such amendment, modification or waiver occurs.

7.16 Compliance with ERISA. Except as would not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect, (a) (x) Maintain, or permit any member of the Controlled Group to maintain, or (y) become obligated to contribute, or permit any member of the Controlled Group to become obligated to contribute, to any Pension Benefit Plan or Multiemployer Plan, other than those Pension Benefit Plan or Multiemployer Plans disclosed on Schedule 5.8(e) hereto, (b) engage, or permit any member of the Controlled Group to engage, in any non-exempt "prohibited transaction" in respect of a Pension Benefit Plan or Multiemployer Plan, as that term is defined in Section 406 of ERISA or Section 4975 of the Code, (c) terminate, or permit any member of the Controlled Group to terminate, any Pension Benefit Plan or Multiemployer Plan where such event could result in any liability of any Loan Party or any member of the Controlled Group or the imposition of a lien on the property of any Loan Party or any member of the Controlled Group pursuant to Section 4068 of ERISA, (d) incur, or permit any member of the Controlled Group to incur, any withdrawal liability to any Multiemployer Plan; (e) fail promptly to notify Agent of the occurrence of any Termination Event, (f) fail to comply, or permit any member of the Controlled Group to fail to comply, with the requirements of ERISA or the Code or other Applicable Laws in respect of any Plan, (g) fail to meet, permit any member of the Controlled Group to fail to meet, or

permit any Plan to fail to meet all minimum funding requirements under ERISA and the Code, without regard to any waivers or variances, or postpone or delay or allow any member of the Controlled Group to postpone or delay any funding requirement with respect to any Plan, or (h) cause, or permit any member of the Controlled Group to cause, a representation or warranty in Section 5.8(e) hereof to cease to be true and correct.

7.17 Prepayment of Indebtedness. At any time, directly or indirectly, prepay any Indebtedness, or repurchase, redeem, retire or otherwise acquire any Indebtedness (other than the Convertible Subordinated Debt) of any Loan Party, except:

(a) Borrowers may prepay the Obligations to the extent permitted hereunder;

(b) subject to the terms of the Intercreditor Agreement, Borrowers may make mandatory prepayments in respect of the Revolving Loan Indebtedness pursuant to Sections 2.20(a) and 2.20(b) of the Revolving Loan Agreement (as in effect on the Closing Date hereof and as the same may be amended in accordance with the terms of the Intercreditor Agreement);

(c) Borrowers may make voluntary prepayments in respect of the Revolving Loan Indebtedness pursuant to Section 2.20(c) of the Revolving Loan Agreement (as in effect on the Closing Date hereof and as the same may be amended in accordance with the terms of the Intercreditor Agreement);

(d) [Reserved];

(e) any Loan Party may prepay, repurchase, redeem, retire or otherwise acquire any Indebtedness described in clauses (c), (f), (g), (h), (n), (q), (t) or (u) of the definition of "Permitted Indebtedness"; provided that (i) on the date of any such prepayment, repurchase, redemption, retirement or other acquisition and after giving effect thereto, (A) each of the Payment Conditions shall have been satisfied; and (B) Quantum and its Subsidiaries, on a consolidated basis, are projected to be in compliance with each of the financial covenants set forth in Section 6.5 hereof for the four (4) fiscal quarter period ended one year after the proposed date of such payment; (ii) in connection with any prepayment, repurchase, redemption, retirement or other acquisition of Indebtedness described in clauses (f), (g), (h), (n) and (u) of the definition of "Permitted Indebtedness", all of the applicable subordination provisions (or the conditions set forth in the applicable Subordination Agreement) related to such Indebtedness shall have been satisfied; and

(f) Quantum may make payments in exchange for fractional shares in connection with the conversion of any Indebtedness that has been contractually subordinated in right of payment to the Obligations, in an otherwise cashless exchange (with cash payment made in exchange for fractional shares) into Qualified Equity Interests so long as no Default or Event of Default shall have occurred and be continuing or would result therefrom.

7.18 Convertible Subordinated Debt. At any time, directly or indirectly, pay, prepay, repurchase, redeem, retire or otherwise acquire, or make any payment on account of any principal of, interest on or premium payable in connection with the repayment or redemption of the Convertible Subordinated Debt, except that that (a) prior to the Second Amendment Effective Date, Quantum may repay, prepay, repurchase, redeem, retire or otherwise acquire up to $13,000,000 of the Convertible Subordinated Debt, and (b) on or prior to the Convertible Subordinated Debt Maturity Date, Quantum shall satisfy the Specified Convertible Subordinated Debt Condition, provided that, in connection with any repayment, prepayment, repurchase, redemption, retirement or other acquisition of the Convertible Subordinated Debt (other than the repayment, prepayment, repurchase, redemption, retirement or other acquisition permitted pursuant to clause (a) above): (A) immediately after giving effect to any such repayment, prepayment, repurchase, redemption, retirement or other acquisition, Quantum and its Subsidiaries, on a consolidated basis, shall be in compliance on a pro forma basis with the financial covenants set forth in Section 6.5(a) and 6.5(c) hereof, recomputed for the most recently ended fiscal quarter for which financial statements are required to be delivered pursuant to Section 9.9 hereof (in each case, after giving effect to the Second Amendment), (B) immediately after giving effect to any such repayment, prepayment, repurchase, redemption, retirement or other acquisition, the Senior Net Leverage Ratio for Quantum and its Subsidiaries, on a consolidated basis, shall be less than or equal to 5.00 to 1.00 on a pro forma basis for the four (4) consecutive fiscal quarters ending immediately prior to any such repayment, prepayment, repurchase, redemption, retirement or other acquisition, recomputed for the most recently ended fiscal quarter for which financial statements are required to be delivered pursuant to Section 9.9 hereof, (C) on the date of any such repayment, prepayment, repurchase, redemption, retirement or other acquisition and immediately after giving effect thereto, each of the Convertible Subordinated Debt Payment Conditions shall have been satisfied, and (D) on or before the date of any such repayment, prepayment, repurchase, redemption, retirement or other acquisition, Borrowing Agent shall have delivered to Agent, in form and substance satisfactory to Agent, a Compliance Certificate demonstrating by reasonably detailed calculations (including without limitation a calculation of EBITDA) that, upon giving effect to any repayment, prepayment, repurchase, redemption, retirement or other acquisition, Quantum and its Subsidiaries were and will be in compliance with the conditions set forth in clauses (A) through (C) of this proviso.

7.19 Amendments to Certain Documents. Enter into any amendment, waiver or modification of (a) any of the Convertible Subordinated Debt Documents that is adverse to the interests of Agent and the Lenders in the reasonable determination of Agent without the prior written consent of Agent and in any event Borrowing Agent shall deliver to Agent true, correct and complete copies of any material amendment, waiver or modification of any of the Convertible Subordinated Debt Documents (whether or not adverse to the interests of Agent and the Lenders) concurrently with the delivery of the monthly financial statements required to be delivered to Agent pursuant to Section 9.9 hereof with respect to the month in which such amendment, waiver or modification occurs, or (b) any of the Revolving Loan Documents, except to the extent permitted by the terms of the Intercreditor Agreement.

7.20 LTO Subsidiary as a Special Purpose Vehicle. Permit LTO Subsidiary to incur any Indebtedness other than (a) the Obligations, (b) the Revolving Loan Indebtedness and (c) liabilities arising in connection with the LTO Program in the ordinary course of business.

VIII CONDITIONS PRECEDENT.

8.1 Conditions to Initial Loans. The agreement of Lenders to make the Term A Loan on the Closing Date is subject to the satisfaction, or waiver by Agent, immediately prior to or concurrently with the making of the Term A Loan, of the following conditions precedent:

(a) Executed Documents. Agent shall have received, in form and substance satisfactory to Agent, this Agreement and each of the Other Documents, in each case duly authorized, executed and delivered by the Loan Parties and any other Person party thereto;

(b) Intercreditor Agreement. Agent shall have received, in form and substance reasonably satisfactory to Agent, the Intercreditor Agreement, duly authorized, executed and delivered by Revolving Loan Agent and acknowledged by the Loan Parties;

(c) Stock Certificates. Agent shall have received originals of stock certificates representing 100% (or 65%, as applicable) of the Equity Interests of each Subsidiary of Quantum, together with stock powers executed in blank.

(d) Financial Condition Certificate. Agent shall have received an executed Financial Condition Certificate in the form of Exhibit 8.1(d) attached hereto.

(e) Closing Certificate. Agent shall have received a closing certificate signed by the Chief Financial Officer of Borrowing Agent dated as of the Closing Date, stating that (i) all representations and warranties set forth in this Agreement and the Other Documents are true and correct on and as of such date, and (ii) on such date no Default or Event of Default has occurred or is continuing;

(f) W-9. Agent shall have received a duly completed W-9 (or other applicable IRS tax form) of each Loan Party;

(g) Quality of Earnings; Closing Date EBITDA. Agent shall have received, and been satisfied with its review of, a quality of earnings report performed by a third party firm acceptable to Agent in its Permitted Discretion, which report, among other things, shall confirm that the EBITDA of Quantum and its Subsidiaries for the twelve (12) month period ending on or about July 31, 2016 was equal to or greater than $23,000,000 (the "July Quality of Earnings Report"), and Agent shall have received evidence, in form and substance reasonably satisfactory to Agent, that EBITDA of Quantum and its Subsidiaries, using methodology substantially consistent with the determination of EBITDA in the July Quality of Earnings Report, for the twelve (12) month period ending on or about September 30, 2016 was equal to or greater than $30,000,000 (the "Closing EBITDA Amount");

(h) Total Funded Debt. After giving pro forma effect to the Loans made hereunder on the Closing Date and the Advances made by Revolving Loan Lenders on the Closing Date, the total amount of Funded Debt of Quantum and its Subsidiaries, on a consolidated basis, on the Closing Date shall be less than or equal to the lesser of (i) $146,000,000 and (ii) the amount equal to the product of (x) the Closing EBITDA Amount, multiplied by (y) 4.6;

(i) Maximum Senior Net Leverage Ratio. After giving pro forma effect to the Loans made hereunder on the Closing Date and the Advances made by Revolving Loan Lenders on the Closing Date, the Senior Net Leverage Ratio for Quantum and its Subsidiaries, on a consolidated basis, for the four (4) consecutive fiscal quarters ending on or about September 30, 2016 shall be less than or equal to 1.70 to 1.00;

(j) Undrawn Availability. After giving effect to the Advances made by the Revolving Loan Lenders on the Closing Date, the Borrowers shall have Undrawn Availability of at least $30,000,000;

(k) Blocked Accounts. Agent shall have received duly executed agreements establishing the Blocked Accounts with one or more Blocked Account Banks for the collection or servicing of the Receivables and proceeds of the Collateral, and Agent shall have received, in form and substance reasonably satisfactory to Agent, a Control Agreement among Agent, Revolving Loan Agent, Quantum and each Specified Domestic Blocked Account Bank with respect to the Blocked Accounts maintained by Quantum at Specified Domestic Blocked Account Banks;

(l) Advances and Revolving Loan Documents. Agent shall have received true, correct and complete copies of the Revolving Loan Documents, all of which shall be in form and substance reasonably satisfactory to Agent, duly authorized, executed and delivered by the parties thereto and in effect on the Closing Date, and the transactions contemplated by the Revolving Loan Documents shall be consummated simultaneously with the making of the initial Loans hereunder;

(m) Filings, Registrations and Recordings. Agent shall have received each document (including any Uniform Commercial Code financing statement and Uniform Commercial Code termination statement) required by this Agreement, any of the Other Documents or under Applicable Law or reasonably requested by Agent to be filed, registered or recorded in order to create, in favor of Agent, a perfected security interest in or lien upon the Collateral and in order to terminate the perfected security interest in or lien upon the Collateral of Existing Agent shall have been properly filed, registered or recorded (or arrangements reasonable satisfactory to Agent for such filing, registration or recording shall have been made) in each jurisdiction in which the filing, registration or recordation thereof is so required or requested;

(n) Payoff Letter. Agent shall have received evidence, in form and substance reasonably satisfactory to Agent, a payoff letter from Existing Agent providing that, among other things, all of the Indebtedness of the Loan Parties under the Existing Loan Documents has been paid and satisfied in full;

(o) Lien Waiver Agreements. Borrowers shall have exercised commercially reasonable efforts to deliver to Agent (a) a Lien Waiver Agreement from the owner or lessor of the chief executive office of Quantum and (b) Lien Waiver Agreements from the owners or lessors of all of the other premises leased by Quantum listed on Schedule 4.4 hereto and all of the warehouses and other locations used by Quantum listed on Schedule 4.4 hereto in which Equipment and Inventory having a value in excess of $1,000,000 is located;

(p) Secretary's Certificates, Authorizing Resolutions and Good Standing Certificates. Agent shall have received, in form and substance reasonably satisfactory to Agent, a certificate of the Secretary or Assistant Secretary (or other equivalent officer or manager) of each Loan Party dated as of the Closing Date which shall certify (i) copies of resolutions, in form and substance reasonably satisfactory to Agent, of the board of directors (or other equivalent governing body or member) of such Loan Party authorizing (x) the execution, delivery and performance of this Agreement and the Other Documents to which such Loan Party is a party (including authorization of the incurrence of Indebtedness, borrowing of the Loans on a joint and several basis with all Loan Parties as provided for herein), and (y) the granting by such Loan Party of the security interests in and liens upon the Collateral to secure all of the joint and several Obligations of the Loan Parties (and such certificate shall state that such resolutions have not been amended, modified, revoked or rescinded as of the date of such certificate), (ii) the incumbency and signature of the officers of such Loan Party authorized to execute this Agreement and the Other Documents, (iii) copies of the Organizational Documents of such Loan Party as in effect on such date, complete with all amendments thereto, and (iv) the good standing (or equivalent status) of such Loan Party in its jurisdiction of organization and each other jurisdiction in which the failure to be duly qualified or licensed could reasonably be expected to have a Material Adverse Effect, as evidenced by good standing certificates (or the equivalent thereof issued by any applicable jurisdiction) dated not more than thirty (30) days prior to the Closing Date, issued by the Secretary of State or other appropriate official of each such jurisdiction;

(q) Legal Opinion. Agent shall have received, in form and substance reasonably satisfactory to Agent, the executed legal opinion of counsel to the Loan Parties which shall cover such matters incident to the Transactions as Agent may reasonably require and each Loan Party hereby authorizes and directs such counsel to deliver such opinion to Agent and Lenders;

(r) No Litigation. No litigation, investigation or proceeding before or by any arbitrator or Governmental Body shall be continuing or threatened against any Loan Party or against the officers or directors of any Loan Party (A) in connection with this Agreement, the Other Documents, the Convertible Subordinated Debt Documents or any of the Transactions and which, in the reasonable opinion of Agent, is deemed material or (B) which could, in the reasonable opinion of Agent, have a Material Adverse Effect; and (ii) no injunction, writ, restraining order or other order of any nature materially adverse to any Loan Party or the conduct of its business or inconsistent with the due consummation of the Transactions shall have been issued by any Governmental Body;

(s) Collateral Examination. Agent shall have completed Collateral examinations and received appraisals, the results of which shall be satisfactory in form and substance to Agent, of the Receivables, Inventory and Equipment of the Loan Parties and all books and records in connection therewith;

(t) Fees. Agent shall have received all fees payable to Agent and Lenders on or prior to the Closing Date hereunder, including pursuant to Article III hereof and the Fee Letter;

(u) Pro Forma Financial Statements. Agent shall have received a copy of the Pro Forma Financial Statements which shall be reasonably satisfactory in all respects to Agent;

(v) Insurance. Agent shall have received in form and substance reasonably satisfactory to Agent, (i) evidence that adequate insurance, including without limitation, credit insurance, casualty insurance and liability insurance, required to be maintained under this Agreement is in full force and effect, (ii) insurance certificates issued by the Loan Parties' insurance broker containing such information regarding the Loan Parties' casualty and liability insurance policies as Agent shall reasonably request and naming Agent as an additional insured and/or lenders loss payee, and (iii) loss payable endorsements issued by the Loan Parties' insurer naming Agent as lenders loss payee;

(w) Payment Instructions. Agent shall have received written instructions from Borrowing Agent directing the application of proceeds of the Term A Loan made pursuant to this Agreement;

(x) Consents. Agent shall have received any and all Consents necessary to permit the effectuation of the Transactions and Agent shall have received such Consents and waivers of such third parties as might assert claims with respect to the Collateral, as Agent shall deem necessary;

(y) No Adverse Material Change. (i) Since March 31, 2016, there shall not have occurred any event, condition or state of facts which could reasonably be expected to have a Material Adverse Effect and (ii) no representations made or information supplied to Agent or Lenders shall have been proven to be inaccurate or misleading in any material respect;

(z) Notice of Borrowing. Agent shall have received an executed Notice of Borrowing;

(aa) Contract Review. Agent shall have received and reviewed all Material Contracts of the Loan Parties including all material leases, union contracts, collective bargaining contracts, vendor supply contracts, license agreements and distributorship agreements and such contracts and agreements shall be reasonably satisfactory in all respects to Agent; and

(bb) Compliance with Laws. Agent shall be reasonably satisfied that each Loan Party is in compliance with all pertinent federal, state, local or territorial regulations, including those with respect to the Federal Occupational Safety and Health Act, the Environmental Protection Act, ERISA and the Anti-Terrorism Laws.

Each Lender that makes its initial extensions of credit under this Agreement shall be conclusively deemed to be satisfied with, or have waived, the conditions precedent set forth in this Section 8.1.

IX INFORMATION AS TO BORROWERS.

Each Loan Party shall, or (except with respect to Section 9.11 hereof) shall cause Borrowing Agent on its behalf to, until the Payment in Full of the Obligations and the termination of this Agreement:

9.1 [Reserved].

9.2 Schedules. Deliver to Agent, in form and substance satisfactory to Agent: (a) at all times during an Additional Reporting Period, on or before Wednesday of each week, (i) a sales/collections report and roll-forward for the prior week, and (ii) a report summarizing all Qualified Cash and PNC Other Cash, (b) on or before the twentieth (20th) day of each month as of and for the prior month: (i) accounts receivable agings inclusive of reconciliations to the general ledger, (ii) accounts payable schedules inclusive of reconciliations to the general ledger, (iii) perpetual Inventory reports inclusive of reconciliations to the general ledger, (iv) a detailed report summarizing all cash and Cash Equivalents of Quantum and its Subsidiaries (including an indication of which amounts constitute Qualified Cash and at which Blocked Account Banks such Qualified Cash is maintained), and (v) a Borrowing Base Certificate (which shall be calculated as of the last day of the prior month and which shall not be binding upon Agent or restrictive of Agent's rights under this Agreement), (c) within forty-five (45) days after the end of each fiscal quarter, (i) a list of all Material Customers, and (ii) a roll-forward of the production Inventory reserve, and (d) promptly following Agent's request: such other schedules, documents, reports and/or information regarding the Collateral or the financial condition of the Loan Parties and their Subsidiaries as Agent may reasonably request. Agent shall have the right to confirm and verify all Receivables by any manner and through any medium it considers advisable and do whatever it may deem reasonably necessary to protect its interests hereunder. The items to be provided under this Section are to be in form reasonably satisfactory to Agent and executed by each Loan Party and delivered to Agent from time to time solely for Agent's convenience in maintaining records of the Collateral, and any Loan Party's failure to deliver any of such items to Agent shall not affect, terminate, modify or otherwise limit Agent's Lien with respect to the Collateral. Unless otherwise agreed to by Agent, the items to be provided under this Section 9.2 shall be delivered to Agent by the specific method of Approved Electronic Communication designated by Agent.

9.3 Environmental Reports.

(a) To the extent any Loan Party is not in material compliance with applicable Environmental Laws, such Loan Party shall furnish Agent, concurrently with the delivery of the financial statements referred to in Section 9.7 hereof, with a certificate signed by an officer of Borrowing Agent setting forth with specificity all areas of non-compliance and the proposed action such Loan Party will implement in order to achieve full compliance.

(b) In the event any Loan Party receives notice of any Release or threat of Release of a reportable quantity of any Hazardous Materials at all of the Real Property owned or leased by any Loan Party (any such event being hereinafter referred to as a "Hazardous Discharge") or receives any notice of violation, request for information or notification that it is potentially responsible for investigation or cleanup of environmental conditions at any such Real Property, demand letter or complaint, order, citation, or other written notice with regard to any Hazardous Discharge or violation of Environmental Laws affecting such Real Property or any Loan Party's interest therein or the operations or the business (any of the foregoing is referred to herein as an "Environmental Complaint") from any Person, including any Governmental Body, then Borrowing Agent shall, within five (5) Business Days after such receipt, give written notice of same to Agent detailing facts and circumstances of which any Loan Party is aware giving rise to the Hazardous Discharge or Environmental Complaint. Such information is to be provided to allow Agent to protect its security interest in and Lien on the Collateral and is not intended to create nor shall it create any obligation upon Agent or any Lender with respect thereto.

(c) Borrowing Agent shall, concurrently with the delivery of the monthly financial statements required to be delivered to Agent pursuant to Section 9.9 hereof with respect to the period in which such copies, notification or demand letter are received, forward to Agent copies of any request for information, notification of potential liability, demand letter relating to potential responsibility with respect to the investigation or cleanup of Hazardous Materials at any other site owned, operated or used by any Loan Party to manage of Hazardous Materials and shall continue to forward to Agent, concurrently with the delivery of the monthly financial statements required to be delivered to Agent pursuant to Section 9.9 hereof with respect to the period in which such correspondence is received, copies of all material correspondence received by any Loan Party from any Governmental Body regarding such claims until the claim is settled. Borrowing Agent shall promptly forward to Agent copies of all documents and reports concerning a Hazardous Discharge or Environmental Complaint at any Real Property owned or leased by any Loan Party, operations or business that any Loan Party is required to file under any Environmental Laws, in each case concurrently with the delivery of the monthly financial statements required to be delivered to Agent pursuant to Section 9.9 hereof with respect to the period in which such filing occurred. Such information is to be provided solely to allow Agent to protect Agent's security interest in and Lien on the Collateral.

9.4 Litigation. Notify Agent in writing of any claim, litigation, suit or administrative proceeding affecting any Loan Party, whether or not the claim is covered by insurance, and of any litigation, suit or administrative proceeding, which in any such case affects Collateral having a value in excess of $1,000,000 or which could reasonably be expected to have a Material Adverse Effect, in each case, concurrently with the delivery of the monthly financial statements pursuant to Section 9.9 hereof with respect to the period in which any Loan Party becomes aware of such claim, litigation, suit or administrative proceeding.

9.5 Material Occurrences. (a) Immediately after such Loan Party has knowledge thereof, notify Agent in writing upon the occurrence of any Default or Event of Default; and (b) promptly, but in any event within fifteen (15) Business Days after such Loan Party has knowledge thereof, notify Agent in writing upon the occurrence of: (i) any event of default under the Convertible Debt Documents; (ii) any default by any Loan Party which might result in the acceleration of the maturity of any Indebtedness in an amount of $1,000,000 or more, including the names and addresses of the holders of such Indebtedness with respect to which there is a default existing or with respect to which the maturity has been or could be accelerated, and the amount of such Indebtedness; (iii) any matter materially affecting the value, enforceability or collectability of any material portion of the Collateral; and (iv) any other development in the business or affairs of any Loan Party which could reasonably be expected to have a Material Adverse Effect; and (c) promptly, but in any event not later than concurrently with the delivery of the monthly financial statements required to be delivered to Agent pursuant to Section 9.9 hereof with respect to the period in which such Loan Party has knowledge thereof, notify Agent in writing upon the occurrence of: (i) any funding deficiency which, if not corrected as provided in Section 4971 of the Code, could subject any Loan Party or any member of the Controlled Group to a tax imposed by Section 4971 of the Code; (ii) the receipt by any Loan Party of any notice from any Material Customer of its intent to either (x) terminate its relationship directly or indirectly with a Loan Party, or (y) materially and adversely modify any material agreement involving such Loan Party; (v) any material and adverse change in the relationship or arrangements within the LTO Consortium; (iii) any investigation, hearing, proceeding or other inquest by any Governmental Body into any Loan Party, or to the knowledge of Quantum, any Affiliate of any Loan Party with respect to Anti-Terrorism Laws; and (iv) any lapse or other termination of any Consent issued to any Loan Party by any Governmental Body or any other Person that is material to the operation of any Loan Party's business or any refusal by any Governmental Body or any other Person to renew or extend any such Consent; and in each case as to clauses (a), (b) and (c) of this Section 9.5, describing the nature thereof and the action the Loan Parties propose to take with respect thereto.

9.6 Government Receivables. Notify Agent concurrently with the delivery of the financial statements required to be delivered to Agent pursuant to Section 9.9 hereof if its Receivables in an aggregate amount in excess of $500,000 arise out of contracts between any Loan Party and the United States, any state, or any department, agency or instrumentality of any of them.

9.7 Annual Financial Statements. Furnish Agent within ~~<(i) >~~ninety (90) days after the end of each fiscal year (other than the~~<2018 >~~fiscal year~~<) and (ii) one hundred twenty (120) days after the end of the 2018 fiscal year,>~~ ending on or about March 31, 2018) audited financial statements of Quantum and its Subsidiaries, on a consolidated basis and unaudited financial statements of Quantum and its Subsidiaries, on a consolidating basis (which shall consist of a balance sheet and statements of income, stockholders' equity and cash flow), from the beginning of the current fiscal year to the end of such fiscal year and the balance sheet as at the end of such fiscal year, all prepared in accordance with GAAP, and in reasonable detail and audited by independent certified public accountants reasonably acceptable to Agent (the "Accountants") and certified without qualification~~< (except, solely with respect to the 2018 fiscal year, to the extent such qualification solely is due to the projected, potential or possible failure to comply with any covenant under this Agreement or the Revolving Loan Agreement during the one year period following the date such certification is delivered)>~~. The reports described in this Section shall be accompanied by a Compliance Certificate.

9.8 Quarterly Financial Statements. Furnish Agent within forty-five (45) days after the end of each fiscal quarter, (a) an unaudited balance sheet of Quantum and its Subsidiaries, on a consolidated and consolidating basis, and unaudited statements of income, stockholders' equity and cash flow of Quantum and its Subsidiaries, on a consolidated and consolidating basis, reflecting results of operations from the beginning of the fiscal year to the end of such fiscal quarter and for such fiscal quarter, all prepared in accordance with GAAP in all material respects, subject to normal and year-end adjustments that individually and in the aggregate are not material to the business operations of Quantum and its Subsidiaries and setting forth in comparative form the respective financial statements for the corresponding date and period in the previous fiscal year and (b) a written statement of management of Quantum setting forth a discussion of the financial condition, changes in financial condition and results of operations of Quantum and its Subsidiaries. The reports described in this Section shall be accompanied by a Compliance Certificate.

9.9 Monthly Financial Statements. Furnish Agent within thirty (30) days after the end of each month (or within forty-five (45) days after the end of the months of March, June, September and December), an unaudited balance sheet of Quantum and its Subsidiaries, on a consolidated and consolidating basis, and unaudited statements of income and cash flow of Quantum and its Subsidiaries, on a consolidated and consolidating basis, reflecting results of operations from the beginning of the fiscal year to the end of such month and for such month, all (other than the statements of cash flow) prepared in accordance with GAAP in all material respects, subject to normal and year-end adjustments that individually and in the aggregate are not material to the business operations of Quantum and its Subsidiaries and setting forth in comparative form the respective financial statements for the corresponding date and period in the previous fiscal year. The reports described in this Section shall be accompanied by a Compliance Certificate.

9.10 Other Reports. Furnish Agent, (a) promptly, but in any event within five (5) days following delivery or receipt thereof, copies of all material notices and other communications sent or received by Quantum pursuant to the Convertible Debt Documents, and (b) if requested by Agent, (i) if and when filed by Quantum, all Form 10-Q quarterly reports, Form 10-K annual reports, Form 8-K current reports and any other reports filed by Quantum with the SEC, and (ii) copies of any reports or other information provided by

Quantum to its shareholders generally. Any report requested by Agent to be furnished pursuant to clause (b) of this Section 9.10 shall be deemed to have been furnished on the date on which Quantum has filed such report with the SEC and is available on the EDGAR website on the Internet at www.sec.gov or any successor government website that is freely and readily available to Agent without charge; provided that, notwithstanding the foregoing, Borrowing Agent shall deliver to Agent paper or electronic copies of any such report to be furnished pursuant to clause (b) of this Section 9.10 if Agent requests that Borrowing Agent furnish such paper or electronic copies until written notice to cease delivering such paper or electronic copies is given by Agent to Borrowing Agent.

9.11 Additional Information. Furnish Agent with such additional information as Agent shall reasonably request in order to enable Agent to determine whether the terms, covenants, provisions and conditions of this Agreement and the Other Documents have been complied with by the Loan Parties including, without the necessity of any request by Agent, (a) copies of all environmental audits and reviews, (b) at least five (5) days prior thereto, (i) notice of Quantum's opening of a new chief executive office, or (ii) notice of Quantum's closing of its chief executive office, and (c) concurrently with the delivery of the monthly financial statements required to be delivered to Agent pursuant to Section 9.9 hereof with respect to the period in which such Loan Party (i) opens any new office or place of business (other than its chief executive office), in each case to the extent such location is required to be disclosed on Schedule 4.4 hereto, notice of such opening, (ii) closes any existing office or place of business (other than its chief executive office), notice of such closing, and (iii) learns of the occurrence thereof, notice of any labor dispute to which any Loan Party may become a party, any strikes or walkouts relating to any of its plants or other facilities, and the expiration of any collective bargaining contract to which any Loan Party is a party or by which any Loan Party is bound and which could reasonably be expected to have a Material Adverse Effect.

9.12 Projected Operating Budget. Furnish Agent, no later than forty-five (45) days after the beginning of each fiscal year (commencing with fiscal year ending on or about March 31, 2017), month by month projections (including an operating budget) and cash flow of Quantum and its Subsidiaries, on a consolidated basis, for such fiscal year (including an income statement for each month and a balance sheet as at the end of the last month in each fiscal quarter), and year by year projections (including an operating budget) and cash flow of Quantum and its Subsidiaries, on a consolidated basis, for the forthcoming three (3) fiscal years, such projections to be accompanied by a certificate signed by the President or Chief Financial Officer of Quantum to the effect that such projections represent the good faith estimate of Quantum, on the date such projections are delivered, of the future performance Quantum and its Subsidiaries for the periods covered thereby based upon assumptions believed by Quantum to be reasonable at the time of the delivery thereof to Agent. The form and scope of the projections required to be delivered to Agent described in this Section shall be in a form and scope consistent with the Closing Date Projections or otherwise reasonably acceptable to Agent.

9.13 Variances From Operating Budget. Furnish Agent, concurrently with the delivery of the financial statements referred to in Sections 9.7 and 9.8 hereof, a written report summarizing all material variances from budgets submitted by the Loan Parties pursuant to Section 9.12 hereof and a discussion and analysis by management with respect to such variances.

9.14 SEC Inquiry. (a) Furnish Agent, promptly, but in any event within three (3) Business Days following delivery or receipt thereof, copies of all notices and other communications sent or received by Quantum in connection with the SEC Inquiry, (b) notify Agent, promptly, but in any event within three (3) Business Days thereof, of any material update or development in connection with the Independent Investigation, and (c) furnish Agent, promptly, but in any event within three (3) Business Days following the creation, delivery or receipt thereof, copies of all reports, summaries or findings prepared by, or any other material written communication received from, the Audit Committee; provided that Quantum shall not be required to furnish to Agent any document, information or other matter (i) in respect of which disclosure to Agent or any Lender (or their respective representatives or contractors) is prohibited by Applicable Law or (ii) that is subject to attorney-client or similar privilege, or constitutes attorney work-product.

9.15 ERISA Notices and Requests. Furnish Agent with immediate written notice in the event that (i) any Loan Party or any member of the Controlled Group knows or has reason to know that a Termination Event has occurred, together with a written statement describing such Termination Event and the action, if any, which such Loan Party or any member of the Controlled Group has taken, is taking, or proposes to take with respect thereto and, when known, any action taken or threatened by the Internal Revenue Service, Department of Labor or PBGC with respect thereto, (ii) any Loan Party or any member of the Controlled Group knows or has reason to know that a prohibited transaction (as defined in Section 406 of ERISA or 4975 of the Code) has occurred together with a written statement describing such transaction and the action which such Loan Party or any member of the Controlled Group has taken, is taking or proposes to take with respect thereto, (iii) a funding waiver request has been filed with respect to any Plan together with all communications received by any Loan Party or any member of the Controlled Group with respect to such request, (iv) any increase in the benefits of any existing Pension Benefit Plan or Multiemployer Plan or the establishment of any new Pension Benefit Plan or Multiemployer Plan or the commencement of contributions to any Pension Benefit Plan or Multiemployer Plan to which any Loan Party or any member of the Controlled Group was not previously contributing shall occur, (v) any Loan Party or any member of the Controlled Group shall receive from the PBGC a notice of intention to terminate a Plan or to have a trustee appointed to administer a Plan, together with copies of each such notice, (vi) any Loan Party or any member of the Controlled Group shall receive any favorable or unfavorable determination letter from the Internal Revenue Service regarding the qualification of a Plan under Section 401(a) of the Code, together with copies of each such letter; (vii) any Loan Party or any member of the Controlled Group shall receive a notice regarding the imposition of withdrawal liability, together with copies of each such notice; (viii) any Loan Party or any member of the Controlled Group shall fail to make a required installment under a Pension Benefit Plan or Multiemployer Plan or any other required payment under the Code or ERISA on or before the due date for such installment or payment; or (ix) any Loan Party or any member of the Controlled Group knows that (a) a Multiemployer Plan has been terminated, (b) the administrator or plan sponsor of a Multiemployer Plan intends to terminate a Multiemployer Plan, (c) the PBGC has instituted or will institute proceedings under Section 4042 of ERISA to terminate a Multiemployer Plan or (d) a Multiemployer Plan is subject to Section 432 of the Code or Section 305 of ERISA.

9.16 Additional Documents. Execute and deliver to Agent, upon request, such documents and agreements as Agent may, from time to time, reasonably request to carry out the terms or conditions of this Agreement.

9.17 Updates to Certain Schedules. Concurrently with the delivery of the monthly financial statements required to be delivered pursuant to Section 9.9 hereof, deliver to Agent, in form and, unless such updates are solely factual in nature, in substance reasonably satisfactory to Agent, such updates to Schedules 4.4 (Locations of Equipment and Inventory), 5.9 (Intellectual Property), 5.21 (Equity Interests), 5.22 (Commercial Tort Claims) and 5.23 (Letter-of-Credit Rights) to this Agreement and such other Schedules hereto as the Loan Parties shall deem required to maintain the related representations and warranties herein as true and correct. Any such updated Schedules delivered by the Loan Parties to Agent in accordance with this Section 9.17 shall automatically and immediately be deemed to amend and restate the prior version of such Schedule previously delivered to Agent and attached to and made part of this Agreement.

9.18 Financial Disclosure. Each Loan Party hereby irrevocably authorizes and directs all accountants and auditors employed by such Loan Party at any time during the Term to exhibit and deliver to Agent and each Lender copies of any of such Loan Party's financial statements, trial balances or other accounting records of any sort in the accountant's or auditor's possession, and to disclose to Agent and each Lender any information such accountants may have concerning such Loan Party's financial status and business operations. Each Loan Party hereby authorizes all Governmental Bodies to furnish to Agent and each Lender copies of reports or examinations relating to such Loan Party, whether made by such Loan Party or otherwise; provided, however, Agent and each Lender will attempt to obtain such information or materials directly from such Loan Party prior to obtaining such information or materials from such accountants or Governmental Bodies.

9.19 Weekly Information Report. Furnish Agent, weekly (no later than Thursday of each week (or, if Thursday is not a Business Day, on the next succeeding Business Day)) (a) an information report, in form to be mutually agreed upon by Quantum and Agent, which such report shall in any event include, without limitation, , actual accounts payable aging for the prior week, actual cash receipts and cash disbursements for the prior week, and (b) Quantum's quarterly revenue forecast, updated as of the Tuesday of such week (or, if Tuesday is not a Business Day, on the next succeeding Business Day), prepared in good faith based upon assumptions which the Borrowers believe to be reasonable in light of the conditions existing at the time of delivery thereof (collectively, each a "Weekly Information Report").

9.20 Monthly Cash Flow Forecast Report. Furnish Agent, monthly (no later than ten (10) Business Days after the end of each month), a thirteen (13) week cash flow forecast, commencing as of the first day of the week in which it was delivered, prepared by the Company, covering Quantum and its Subsidiaries on a consolidated basis, which such cash flow forecast shall be in form and substance reasonably satisfactory to Agent and prepared in good faith based upon assumptions which the Borrowers believe to be reasonable in light of the conditions existing at the time of delivery thereof (each a "Cash Flow Forecast").

9.21 Variance Report. Furnish Agent, weekly (no later than Friday of each week (or, if Friday is not a Business Day, on the next succeeding Business Day)), (a) commencing with the first full week after the first Cash Flow Forecast required pursuant to Section 9.20 has been received, a variance report comparing the actual cash receipts and cash disbursements for the prior week to the forecasted results for such week as set forth in the most recently received Cash Flow Forecast and (b) a variance report comparing the quarterly revenue forecast from the most recently received Weekly Information Report to the quarterly revenue forecast from the immediately preceding Weekly Information Report.

X EVENTS OF DEFAULT.

The occurrence of any one or more of the following events shall constitute an "Event of Default":

10.1 Nonpayment. Failure by any Loan Party to pay (a) when due any principal of the Loans (including without limitation pursuant to Section 2.3 hereof), or (b) within three (3) Business Days of being due (or in the case of maturity, by reason of acceleration pursuant to the terms of this Agreement, by notice of intention to prepay or by required prepayment, when due), any interest on the Obligations or any other fee, charge, amount or liability provided for herein or in any Other Document, in each case whether at maturity, by reason of acceleration pursuant to the terms of this Agreement, by notice of intention to prepay or by required prepayment.

10.2 Breach of Representation. Any representation or warranty made or deemed made by any Loan Party in this Agreement, any of the Other Documents or in any agreement, documents, certificate or financial or other statement furnished at any time in connection herewith or therewith shall prove to have been incorrect or misleading in any material respect on the date when made or deemed to have been made;

10.3 Financial Information. Failure by any Loan Party to (a) furnish financial information when due under Sections 9.7, 9.9, 9.12, 9.13 9.19, 9.20 or 9.21 of this Agreement, or (b) permit the inspection of its books or records or access to its premises for audits and appraisals in accordance with the terms of Section 4.6 hereof;

10.4 [Reserved].

10.5 Noncompliance. Except as otherwise provided for in Sections 10.1, 10.3, 10.10 and 10.11 hereof:

(a) failure or neglect of any Loan Party to perform, keep or observe any term, provision, condition or covenant contained in Sections 4.1, 4.2, 4.6, 4.8, 6.2 (solely if a Loan Party is not in good standing in its jurisdiction of incorporation or formation), 6.5, 6.6(a), 6.14, 6.16, any Section of Article VII (other than Section 7.16), or Sections 9.1, 9.2, 9.5(a) or 16.18 of this Agreement;

(b) failure or neglect of any Loan Party to perform, keep or observe any other term, provision, condition or covenant contained in Sections 4.4, 4.5, 4.7, 4.12, 6.3, 6.11, 6.17, 9.4, 9.5(b), 9.6, 9.10, 9.11, 9.17 or 9.18 of this Agreement which is not cured within fifteen (15) days after the earlier of (x) knowledge of such failure or neglect by a Responsible Officer of any Loan Party or (y) the receipt by Borrowing Agent of written notice of such failure or neglect from Agent or any Lender (provided that such fifteen (15) day period shall not apply in the case of any failure or neglect to perform, keep or observe any term, provision, condition or covenant which is not capable of being cured at all or within such fifteen (15) day period); or

(c) failure or neglect of any Loan Party to perform, keep or observe any other term, provision, condition or covenant contained in this Agreement or any of the Other Documents which is not cured within thirty (30) days after the earlier of (x) knowledge of such failure or neglect by a Responsible Officer of any Loan Party or (y) the receipt by Borrowing Agent of written notice of such failure or neglect from Agent or any Lender (provided that such thirty (30) day period shall not apply in the case of any failure or neglect to perform, keep or observe any term, provision, condition or covenant which is not capable of being cured at all or within such thirty (30) day period);

10.6 Judgments. Any (a) judgment, writ, order or decree for the payment of money are rendered against any Loan Party for an aggregate amount in excess of $1,500,000 or against all Loan Parties for an aggregate amount in excess of $1,500,000 (except to the extent fully covered (other than to the extent of customary deductibles) by insurance pursuant to which the insurer has not denied coverage) and (b) (i) action shall be legally taken by any judgment creditor to levy upon assets or properties of any Loan Party to enforce any such judgment, or (ii) such judgment shall remain undischarged for a period of thirty (30) consecutive days during which a stay of enforcement of such judgment, by reason of a pending appeal or otherwise, shall not be in effect;

10.7 Bankruptcy. Any Loan Party or any Subsidiary of any Loan Party shall (a) apply for, consent to or suffer the appointment of, or the taking of possession by, a receiver, custodian, trustee, liquidator or similar fiduciary of itself or of all or a substantial part of its property, (b) admit in writing its inability, or be generally unable, to pay its debts as they become due or cease operations of its present business, (c) make a general assignment for the benefit of creditors, (d) commence a voluntary case under any state or federal bankruptcy or receivership laws (as now or hereafter in effect), (e) be adjudicated a bankrupt or insolvent (including by entry of any order for relief in any involuntary bankruptcy or insolvency proceeding commenced against it), (f) file a petition seeking to take advantage of any other law providing for the relief of debtors, (g) acquiesce to, or fail to have dismissed, within sixty (60) days, any petition filed against it in any involuntary case under such bankruptcy laws, or (h) take any formal action for the purpose of effecting any of the foregoing;

10.8 Reserved;

10.9 Lien Priority. Any Lien created hereunder or provided for hereby or under any Other Document for any reason ceases to be or is not a valid and perfected Lien having a first priority Lien (subject only to Permitted Encumbrances that have priority as a matter of Applicable Law) except (a) as a result of a Disposition of the applicable Collateral in a transaction permitted hereunder, (b) with respect to Collateral the aggregate value of which, for all such Collateral, does not exceed at any time $1,000,000 or (c) as the result of an action or failure to act on the part of Agent;

10.10 Reserved;

10.11 Cross Default. Either (a) an "Event of Default" under (and as such term is defined in) the Convertible Subordinated Debt Documents, (b) any specified "event of default" under any Indebtedness (other than the Obligations) of any Loan Party with a then-outstanding principal balance (or, in the case of any Indebtedness not so denominated, with a then-outstanding total obligation amount) of $1,000,000 or more, or any other event or circumstance which would permit the holder of any such Indebtedness of any Loan Party to accelerate such Indebtedness (and/or the obligations of such Loan Party thereunder) prior to the scheduled maturity or termination thereof, shall occur (regardless of whether the holder of such Indebtedness shall actually accelerate, terminate or otherwise exercise any rights or remedies with respect to such Indebtedness), (c) Revolving Loan Agent breaches, violates, terminates or challenges the validity of the Intercreditor Agreement or (d) any creditor party to any Subordination Agreement breaches, violates, terminates or challenges the validity of such Subordination Agreement;

10.12 Termination or Limitation of Guaranty, Guarantor Security Agreement or Pledge Agreement. Termination or limitation of any Guaranty, Guarantor Security Agreement, Pledge Agreement or similar agreement executed and delivered to Agent in connection with the Obligations of any Loan Party, or if any Loan Party or pledgor attempts to terminate, challenges the validity of, or its liability under, any such Guaranty, Guarantor Security Agreement, Pledge Agreement or similar agreement (other than any termination permitted in accordance with the terms of this Agreement);

10.13 Change of Control. Any Change of Control shall occur;

10.14 Invalidity. This Agreement or any Other Document shall, for any reason, cease to be valid and binding on any Loan Party, or any Loan Party shall so claim in writing to Agent or any Lender or any Loan Party challenges the validity of or its liability under this Agreement or any Other Document;

10.15 SEC Inquiry. Either (a) any material update or development has occurred, or finding reached, in connection with the SEC Inquiry or the Independent Investigation which could reasonably be expected to result in a Material Adverse Effect, or (b) the SEC Inquiry or the Independent Investigation has discovered, determined or ruled that any consolidated financial statements of Quantum and its Subsidiaries were materially misleading in the reasonable judgment of Agent; or

10.16 Pension Plans. An event or condition specified in Section 7.16 or 9.15 hereof shall occur or exist with respect to any Plan and, as a result of such event or condition, together with all other such events or conditions, any Loan Party or any member of the Controlled Group shall incur, or in the opinion of Agent be reasonably likely to incur, a liability to a Plan or the PBGC (or both) which, in the reasonable judgment of Agent, would have a Material Adverse Effect; or the occurrence of any Termination Event, or any Loan Party's failure to immediately report a Termination Event in accordance with Section 9.15 hereof.

XI LENDERS' RIGHTS AND REMEDIES AFTER DEFAULT.

11.1 Rights and Remedies.

(a) Upon the occurrence of: (i) an Event of Default pursuant to Section 10.7 hereof (other than Section 10.7(g) hereof), all Obligations shall be immediately due and payable and this Agreement shall be deemed terminated, and (ii) any of the other Events of Default and at any time thereafter, at the option of Agent or at the direction of Required Lenders all Obligations shall be immediately due and payable and Agent or Required Lenders shall have the right to terminate this Agreement. Upon the occurrence of any Event of Default, Agent shall have the right to exercise any and all rights and remedies provided for herein, under the Other Documents, under the Uniform Commercial Code and at law or equity generally, including the right to foreclose the security interests granted herein and to realize upon any Collateral by any available judicial procedure and/or to take possession of and sell any or all of the Collateral with or without judicial process. Agent may enter any of any Loan Party's premises or other premises without legal process and without incurring liability to any Loan Party therefor, and Agent may thereupon, or at any time thereafter, in its discretion without notice or demand, take the Collateral and remove the same to such place as Agent may deem advisable and Agent may require the Loan Parties to make the Collateral available to Agent at a convenient place. With or without having the Collateral at the time or place of sale, Agent may sell the Collateral, or any part thereof, at public or private sale, at any time or place, in one or more sales, at such price or prices, and upon such terms, either for cash, credit or future delivery, as Agent may elect. Except as to that part of the Collateral which is perishable or threatens to decline speedily in value or is of a type customarily sold on a recognized market, Agent shall give the Loan Parties reasonable notification of such sale or sales, it being agreed that in all events written notice mailed to Borrowing Agent at least ten (10) days prior to such sale or sales is reasonable notification. At any public sale Agent or any Lender may bid (including credit bid) for and become the purchaser, and Agent, any Lender or any other purchaser at any such sale thereafter shall hold the Collateral sold absolutely free from any claim or right of whatsoever kind, including any equity of redemption and all such claims, rights and equities are hereby expressly waived and released by each Loan Party. In connection with the exercise of the foregoing remedies, including the sale of Inventory, Agent is granted a perpetual nonrevocable, royalty free, nonexclusive license and Agent is granted permission to use all of each Loan Party's (a) Intellectual Property which is used by such Loan Party in connection with Inventory for the purpose of marketing, advertising for sale and selling or otherwise disposing of such Inventory and (b) Equipment for the

purpose of completing the manufacture of unfinished goods. The Net Cash Proceeds realized from the sale of any Collateral shall be applied to the Obligations in the order set forth in Section 11.5 hereof. Noncash proceeds will only be applied to the Obligations as they are converted into cash. If any deficiency shall arise, the Loan Parties shall remain liable to Agent and Lenders therefor.

(b) To the extent that Applicable Law imposes duties on Agent to exercise remedies in a commercially reasonable manner, each Loan Party acknowledges and agrees that it is not commercially unreasonable for Agent: (i) to fail to incur expenses reasonably deemed significant by Agent to prepare Collateral for Disposition or otherwise to complete raw material or work in process into finished goods or other finished products for Disposition; (ii) to fail to obtain third party consents for access to Collateral to be Disposed of, or to obtain or, if not required by other law, to fail to obtain governmental or third party consents for the collection or Disposition of Collateral to be collected or Disposed of; (iii) to fail to exercise collection remedies against Customers or other Persons obligated on Collateral or to remove Liens on or any adverse claims against Collateral; (iv) to exercise collection remedies against Customers and other Persons obligated on Collateral directly or through the use of collection agencies and other collection specialists; (v) to advertise Dispositions of Collateral through publications or media of general circulation, whether or not the Collateral is of a specialized nature; (vi) to contact other Persons, whether or not in the same business as any Loan Party, for expressions of interest in acquiring all or any portion of such Collateral; (vii) to hire one or more professional auctioneers to assist in the Disposition of Collateral, whether or not the Collateral is of a specialized nature; (viii) to Dispose of Collateral by utilizing internet sites that provide for the auction of assets of the types included in the Collateral or that have the reasonable capacity of doing so, or that match buyers and sellers of assets; (ix) to Dispose of assets in wholesale rather than retail markets; (x) to disclaim disposition warranties, such as title, possession or quiet enjoyment, (xi) to purchase insurance or credit enhancements to insure Agent against risks of loss, collection or Disposition of Collateral or to provide to Agent a guaranteed return from the collection or Disposition of Collateral; or (xii) to the extent deemed appropriate by Agent, to obtain the services of other brokers, investment bankers, consultants and other professionals to assist Agent in the collection or Disposition of any of the Collateral. Each Loan Party acknowledges that the purpose of this Section 11.1(b) is to provide non-exhaustive indications of what actions or omissions by Agent would not be commercially unreasonable in Agent's exercise of remedies against the Collateral and that other actions or omissions by Agent shall not be deemed commercially unreasonable solely on account of not being indicated in this Section 11.1(b). Without limitation upon the foregoing, nothing in this Section 11.1(b) shall be construed to grant any rights to any Loan Party or to impose any duties on Agent that would not have been granted or imposed by this Agreement or by Applicable Law in the absence of this Section 11.1(b).

(c) Without limiting any other provision hereof:

(i) At any bona fide public sale, and to the extent permitted by Applicable Law, at any private sale, Agent shall be free to purchase all or any part of the Investment Property Collateral. Any such sale may be on cash or credit. Agent shall be authorized at any such sale (if it deems it advisable to do so) to restrict the prospective bidders or purchasers to persons who will represent and agree that they are purchasing the Investment Property Collateral for their own account in compliance with Regulation D of the Securities Act or any other applicable exemption available under the Securities Act. Agent will not be obligated to make any sale if it determines not to do so, regardless of the fact that notice of the sale may have been given. Agent may adjourn any sale and sell at the time and place to which the sale is adjourned. If the Investment Property Collateral is customarily sold on a recognized market or threatens to decline speedily in value, Agent may sell such Investment Property Collateral at any time without giving prior notice to any Loan Party or other Person.

(ii) Each Loan Party recognizes that Agent may be unable to effect or cause to be effected a public sale of the Investment Property Collateral by reason of certain prohibitions of the Securities Act, so that Agent may be compelled to resort to one or more private sales to a restricted group of purchasers who will be obligated to agree, among other things, to acquire the Investment Property Collateral for their own account, for investment and without a view to the distribution or resale thereof. Each Loan Party understands that private sales so made may be at prices and on other terms less favorable to the seller than if the Investment Property Collateral were sold at public sales, and agrees that Agent has no obligation to delay or agree to delay the sale of any of the Investment Property Collateral for the period of time necessary to permit the issuer of the securities which are part of the Investment Property Collateral (even if the issuer would agree), to register such securities for sale under the Securities Act. Each Loan Party agrees that private sales made under the foregoing circumstances shall be deemed to have been made in a commercially reasonable manner.

(iii) The Net Cash Proceeds arising from the Disposition of the Investment Property Collateral after deducting expenses incurred by Agent will be applied to the Obligations pursuant to Section 11.5 hereof. If any excess remains after the discharge of all of the Obligations, the same will be paid to the applicable Loan Party or to any other Person that may be legally entitled thereto.

At any time after the occurrence and during the continuance of an Event of Default (A) Agent may transfer any or all of the Investment Property Collateral into its name or that of its nominee and may exercise all voting rights with respect to the Investment Property Collateral, but no such transfer shall constitute a taking of such Investment Property Collateral in satisfaction of any or all of the Obligations, and (B) Agent shall be entitled to receive, for application to the Obligations, all cash or stock dividends and distributions, interest and premiums declared or paid on the Investment Property Collateral.

11.2 Agent's Discretion. Agent shall have the right in its sole discretion to determine which rights, Liens, security interests or remedies Agent may at any time pursue, relinquish, subordinate, or modify, which procedures, timing and methodologies to employ, and what any other action to take with respect to any or all of the Collateral and in what order, thereto and such determination will not in any way modify or affect any of Agent's or Lenders' rights hereunder as against the Loan Parties or each other.

11.3 Setoff. Subject to Section 14.13 hereof, in addition to any other rights which Agent or any Lender may have under Applicable Law, upon the occurrence of an Event of Default hereunder, Agent and such Lender shall have a right, immediately and without notice of any kind, to apply any Loan Party's property held by Agent and such Lender or any of their Affiliates to reduce the Obligations and to exercise any and all rights of setoff which may be available to Agent and such Lender with respect to any deposits held by Agent or such Lender.

11.4 Rights and Remedies not Exclusive. The enumeration of the foregoing rights and remedies is not intended to be exhaustive and the exercise of any rights or remedy shall not preclude the exercise of any other right or remedies provided for herein or otherwise provided by law, all of which shall be cumulative and not alternative.

11.5 Allocation of Payments After Event of Default. Notwithstanding any other provisions of this Agreement to the contrary, after the occurrence and during the continuance of an Event of Default, all amounts collected or received by Agent on account of the Obligations, or in respect of the Collateral may, at Agent's discretion, and shall, at the direction of the Required Lenders, be paid over or delivered as follows:

FIRST, to the payment of all reasonable and documented out-of-pocket costs and expenses (including reasonable attorneys' fees) of Agent in connection with enforcing its rights and the rights of Lenders under this Agreement and the Other Documents, and any Protective Advances funded by Agent with respect to the Collateral under or pursuant to the terms of this Agreement;

SECOND, to payment of any fees owed to Agent;

THIRD, to the payment of all reasonable and documented out-of-pocket costs and expenses (including reasonable attorneys' fees) of each of the Lenders to the extent owing to such Lender pursuant to the terms of this Agreement;

FOURTH, to the payment of all Obligations arising under this Agreement and the Other Documents consisting of accrued fees and interest;

FIFTH, to the payment of the outstanding principal amount of the Obligations;

SIXTH, to all other Obligations arising under this Agreement, under the Other Documents or otherwise which shall have become due and payable and not repaid pursuant to clauses "FIRST" through "FIFTH" above; and

SEVENTH, to the payment of the surplus, if any, to whoever may be lawfully entitled to receive such surplus.

In carrying out the foregoing, (i) amounts received shall be applied in the numerical order provided until exhausted prior to application to the next succeeding category; and (ii) each of the Lenders shall receive an amount equal to its pro rata share (based on the proportion that then outstanding Loans held by such Lender bears to the aggregate then outstanding Loans) of amounts available to be applied pursuant to clauses "FOURTH", "FIFTH", "SIXTH" and "SEVENTH" above.

XII WAIVERS AND JUDICIAL PROCEEDINGS.

12.1 Waiver of Notice. Each Loan Party hereby waives notice of non-payment of any of the Receivables, demand, presentment, protest and notice thereof with respect to any and all instruments, notice of acceptance hereof, notice of loans or advances made, credit extended, Collateral received or delivered, or any other action taken in reliance hereon, and all other demands and notices of any description, except such as are expressly provided for herein.

12.2 Delay. No delay or omission on Agent's or any Lender's part in exercising any right, remedy or option shall operate as a waiver of such or any other right, remedy or option or of any Default or Event of Default.

12.3 Jury Waiver. EACH PARTY TO THIS AGREEMENT HEREBY EXPRESSLY WAIVES ANY RIGHT TO TRIAL BY JURY OF ANY CLAIM, COUNTERCLAIM, DEMAND, ACTION OR CAUSE OF ACTION (A) ARISING UNDER THIS AGREEMENT, ANY OTHER DOCUMENT OR ANY OTHER INSTRUMENT, DOCUMENT OR AGREEMENT EXECUTED OR DELIVERED IN CONNECTION HEREWITH, OR (B) IN ANY WAY CONNECTED WITH OR RELATED OR INCIDENTAL TO THE DEALINGS OF THE PARTIES HERETO OR ANY OF THEM WITH RESPECT TO THIS AGREEMENT, ANY OTHER DOCUMENT OR ANY OTHER INSTRUMENT, DOCUMENT OR AGREEMENT EXECUTED OR DELIVERED IN CONNECTION HEREWITH, OR THE TRANSACTIONS RELATED HERETO OR THERETO IN EACH CASE WHETHER NOW EXISTING OR HEREAFTER ARISING, AND WHETHER SOUNDING IN CONTRACT OR TORT OR OTHERWISE AND EACH PARTY HEREBY CONSENTS THAT ANY SUCH CLAIM, COUNTERCLAIM, DEMAND, ACTION OR CAUSE OF ACTION SHALL BE DECIDED BY COURT TRIAL WITHOUT A JURY, AND THAT ANY PARTY TO THIS AGREEMENT MAY FILE AN ORIGINAL COUNTERPART OR A COPY OF THIS SECTION WITH ANY COURT AS WRITTEN EVIDENCE OF THE CONSENTS OF THE PARTIES HERETO TO THE WAIVER OF THEIR RIGHT TO TRIAL BY JURY.

XIII EFFECTIVE DATE AND TERMINATION.

13.1 Term. This Agreement, which shall inure to the benefit of and shall be binding upon the respective successors and permitted assigns of each Loan Party, Agent and each Lender, shall become effective on the Closing Date and shall continue in full force and effect until the Maturity Date (the "Term") unless sooner terminated as herein provided. The Loan Parties may terminate this Agreement at any time upon ten (10) Business Days prior written notice to Agent upon the Payment in Full of all of the Obligations.

13.2 Termination. The termination of the Agreement shall not affect Agent's or any Lender's rights, or any of the Obligations having their inception prior to the effective date of such termination or any Obligations which pursuant to the terms hereof continue to accrue after such date, and the provisions hereof shall continue to be fully operative until (a) all of the Obligations have been Paid in Full and this Agreement has been terminated and (b) each of the Loan Parties has released the Secured Parties from and against any and all claims of any nature whatsoever that any Loan Party may have against the Secured Parties. The security interests, Liens and rights granted to Agent and Lenders hereunder and the financing statements filed in connection herewith shall continue in full force and effect, notwithstanding the termination of this Agreement, until all of the Obligations have been Paid in Full and this Agreement has been terminated in accordance with its terms. Accordingly, each Loan Party waives any rights which it may have under the Uniform Commercial Code to demand the filing of termination statements with respect to the Collateral, and Agent shall not be required to send such termination statements to each Loan Party, or to file them with any filing office, unless and until all of the Obligations have been Paid in Full and this Agreement shall have been terminated in accordance with its terms. All representations, warranties, covenants, waivers and agreements set forth herein shall survive termination hereof until all of the Obligations have been Paid in Full and this Agreement has been terminated.

XIV REGARDING AGENT.

14.1 Appointment. Each Lender hereby designates TCW to act as Agent for such Lender under this Agreement and the Other Documents. Each Lender hereby irrevocably authorizes Agent to take such action on its behalf under the provisions of this Agreement and the Other Documents and to exercise such powers and to perform such duties hereunder and thereunder as are specifically delegated to or required of Agent by the terms hereof and thereof and such other powers as are reasonably incidental thereto and Agent shall hold all Collateral, payments of principal and interest, fees (except the fees set forth in Section 3.4 hereof and in the Fee Letter), charges and collections received pursuant to this Agreement, for the ratable benefit of Lenders. Agent may, upon any term or condition it specifies, delegate or exercise any of its rights, powers and remedies under, and delegate or perform any of its duties or any other action with respect to, this Agreement or any Other Documents by or through any trustee, sub-agent, employee, attorney-in-fact and any other Person (including any Lender). Any such Person shall benefit from this Article X to the extent provided by the Agent. As to any matters not expressly provided for by this Agreement (including collection of the Notes) Agent shall not be required to exercise any discretion or take any action, but shall be required to act or to refrain from acting (and shall be fully protected in so acting or refraining from acting) upon the instructions of Required Lenders, and such instructions shall be binding; provided, however, that Agent shall not be required to take any action which, in Agent's discretion, exposes Agent to liability or which is contrary to this Agreement or the Other Documents or Applicable Law unless Agent is furnished with an indemnification reasonably satisfactory to Agent with respect thereto.

14.2 Nature of Duties. Agent shall have no duties or responsibilities except those expressly set forth in this Agreement and the Other Documents. Neither Agent nor any of its officers, directors, employees or agents shall be (i) liable for any action taken or omitted by them as such hereunder or in connection herewith, unless caused by their gross (not mere) negligence or willful misconduct (as determined by a court of competent jurisdiction in a final non-appealable judgment), or (ii) responsible in any manner for any recitals, statements,

representations or warranties made by any Loan Party or any officer thereof set forth in this Agreement, or in any of the Other Documents or in any certificate, report, statement or other document referred to or provided for in, or received by Agent under or in connection with, this Agreement or any of the Other Documents or for the value, validity, effectiveness, genuineness, due execution, enforceability or sufficiency of this Agreement, or any of the Other Documents or for any failure of any Loan Party to perform its obligations hereunder. Agent shall not be under any obligation to any Lender to ascertain or to inquire as to the observance or performance of any of the agreements set forth in, or conditions of, this Agreement or any of the Other Documents, or to inspect the properties, books or records of any Loan Party. The duties of Agent as respects the Loans to the Loan Parties shall be mechanical and administrative in nature; Agent shall not have by reason of this Agreement a fiduciary relationship in respect of any Lender; and nothing in this Agreement, expressed or implied, is intended to or shall be so construed as to impose upon Agent any obligations in respect of this Agreement or the transactions described herein except as expressly set forth herein.

14.3 Lack of Reliance on Agent. Independently and without reliance upon Agent or any other Lender, each Lender has made and shall continue to make (i) its own independent investigation of the financial condition and affairs of each Loan Party in connection with the making and the continuance of the Loans hereunder and the taking or not taking of any action in connection herewith, and (ii) its own appraisal of the creditworthiness of each Loan Party. Agent shall have no duty or responsibility, either initially or on a continuing basis, to provide any Lender with any credit or other information with respect thereto, whether coming into its possession before making of the Loans or at any time or times thereafter except as shall be provided by any Loan Party pursuant to the terms hereof. Agent shall not be responsible to any Lender for any recitals, statements, information, representations or warranties herein or in any agreement, document, certificate or a statement delivered in connection with or for the execution, effectiveness, genuineness, validity, enforceability, collectability or sufficiency of this Agreement or any Other Document, or of the financial condition of any Loan Party, or be required to make any inquiry concerning either the performance or observance of any of the terms, provisions or conditions of this Agreement, the Notes, the Other Documents or the financial condition or prospects of any Loan Party, or the existence of any Event of Default or any Default.

14.4 Resignation of Agent; Successor Agent. Agent may resign on sixty (60) days written notice to each Lender and Borrowing Agent and upon such resignation, Required Lenders will promptly designate a successor Agent reasonably satisfactory to the Loan Parties (provided that no such approval by the Loan Parties shall be required after the occurrence and during the continuance of any Event of Default). Any such successor Agent shall succeed to the rights, powers and duties of Agent, and shall in particular succeed to all of Agent's right, title and interest in and to all of the Liens in the Collateral securing the Obligations created hereunder or any Other Document, and the term "Agent" shall mean such successor agent effective upon its appointment, and the former Agent's rights, powers and duties as Agent shall be terminated, without any other or further act or deed on the part of such former Agent. However, notwithstanding the foregoing, if at the time of the effectiveness of the new Agent's appointment, any further actions need to be taken in order to provide for the legally binding and valid transfer of any Liens in the Collateral from former Agent to new Agent and/or for

the perfection of any Liens in the Collateral as held by new Agent or it is otherwise not then possible for new Agent to become the holder of a fully valid, enforceable and perfected Lien as to any of the Collateral, former Agent shall continue to hold such Liens solely as agent for perfection of such Liens on behalf of new Agent until such time as new Agent can obtain a fully valid, enforceable and perfected Lien on all Collateral, provided that Agent shall not be required to or have any liability or responsibility to take any further actions after such date as such agent for perfection to continue the perfection of any such Liens (other than to forego from taking any affirmative action to release any such Liens). After any Agent's resignation as Agent, the provisions of this Article XIV, and any indemnification rights under this Agreement, including without limitation, rights arising under Section 16.5 hereof, shall inure to its benefit as to any actions taken or omitted to be taken by it while it was Agent under this Agreement (and in the event resigning Agent continues to hold any Liens pursuant to the provisions of the immediately preceding sentence, the provisions of this Article XIV and any indemnification rights under this Agreement, including without limitation, rights arising under Section 16.5 hereof, shall inure to its benefit as to any actions taken or omitted to be taken by it in connection with such Liens).

14.5 Certain Rights of Agent. If Agent shall request instructions from Lenders with respect to any act or action (including failure to act) in connection with this Agreement or any Other Document, Agent shall be entitled to refrain from such act or taking such action unless and until Agent shall have received instructions from Required Lenders; and Agent shall not incur liability to any Person by reason of so refraining. Without limiting the foregoing, Lenders shall not have any right of action whatsoever against Agent as a result of its acting or refraining from acting hereunder in accordance with the instructions of Required Lenders.

14.6 Reliance. Agent shall be entitled to rely, and shall be fully protected in relying, upon any note, writing, resolution, notice, statement, certificate, email, facsimile, telex, teletype or telecopier message, cablegram, order or other document or telephone message believed by it to be genuine and correct and to have been signed, sent or made by the proper person or entity, and, with respect to all legal matters pertaining to this Agreement and the Other Documents and its duties hereunder, upon advice of counsel selected by it. Agent may employ agents and attorneys-in-fact and shall not be liable for the default or misconduct of any such agents or attorneys-in-fact selected by Agent with reasonable care.

14.7 Notice of Default. Agent shall not be deemed to have knowledge or notice of the occurrence of any Default or Event of Default hereunder or under the Other Documents, unless Agent has received written notice from a Lender or Borrowing Agent referring to this Agreement or the Other Documents, describing such Default or Event of Default and stating that such notice is a "notice of default". In the event that Agent receives such a notice, Agent shall give notice thereof to Lenders. Agent shall take such action with respect to such Default or Event of Default as shall be reasonably directed by Required Lenders; provided that, unless and until Agent shall have received such directions, Agent may (but shall not be obligated to) take such action, or refrain from taking such action, with respect to such Default or Event of Default as it shall deem advisable in the best interests of Lenders.

14.8 Indemnification. To the extent Agent is not reimbursed and indemnified by the Loan Parties, each Lender will reimburse and indemnify Agent in proportion to its respective portion of the outstanding Loans, from and against any and all liabilities, obligations, losses, damages, penalties, actions, judgments, suits, costs, expenses or disbursements of any kind or nature whatsoever which may be imposed on, incurred by or asserted against Agent in performing its duties hereunder, or in any way relating to or arising out of this Agreement or any Other Document; provided that Lenders shall not be liable for any portion of such liabilities, obligations, losses, damages, penalties, actions, judgments, suits, costs, expenses or disbursements resulting from Agent's gross (not mere) negligence or willful misconduct (as determined by a court of competent jurisdiction in a final non-appealable judgment).

14.9 Agent in its Individual Capacity. With respect to the obligation of Agent to lend under this Agreement, the Loans made by it shall have the same rights and powers hereunder as any other Lender and as if it were not performing the duties as Agent specified herein; and the term "Lender" or any similar term shall, unless the context clearly otherwise indicates, include Agent in its individual capacity as a Lender. Agent may engage in business with any Loan Party as if it were not performing the duties specified herein, and may accept fees and other consideration from any Loan Party for services in connection with this Agreement or otherwise without having to account for the same to Lenders.

14.10 Delivery of Documents. To the extent Agent receives financial statements required under Sections 9.7, 9.9, 9.12 and 9.13 hereof from any Loan Party pursuant to the terms of this Agreement which any Loan Party is not obligated to deliver to each Lender, Agent will promptly furnish such documents and information to Lenders.

14.11 Loan Parties Undertaking to Agent. Without prejudice to their respective obligations to Lenders under the other provisions of this Agreement, each Loan Party hereby undertakes with Agent to pay to Agent from time to time on demand all amounts from time to time due and payable by it for the account of Agent or Lenders or any of them pursuant to this Agreement to the extent not already paid. Any payment made pursuant to any such demand shall pro tanto satisfy the relevant Loan Party's obligations to make payments for the account of Lenders or the relevant one or more of them pursuant to this Agreement.

14.12 No Reliance on Agent's Customer Identification Program. To the extent the Loans or this Agreement is, or becomes, syndicated in cooperation with other Lenders, each Lender acknowledges and agrees that neither such Lender, nor any of its Affiliates, participants or assignees, may rely on Agent to carry out such Lender's, Affiliate's, participant's or assignee's customer identification program, or other obligations required or imposed under or pursuant to the USA PATRIOT Act or the regulations thereunder, including the regulations contained in 31 CFR 103.121 (as hereafter amended, modified, supplemented or replaced, the "CIP Regulations"), or any other Anti-Terrorism Law, including any programs involving any of the following items relating to or in connection with any of the Loan Parties, their Affiliates or their agents, the Other Documents or the transactions hereunder or contemplated hereby: (i) any identity verification procedures, (ii) any recordkeeping, (iii) comparisons with government lists, (iv) customer notices or (v) other procedures required under the CIP Regulations or such Anti-Terrorism Laws.

14.13 Other Agreements. Each of the Lenders agrees that it shall not, without the prior written consent of Agent, and that it shall, to the extent it is lawfully entitled to do so, upon the request of Agent, set off against the Obligations, any amounts owing by such Lender to any Loan Party or any deposit accounts of any Loan Party now or hereafter maintained with such Lender. Anything in this Agreement to the contrary notwithstanding, each of the Lenders further agrees that it shall not, unless specifically requested to do so by Agent, take any action to protect or enforce its rights arising out of this Agreement or the Other Documents, it being the intent of Lenders that any such action to protect or enforce rights under this Agreement and the Other Documents shall be taken in concert and at the direction or with the consent of Agent or Required Lenders.

14.14 Swiss Law Governed Security Documents.

(a) Without prejudice to the provisions of this Agreement or any of the Other Documents, the parties hereto acknowledge and agree that, for the purposes of taking and ensuring the continuing validity of any pledge or security agreement governed by the laws of Switzerland, Agent shall hold: (i) the security that it holds under any such Swiss law governed pledge or security agreement that is accessory in nature *(akzessorisch)* for itself and for and on behalf of the other Secured Parties as a direct representative *(direkte Stellvertretung)* and (ii) the security that it holds under any such Swiss law governed pledge or security agreement that is non-accessory in nature *(nicht-akzessorisch)* as an agent for the benefit of the Secured Parties *(Halten unter einem Treuhandveraltnis).*

(b) With regards to any pledge or security agreement governed by the laws of Switzerland, (i) each Lender (on behalf of itself and its Affiliates) hereby appoints and authorizes Agent (x) to enter into, do all actions required in connection with and enforce (all in accordance with this Agreement) each of the Other Documents governed by the laws of Switzerland that is non-accessory in nature *(nicht-akzessorisch)* in its own name but for the benefit of the Secured Parties, and (y) to enter into, do all actions required in connection with and enforce (all in accordance with this Agreement) each of the Other Documents governed by the laws of Switzerland that is accessory in nature *(akzessorisch)* for itself and for and on behalf of the Secured Parties as a direct representative *(direkter Stellvertreter)*, and each Lender (on behalf of itself and its Affiliates) and (ii) each Loan Party acknowledges that each Lender (including, without limitation, any future Lender) will be a party to each of the Other Documents governed by the laws of Switzerland.

XV BORROWING AGENCY.

15.1 Borrowing Agency Provisions.

(a) Each Loan Party hereby irrevocably designates Borrowing Agent to be its attorney and agent and in such capacity to (i) borrow, (ii) request the Delayed Draw Term Loan, (iii) sign and endorse notes, (iv) execute and deliver all instruments, documents, applications, security agreements and all other agreements, documents, instruments, certificates, notices and further assurances now or hereafter required hereunder, (v) make elections regarding interest rates, and (vi) otherwise take action under and in connection with this Agreement and the Other Documents, all on behalf of and in the name such Loan Party or the Loan Parties, and hereby authorizes Agent to pay over or credit all loan proceeds hereunder in accordance with the request of Borrowing Agent.

(b) The handling of this credit facility as a co-borrowing facility with a borrowing agent in the manner set forth in this Agreement is solely as an accommodation to the Loan Parties and at their request. Neither Agent nor any Lender shall incur liability to the Loan Parties as a result thereof. To induce Agent and Lenders to do so and in consideration thereof, each Loan Party hereby indemnifies Agent and each Lender and holds Agent and each Lender harmless from and against any and all liabilities, expenses, losses, damages and claims of damage or injury asserted against Agent or any Lender by any Person arising from or incurred by reason of the handling of the financing arrangements of the Loan Parties as provided herein, reliance by Agent or any Lender on any request or instruction from Borrowing Agent or any other action taken by Agent or any Lender with respect to this Section 15.1 except due to the willful misconduct or gross (not mere) negligence by the indemnified party (as determined by a court of competent jurisdiction in a final and non-appealable judgment).

(c) All Obligations shall be joint and several, and each Loan Party shall make payment upon the maturity of the Obligations by acceleration or otherwise, and such obligation and liability on the part of each Loan Party shall in no way be affected by any extensions, renewals and forbearance granted by Agent or any Lender to any Loan Party, failure of Agent or any Lender to give any Loan Party notice of borrowing or any other notice, any failure of Agent or any Lender to pursue or preserve its rights against any Loan Party, the release by Agent or any Lender of any Collateral now or thereafter acquired from any Loan Party, and such agreement by each Loan Party to pay upon any notice issued pursuant thereto is unconditional and unaffected by prior recourse by Agent or any Lender to the other Loan Parties or any Collateral for such Loan Party's Obligations or the lack thereof. Each Loan Party waives all suretyship defenses.

15.2 Waiver of Subrogation. Each Loan Party expressly waives any and all rights of subrogation, reimbursement, indemnity, exoneration, contribution of any other claim which such Loan Party may now or hereafter have against the other Loan Parties or any other Person directly or contingently liable for the Obligations hereunder, or against or with respect to any other Loan Parties' property (including, without limitation, any property which is Collateral for the Obligations), arising from the existence or performance of this Agreement, until the termination of the Commitments, the termination of this Agreement and the Payment in Full of the Obligations.

XVI MISCELLANEOUS.

16.1 Governing Law. This Agreement and each Other Document (unless and except to the extent expressly provided otherwise in any such Other Document), and all matters relating hereto or thereto or arising herefrom or therefrom (whether arising under contract law, tort law or otherwise) shall, in accordance with Section 5-1401 of the General Obligations Law of the State of New York, be governed by and construed in accordance with the laws of the State of New York. Any judicial proceeding brought by or against any Loan Party with

respect to any of the Obligations, this Agreement or any of the Other Documents may be brought in any court of competent jurisdiction in the State of New York, United States of America, and, by execution and delivery of this Agreement, each party to this Agreement accepts for itself and in connection with its properties, generally and unconditionally, the non-exclusive jurisdiction of the aforesaid courts, and irrevocably agrees to be bound by any judgment rendered thereby in connection with this Agreement. Each party to this Agreement hereby waives personal service of any and all process upon it and consents that all such service of process may be made by certified or registered mail (return receipt requested) directed to Borrowing Agent (for all Loan Parties) at its address set forth in Section 16.6 hereof and to all other parties to this Agreement to their respective addresses set forth in Section 16.6 hereof and service so made shall be deemed completed five (5) days after the same shall have been so deposited in the mails of the United States of America, or, at Agent's option, by service upon Borrowing Agent which each Loan Party irrevocably appoints as such Loan Party's agent for the purpose of accepting service within the State of New York. Nothing herein shall affect the right to serve process in any manner permitted by law or shall limit the right of Agent or any Lender to bring proceedings against any Loan Party in the courts of any other jurisdiction. Each party to this Agreement waives any objection to jurisdiction and venue of any action instituted hereunder and shall not assert any defense based on lack of jurisdiction or venue or based upon forum non conveniens. Each Loan Party waives the right to remove any judicial proceeding brought against such Loan Party in any state court to any federal court. Any judicial proceeding by any Loan Party against Agent or any Lender involving, directly or indirectly, any matter or claim in any way arising out of, related to or connected with this Agreement or any of the Other Documents, shall be brought only in a federal or state court located in the County of New York, State of New York.

16.2 Entire Understanding.

(a) This Agreement and the documents executed concurrently herewith contain the entire understanding between each Loan Party, Agent and each Lender and supersedes all prior agreements and understandings, if any, relating to the subject matter hereof. Any promises, representations, warranties or guarantees not set forth herein and hereinafter made shall have no force and effect unless in writing, signed by each Loan Party's, Agent's and each Lender's respective officers. Neither this Agreement nor any portion or provisions hereof may be amended, modified, changed, waived, supplemented, discharged, cancelled or terminated orally or by any course of dealing, or in any manner other than by an agreement in writing, signed by the party to be charged. Notwithstanding the foregoing, Agent and Borrowing Agent may modify this Agreement or any of the Other Documents for the purposes of completing missing content or correcting erroneous content of an administrative nature, without the need for a written amendment, provided that Agent shall send a copy of any such modification to the Borrowers and each Lender (which copy may be provided by electronic mail). Each Loan Party acknowledges that it has been advised by counsel in connection with the execution of this Agreement and Other Documents and is not relying upon oral representations or statements inconsistent with the terms and provisions of this Agreement.

(b) Required Lenders, Agent with the consent in writing of Required Lenders, and the Loan Parties may, subject to the provisions of this Section 16.2(b), from time to time enter into written supplemental agreements to this Agreement or the Other Documents executed by the Loan Parties, for the purpose of adding or deleting any provisions or otherwise changing, varying or waiving in any manner the rights of Lenders, Agent or the Loan Parties thereunder or the conditions, provisions or terms thereof or waiving any Event of Default thereunder, but only to the extent specified in such written agreements; provided, however, that no such supplemental agreement shall:

(i) increase the Delayed Draw Term Loan Commitment Percentage or the maximum dollar amount of the Delayed Draw Term Loan without the consent of such Lender directly affected thereby;

(ii) extend the Term or the time for payment of principal or interest of the Loans (excluding the due date of any mandatory prepayment of the Loans), or any fee payable to any Lender, or reduce the principal amount of or the rate of interest borne by the Loans or reduce any fee payable to any Lender, without the consent of each Lender directly affected thereby (except that Required Lenders may elect to waive or rescind any imposition of the Default Rate under Section 3.1 hereof (unless imposed by Agent));

(iii) alter the definition of the term "Required Lenders" or alter, amend or modify this Section 16.2(b) without the consent of all Lenders;

(iv) alter, amend or modify the provisions of Section 11.5 hereof without the consent of each Lender directly and adversely affected thereby;

(v) release all or substantially all of the Collateral (other than in accordance with the provisions of this Agreement) without the consent of all Lenders directly affected thereby; or

(vi) release any Borrower without the consent of all Lenders.

(c) Any such supplemental agreement shall apply equally to each Lender and shall be binding upon the Loan Parties, Lenders and Agent and all future holders of the Obligations. In the case of any waiver, the Loan Parties, Agent and Lenders shall be restored to their former positions and rights, and any Event of Default waived shall be deemed to be cured and not continuing, but no waiver of a specific Event of Default shall extend to any subsequent Event of Default (whether or not the subsequent Event of Default is the same as the Event of Default which was waived), or impair any right consequent thereon.

(d) In the event that Agent requests the consent of a Lender pursuant to this Section 16.2 and such consent is denied, then Agent may, at its option, require such Lender to assign its interest in the Loans to Agent or to another Lender or to any other Person designated by Agent (the "Designated Lender"), for a price equal to (i) then outstanding principal amount thereof plus (ii) accrued and unpaid interest and fees due

such Lender, which interest and fees shall be paid when collected from the Loan Parties. In the event Agent elects to require any Lender to assign its interest to Agent or to the Designated Lender, Agent will so notify such Lender in writing within forty five (45) days following such Lender's denial, and such Lender will assign its interest to Agent or the Designated Lender no later than five (5) days following receipt of such notice pursuant to an Assignment Agreement executed by such Lender, Agent or the Designated Lender, as appropriate, and Agent.

(e) Agent is hereby authorized by the Loan Parties and Lenders, at any time in Agent's sole discretion, regardless of (i) the existence of a Default or an Event of Default, (ii) whether any of the other applicable conditions precedent have not been satisfied or the Commitments have been terminated for any reason, or (iii) any other contrary provision of this Agreement, to make Loans to Borrowers on behalf of Lenders which Agent, in its reasonable business judgment, deems necessary or desirable (a) to preserve or protect the Collateral, or any portion thereof, (b) to enhance the likelihood of, or maximize the amount of, repayment of the Loans and other Obligations, or (c) to pay any other amount chargeable to the Loan Parties pursuant to the terms of this Agreement (the "Protective Advances"). Lenders holding the Loans shall be obligated to fund such Protective Advances and effect a settlement with Agent therefor upon demand of Agent in accordance with their respective pro rata share of the outstanding Loans. To the extent any Protective Advances are not actually funded by the other Lenders as provided for in this Section 16.2(e), any such Protective Advances funded by Agent shall be deemed to be Loans made by and owing to Agent, and Agent shall be entitled to all rights (including accrual of interest) and remedies of a Lender holding Loans.

16.3 Successors and Assigns; Participations; New Lenders.

(a) This Agreement shall be binding upon and inure to the benefit of the Loan Parties, Agent, each Lender, all future holders of the Obligations and their respective successors and assigns, except that no Loan Party may assign or transfer any of its rights or obligations under this Agreement without the prior written consent of Agent and each Lender.

(b) Each Loan Party acknowledges that in the regular course of commercial banking business one or more Lenders may at any time and from time to time sell participating interests in the Loans to other Persons (each such transferee or purchaser of a participating interest, a "Participant"). Each Participant may exercise all rights of payment (including rights of set-off) with respect to the portion of such Loans held by it or other Obligations payable hereunder as fully as if such Participant were the direct holder thereof provided that (i) the Loan Parties shall not be required to pay to any Participant more than the amount which it would have been required to pay to any Lender which granted an interest in its Loans or other Obligations payable hereunder to such Participant had such Lender retained such interest in the Loans hereunder or other Obligations payable hereunder unless the sale of the participation to such Participant is made with the prior written consent of Borrowing Agent and such Participant acknowledges that it is entitled to no greater rights hereunder and under the Other Documents than the applicable Lender, and (ii) in no event shall the Loan Parties be

required to pay any such amount arising from the same circumstances and with respect to the same Loans or other Obligations payable hereunder to both such Lender and such Participant. Each Loan Party hereby grants to any Participant a continuing security interest in any deposits, moneys or other property actually or constructively held by such Participant as security for the Participant's interest in the Loans. Each Lender that sells a participation shall maintain a register on which it enters the name and address of each Participant and the principal amounts (and stated interest) of each Participant's interest in the Loans (the "Participant Register"); provided that no Lender shall have any obligation to disclose all or any portion of the Participant Register (including the identity of any Participant or any information relating to a Participant's interest in any Commitments, Loans or its other Obligations hereunder or under any Other Document) to any Person except to the extent that such disclosure is necessary to establish that any such Commitment, Loan or other Obligation is in registered form under Treas. Reg. Section 5f.103-1(c). The entries in the Participant Register shall be conclusive absent manifest error, and such Lender shall treat each Person whose name is recorded in the Participant Register as the owner of such participation for all purposes of this Agreement notwithstanding any notice to the contrary. For the avoidance of doubt, Agent (in its capacity as Agent) shall have no responsibility for maintaining a Participant Register

(c) Any Lender, with the consent of Agent, may sell, assign or transfer all or any part of its rights and obligations under or relating to Loans under this Agreement and the Other Documents to one or more additional Persons (each a "Purchasing Lender"), in minimum amounts of not less than $5,000,000, pursuant to an Assignment Agreement, executed by a Purchasing Lender, the transferor Lender, and Agent and delivered to Agent for recording, provided, however, that each partial assignment shall be made as an assignment of a proportionate part of all the assigning Lender's rights and obligations under this Agreement with respect to the Loans under this Agreement in which such Lender has an interest. Upon such execution, delivery, acceptance and recording, from and after the transfer effective date determined pursuant to such Assignment Agreement, (i) Purchasing Lender thereunder shall be a party hereto and, to the extent provided in such Assignment Agreement, have the rights and obligations of a Lender thereunder with a Delayed Draw Term Loan Commitment Percentage as set forth therein, and (ii) the transferor Lender thereunder shall, to the extent provided in such Assignment Agreement, be released from its obligations under this Agreement, the Assignment Agreement creating a novation for that purpose. Such Assignment Agreement shall be deemed to amend this Agreement to the extent, and only to the extent, necessary to reflect the addition of such Purchasing Lender and the resulting adjustment of the Delayed Draw Term Loan Commitment Percentages arising from the purchase by such Purchasing Lender of all or a portion of the rights and obligations of such transferor Lender under this Agreement and the Other Documents. Each Loan Party hereby consents to the addition of such Purchasing Lender and the resulting adjustment of the Delayed Draw Term Loan Commitment Percentages arising from the purchase by such Purchasing Lender of all or a portion of the rights and obligations of such transferor Lender under this Agreement and the Other Documents. The Loan Parties shall execute and deliver such further documents and do such further acts and things in order to effectuate the foregoing; provided, however, that the consent

of Borrowing Agent (such consent not to be unreasonably withheld, conditioned or delayed) shall be required unless (x) an Event of Default has occurred and is continuing at the time of such assignment or (y) such assignment is to a Permitted Assignee; provided that Borrowing Agent shall be deemed to have consented to any such assignment unless it shall object thereto by written notice to Agent within seven (7) Business Days after having received prior notice thereof.

(d) Any Lender, with the consent of Agent which shall not be unreasonably withheld or delayed, may directly or indirectly sell, assign or transfer all or any portion of its rights and obligations under or relating to Loans under this Agreement and the Other Documents to an entity, whether a corporation, partnership, trust, limited liability company or other entity that (i) is engaged in making, purchasing, holding or otherwise investing in bank loans and similar extensions of credit in the ordinary course of its business and (ii) is administered, serviced or managed by the assigning Lender or an Affiliate of such Lender (a "Purchasing CLO" and together with each Participant and Purchasing Lender, each a "Transferee" and collectively the "Transferees"), pursuant to an Assignment Agreement modified as appropriate to reflect the interest being assigned ("Modified Assignment Agreement"), executed by any intermediate purchaser, the Purchasing CLO, the transferor Lender, and Agent as appropriate and delivered to Agent for recording. Upon such execution and delivery, from and after the transfer effective date determined pursuant to such Modified Assignment Agreement, (i) Purchasing CLO thereunder shall be a party hereto and, to the extent provided in such Modified Assignment Agreement and recordation in the Register, have the rights and obligations of a Lender thereunder and (ii) the transferor Lender thereunder shall, to the extent provided in such Modified Assignment Agreement, be released from its obligations under this Agreement, the Modified Assignment Agreement creating a novation for that purpose. Such Modified Assignment Agreement shall be deemed to amend this Agreement to the extent, and only to the extent, necessary to reflect the addition of such Purchasing CLO. Each Loan Party hereby consents to the addition of such Purchasing CLO. The Loan Parties shall execute and deliver such further documents and do such further acts and things in order to effectuate the foregoing.

(e) Agent, acting as a non-fiduciary agent of the Loan Parties, shall maintain at its address a copy of each Assignment Agreement and Modified Assignment Agreement delivered to it and the Register for the recordation of the names and addresses of each Lender and the outstanding principal, accrued and unpaid interest and other fees due hereunder. The entries in the Register shall be conclusive, in the absence of manifest error, and each Loan Party, Agent and Lenders may treat each Person whose name is recorded in the Register as the owner of the Loans recorded therein for the purposes of this Agreement. The Register shall be available for inspection by Borrowing Agent or any Lender at any reasonable time and from time to time upon reasonable prior notice. Agent shall receive a fee in the amount of $3,500 payable by the applicable Purchasing Lender and/or Purchasing CLO upon the effective date of each transfer or assignment (other than to an intermediate purchaser) to such Purchasing Lender and/or Purchasing CLO.

(f) Each Loan Party authorizes each Lender to disclose to any Transferee and any prospective Transferee any and all financial information in such Lender's possession concerning such Loan Party which has been delivered to such Lender by or on behalf of such Loan Party pursuant to this Agreement or in connection with such Lender's credit evaluation of such Loan Party; provided that such Transferee or prospective Transferee shall agree to be bound by the provisions of Section 16.15 hereof.

(g) Notwithstanding anything to the contrary set forth in this Agreement, any Lender may at any time and from time to time pledge or assign a security interest in all or any portion of its rights under this Agreement to secure obligations of such Lender, including any pledge or assignment to secure obligations to a Federal Reserve Bank; provided that no such pledge or assignment shall release such Lender from any of its obligations hereunder or substitute any such pledgee or assignee for such Lender as a party hereto.

16.4 Application of Payments. Agent shall have the continuing and exclusive right to apply or reverse and re-apply any payment and any and all proceeds of Collateral to any portion of the Obligations. To the extent that any Loan Party makes a payment or Agent or any Lender receives any payment or proceeds of the Collateral for any Loan Party's benefit, which are subsequently invalidated, declared to be fraudulent or preferential, set aside or required to be repaid to a trustee, debtor in possession, receiver, custodian or any other party under any bankruptcy law, common law or equitable cause, then, to such extent, the Obligations or part thereof intended to be satisfied shall be revived and continue as if such payment or proceeds had not been received by Agent or such Lender.

16.5 Indemnity. Each Loan Party shall defend, protect, indemnify, pay and save harmless Agent, each Lender and each of their respective officers, directors, Affiliates, attorneys, employees and agents (each an "Indemnified Party") for and from and against any and all claims, demands, liabilities, obligations, losses, damages, penalties, fines, actions, judgments, suits, costs, charges, expenses and disbursements of any kind or nature whatsoever (including reasonable and documented fees and disbursements of counsel (including allocated costs of internal counsel)) (collectively, "Claims") which may be imposed on, incurred by, or asserted against any Indemnified Party in arising out of or in any way relating to or as a consequence, direct or indirect, of: (i) this Agreement, the Other Documents, the Loans and other Obligations and/or the transactions contemplated hereby including the Transactions, (ii) any action or failure to act or action taken only after delay or the satisfaction of any conditions by any Indemnified Party in connection with and/or relating to the negotiation, execution, delivery or administration of the Agreement and the Other Documents, the credit facilities established hereunder and thereunder and/or the transactions contemplated hereby including the Transactions, (iii) any Loan Party's failure to observe, perform or discharge any of its covenants, obligations, agreements or duties under or breach of any of the representations or warranties made in this Agreement and the Other Documents, (iv) the enforcement of any of the rights and remedies of Agent or any Lender under the Agreement and the Other Documents, (v) any threatened or actual imposition of fines or penalties, or disgorgement of benefits, for violation of any Anti-Terrorism Law by any Loan Party or any Subsidiary of any Loan Party, and (vi) any claim, litigation, proceeding or investigation

instituted or conducted by any Governmental Body or instrumentality or any other Person with respect to any aspect of, or any transaction contemplated by, or referred to in, or any matter related to, this Agreement or the Other Documents, whether or not Agent or any Lender is a party thereto. Without limiting the generality of any of the foregoing, each Loan Party shall defend, protect, indemnify, pay and save harmless each Indemnified Party from any Claims which may be imposed on, incurred by, or asserted against any Indemnified Party under any Environmental Laws with respect to or in connection with any Real Property owned or leased by any Loan Party, any Hazardous Discharge, the presence of any Hazardous Materials affecting any Real Property owned or leased by any Loan Party (whether or not the same originates or emerges from such Real Property or any contiguous real estate), including any Claims consisting of or relating to the imposition or assertion of any Lien on any Real Property owned or leased by any Loan Party under any Environmental Laws and any loss of value of such Real Property as a result of the foregoing except to the extent such loss, liability, damage and expense is attributable to any Hazardous Discharge resulting from actions on the part of Agent or any Lender. The Loan Parties' obligations under this Section 16.5 shall arise upon the discovery of the presence of any Hazardous Materials at any Real Property owned or leased by any Loan Party, whether or not any federal, state, or local environmental agency has taken or threatened any action in connection with the presence of any Hazardous Materials, in each such case except to the extent that any of the foregoing arises out of the gross negligence or willful misconduct of the Indemnified Party (as determined by a court of competent jurisdiction in a final and non-appealable judgment). Without limiting the generality of the foregoing, this indemnity shall extend to any liabilities, obligations, losses, damages, penalties, actions, judgments, suits, costs, expenses and disbursements of any kind or nature whatsoever (including fees and disbursements of counsel) asserted against or incurred by any of the Indemnified Parties by any Person under any Environmental Laws or similar laws by reason of any Loan Party's or any other Person's failure to comply with laws applicable to solid or hazardous waste materials, including Hazardous Materials and Hazardous Waste, or other Toxic Substances. The foregoing to the contrary notwithstanding, (A) the Loan Parties shall have no obligation to any Indemnified Party under this Section 16.5 with respect to any Claims that (I) a court of competent jurisdiction finally determines to have resulted from the gross negligence or willful misconduct of such Indemnified Party or its officers, directors, employees, attorneys or agents; (II) result from disputes solely between or among the Lenders or from disputes solely between or among the Lenders and their respective Affiliates; it being understood and agreed that the provisions of this Section 16.5 shall extend to Agent (but not the Lenders) relative to disputes between or among Agent, on the one hand, and one or more Lenders, or one or more of their Affiliates, on the other hand, and (B) any obligation for any Claim with respect to legal counsel shall be limited to the reasonable and documented fees, charges and disbursements of (I) one primary counsel and any special and local counsel for Agent and the other Indemnified Parties and (II) in the event of any actual or potential conflicts of interest, one additional primary counsel and any additional special and local counsel, in each case, for all similarly situated Indemnified Parties. This Section 16.5 shall not apply with respect to Taxes.

16.6 Notice. Any notice or request hereunder may be given to Borrowing Agent or any Loan Party or to Agent or any Lender at their respective addresses set forth below or at such other address as may hereafter be specified in a notice designated as a notice of change of address under this Section. Any notice, request, demand, direction or other communication (for purposes of this Section 16.6 only, a "Notice") to be given to or made upon any party hereto under any provision of this Agreement shall be given or made by telephone or in writing (which includes by means of electronic transmission (i.e., "e-mail") or facsimile transmission or by setting forth such Notice on a website to which the Loan Parties are directed (an "Internet Posting") if Notice of such Internet Posting (including the information necessary to access such site) has previously been delivered to the applicable parties hereto by another means set forth in this Section 16.6) in accordance with this Section 16.6. Any such Notice must be delivered to the applicable parties hereto at the addresses and numbers set forth under their respective names set forth below in this Section 16.6 or in accordance with any subsequent unrevoked Notice from any such party that is given in accordance with this Section 16.6. Any Notice shall be effective:

(a) In the case of hand-delivery, when delivered;

(b) If given by mail, four (4) days after such Notice is deposited with the United States Postal Service, with first-class postage prepaid, return receipt requested;

(c) In the case of a telephonic Notice, when a party is contacted by telephone, if delivery of such telephonic Notice is confirmed no later than the next Business Day by hand delivery, a facsimile or electronic transmission, an Internet Posting or an overnight courier delivery of a confirmatory Notice (received at or before noon on such next Business Day);

(d) In the case of a facsimile transmission, when sent to the applicable party's facsimile machine's telephone number, if the party sending such Notice receives confirmation of the delivery thereof from its own facsimile machine;

(e) In the case of electronic transmission, when actually received;

(f) In the case of an Internet Posting, upon delivery of a Notice of such posting (including the information necessary to access such site) by another means set forth in this Section 16.6; and

(g) If given by any other means (including by overnight courier), when actually received.

Any Lender giving a Notice to Borrowing Agent or any Loan Party shall concurrently send a copy thereof to Agent, and Agent shall promptly notify the other Lenders of its receipt of such Notice.

(A) If to Agent or PNC at:

TCW Asset Management Company LLC
200 Clarendon Street, 51st Floor
Boston, Massachusetts 02116
Attention: Jason Andreotes
Telephone: 617-936-2279
Facsimile: 617-948-2003

In each case, with a copy to (and such copy shall not constitute notice hereunder):

Cortland Capital Market Services LLC
225 West Washington Street, 21st Floor
Chicago, Illinois 60606
Attention: Valerie Opperman and Legal Department
Facsimile: 312-376-0751
Email: valerie.opperman@cortlandglobal.com and legal@cortlandglobal.com

and with a copy to:

Goldberg Kohn Ltd.
55 East Monroe Street, Suite 3700
Chicago, Illinois 60603
Attention: Seth Good, Esq.
Facsimile: (312) 863-7838

(B) If to Borrowing Agent or any Loan Party:

"Quantum Corporation
224 Airport Parkway, Suite 5500
San Jose, CA 95110
Attention: Shawn Hall
Facsimile: (408) 944-6581

with a copy to:

Latham & Watkins LLP
140 Scott Drive
Menlo Park, California 94025
Attention: Tad J. Freese, Esq.
Facsimile: (650) 463-2600

16.7 Survival. The obligations of the Loan Parties under Sections 3.7, 3.8, 3.9, 3.10, 16.5 and 16.9 hereof and the obligations of Lenders under Sections 14.8 and 16.5 hereof, shall survive termination of this Agreement and the Other Documents and the Payment in Full of the Obligations.

16.8 Severability. If any part of this Agreement is contrary to, prohibited by, or deemed invalid under Applicable Laws, such provision shall be inapplicable and deemed omitted to the extent so contrary, prohibited or invalid, but the remainder hereof shall not be invalidated thereby and shall be given effect so far as possible.

16.9 Expenses. The Loan Parties shall pay (a) all reasonable and documented out-of-pocket expenses incurred by Agent and its Affiliates (including the reasonable and documented fees, charges and disbursements of one primary counsel and any special and local counsel), and shall pay all reasonable and documented fees and time charges and disbursements for attorneys who may be employees of Agent, in connection with the syndication of the credit facilities provided for herein, the preparation, negotiation, execution, delivery and administration of this Agreement and the Other Documents or any amendments, modifications or waivers of the provisions hereof or thereof (whether or not the transactions contemplated hereby or thereby shall be consummated), (b) all reasonable and documented out-of-pocket expenses incurred by Agent on any Lender (including the reasonable and documented fees, charges and disbursements of (x) one primary counsel and any special and local counsel for Agent and the Lenders and (y) in the event of any actual or potential conflicts of interest, one additional primary counsel and any additional special and local counsel, in each case, for all similarly situated Lenders), and shall pay all fees and time charges for attorneys who may be employees of Agent in connection with the enforcement or protection of its rights in connection with this Agreement and the Other Documents, including its rights under this Section, (c) all documented out-of-pocket expenses incurred by Agent on any Lender (including the reasonable and documented fees, charges and disbursements of (x) one primary counsel and any special and local counsel for Agent and the Lenders and (y) in the event of any actual or potential conflicts of interest, one additional primary counsel and any additional special and local counsel, in each case, for all similarly situated Lenders), and shall pay all fees and time charges for attorneys who may be employees of Agent in connection with the enforcement or protection of its rights in connection with the Loans issued hereunder, including all such out-of-pocket expenses incurred during any workout, restructuring or negotiations in respect of such Loans, and (d) all reasonable and documented out-of-pocket expenses of Agent's regular employees and agents engaged periodically to perform audits of any Loan Party's or any Loan Party's Affiliate's or Subsidiary's books, records and business properties.

16.10 Injunctive Relief. Each Loan Party recognizes that, in the event any Loan Party fails to perform, observe or discharge any of its obligations or liabilities under this Agreement, or threatens to fail to perform, observe or discharge such obligations or liabilities, any remedy at law may prove to be inadequate relief to Lenders; therefor, Agent, if Agent so requests, shall be entitled to temporary and permanent injunctive relief in any such case without the necessity of proving that actual damages are not an adequate remedy.

16.11 Consequential Damages. Neither Agent nor any Lender, nor any agent or attorney for any of them, shall be liable to any Loan Party (or any Affiliate of any such Person) for indirect, punitive, exemplary or consequential damages arising from any breach of contract, tort or other wrong relating to the establishment, administration or collection of the Obligations or as a result of any transaction contemplated under this Agreement or any Other Document.

16.12 Captions. The captions at various places in this Agreement are intended for convenience only and do not constitute and shall not be interpreted as part of this Agreement.

16.13 Counterparts; Facsimile Signatures. This Agreement may be executed in any number of and by different parties hereto on separate counterparts, all of which, when so executed, shall be deemed an original, but all such counterparts shall constitute one and the same agreement. Any signature delivered by a party by facsimile or electronic transmission (including email transmission of a PDF image) shall be deemed to be an original signature hereto.

16.14 Construction. The parties acknowledge that each party and its counsel have reviewed this Agreement and that the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of this Agreement or any amendments, schedules or exhibits thereto.

16.15 Confidentiality; Sharing Information. Agent, each Lender and each Transferee shall hold all non-public information obtained by Agent, such Lender or such Transferee pursuant to the requirements of this Agreement in accordance with Agent's, such Lender's and such Transferee's customary procedures for handling confidential information of this nature; provided, however, Agent, each Lender and each Transferee may disclose such confidential information (a) to its examiners, so long as such examiners are informed of the confidential nature of such information; (b) to its Affiliates, outside auditors, counsel and other professional advisors, so long as such Affiliates, outside auditors, counsel or other professional advisors either have a legal obligation to keep such information confidential or agree to comply with the provisions of this Section 16.15; (c) to Agent or any Lender; (d) to any prospective Transferees, so long as such prospective Transferees agree to comply with the provisions of this Section 16.15; and (e) as required or requested by any Governmental Body or representative thereof or pursuant to legal process; provided further that (i) unless specifically prohibited by Applicable Law, Agent, each Lender and each Transferee shall use its reasonable best efforts prior to disclosure thereof, to notify the applicable Loan Party of the applicable request for disclosure of such non-public information (A) by a Governmental Body or representative thereof (other than any such request in connection with an examination of the financial condition of a Lender or a Transferee by such Governmental Body) or (B) pursuant to legal process and (ii) in no event shall Agent, any Lender or any Transferee be obligated to return any materials furnished by any Loan Party other than those documents and instruments in possession of Agent or any Lender in order to perfect its Lien on the Collateral once the Obligations have been Paid in Full and this Agreement has been terminated. Each Loan Party acknowledges that from time to time financial advisory, investment banking and other services may be offered or provided to such Loan Party or one or more of its Affiliates (in connection with this Agreement or otherwise) by any Lender or by one or more Subsidiaries or Affiliates of such Lender and each Loan Party hereby authorizes each Lender to share any information delivered to such Lender by such Loan Party and its Subsidiaries pursuant to this Agreement, or in connection with the decision of such Lender to enter into this Agreement, to any such Subsidiary or Affiliate of such Lender, it being understood that any such Subsidiary or Affiliate

of any Lender receiving such information shall be bound by the provisions of this Section 16.15 as if it were a Lender hereunder. Such authorization shall survive the repayment of the other Obligations and the termination of this Agreement. Notwithstanding any non-disclosure agreement or similar document executed by Agent in favor of any Loan Party or any of any Loan Party's affiliates, the provisions of this Agreement shall supersede such agreements.

16.16 Publicity. Each Loan Party and each Lender hereby authorizes Agent to make appropriate announcements of the financial arrangement entered into among the Loan Parties, Agent and Lenders, including announcements which are commonly known as tombstones, in such publications and to such selected parties as Agent shall in its sole and absolute discretion deem appropriate.

16.17 Certifications From Banks and Participants; USA PATRIOT Act.

(a) Each Lender or assignee or participant of a Lender that is not incorporated under the Laws of the United States of America or a state thereof (and is not excepted from the certification requirement in Section 313 of the USA PATRIOT Act and the applicable regulations because it is both (i) an affiliate of a depository institution or foreign bank that maintains a physical presence in the United States or foreign country, and (ii) subject to supervision by a banking authority regulating such affiliated depository institution or foreign bank) shall deliver to Agent the certification, or, if applicable, recertification, certifying that such Lender is not a "shell" and certifying to other matters as required by Section 313 of the USA PATRIOT Act and the applicable regulations: (1) within ten (10) days after the Closing Date, and (2) as such other times as are required under the USA PATRIOT Act.

(b) The USA PATRIOT Act requires all financial institutions to obtain, verify and record certain information that identifies individuals or business entities which open an "account" with such financial institution. Consequently, each Lender may from time to time request, and each Loan Party shall provide to Lender, such Loan Party's name, address, tax identification number and/or such other identifying information as shall be necessary for Lender to comply with the USA PATRIOT Act and any other Anti-Terrorism Law.

16.18 Anti-Terrorism Laws.

(a) Each Loan Party represents and warrants that (i) no Covered Entity is a Sanctioned Person and (ii) no Covered Entity, either in its own right or through any third party, (A) has any of its assets in a Sanctioned Country or in the possession, custody or control of a Sanctioned Person in violation of any Anti-Terrorism Law; (B) does business in or with, or derives any of its income from investments in or transactions with, any Sanctioned Country or Sanctioned Person in violation of any Anti-Terrorism Law; or (C) engages in any dealings or transactions prohibited by any Anti-Terrorism Law.

(b) Each Loan Party covenants and agrees that (i) no Covered Entity will become a Sanctioned Person, (ii) no Covered Entity, either in its own right or through any third party, will (B) have any of its assets in a Sanctioned Country or in the possession, custody or control of a Sanctioned Person in violation of any Anti-Terrorism Law; (C) do business in or with, or derive any of its income from investments in or transactions with, any Sanctioned Country or Sanctioned Person in violation of any Anti-Terrorism Law; (D) engage in any dealings or transactions prohibited by any Anti-Terrorism Law or (E) use the Loans to fund any operations in, finance any investments or activities in, or, make any payments to, a Sanctioned Country or Sanctioned Person in violation of any Anti-Terrorism Law, (iii) the funds used to repay the Obligations will not be derived from any unlawful activity, (iv) each Covered Entity shall comply with all Anti-Terrorism Laws and (v) the Loan Parties shall promptly notify Agent in writing upon the occurrence of a Reportable Compliance Event.

16.19 Acknowledgment and Consent to Bail-In of EEA Financial Institutions. Notwithstanding anything to the contrary contained in this Agreement, any Other Document, or any other agreement, arrangement or understanding among any Agent, Lenders and the Loan Parties, Agent, each Lender and each Loan Party acknowledges that any liability of any EEA Financial Institution arising under this Agreement or any Other Document, to the extent such liability is unsecured, may be subject to the Write-Down and Conversion Powers of an EEA Resolution Authority and agrees and consents to, and acknowledges and agrees to be bound by:

(a) the application of any Write-Down and Conversion Powers by an EEA Resolution Authority to any such liabilities arising hereunder which may be payable to it by any party hereto that is an EEA Financial Institution; and

(b) the effects of any Bail-In Action on any such liability, including, if applicable:

(i) a reduction in full or in part or cancellation of any such liability;

(ii) a conversion of all, or a portion of, such liability into shares or other instruments of ownership in such EEA Financial Institution, its parent undertaking, or a bridge institution that may be issued to it or otherwise conferred on it, and that such shares or other instruments of ownership will be accepted by it in lieu of any rights with respect to any such liability under this Agreement or any Other Document; or

(iii) the variation of the terms of such liability in connection with the exercise of the Write-Down and Conversion Powers of any EEA Resolution.

XVII GUARANTY.

17.1 Guaranty. Each Guarantor hereby unconditionally guarantees, as a primary obligor and not merely as a surety, jointly and severally with each other Guarantor when and as due, whether at maturity, by acceleration, by notice of prepayment or otherwise, the due and punctual performance of all Obligations. Each payment made by any Guarantor pursuant to this Guaranty shall be made in lawful money of the United States in immediately available funds.

17.2 Waivers. Each Guarantor hereby absolutely, unconditionally and irrevocably waives (a) promptness, diligence, notice of acceptance, notice of presentment of payment and any other notice hereunder, (b) demand of payment, protest, notice of dishonor or nonpayment, notice of the present and future amount of the Obligations and any other notice with respect to the Obligations, (c) any requirement that Agent, any Lender protect, secure, perfect or insure any security interest or Lien on any property subject thereto or exhaust any right or take any action against any other Loan Party, or any Person or any Collateral, (d) any other action, event or precondition to the enforcement hereof or the performance by each such Guarantor of the Obligations, and (e) any defense arising by any lack of capacity or authority or any other defense of any Loan Party or any notice, demand or defense by reason of cessation from any cause of Obligations other than the Payment in Full of the Obligations and any defense that any other guarantee or security was or was to be obtained by Agent.

17.3 No Defense. No invalidity, irregularity, voidableness, voidness or unenforceability of this Agreement or any Other Document or any other agreement or instrument relating thereto, or of all or any part of the Obligations or of any collateral security therefor shall affect, impair or be a defense hereunder.

17.4 Guaranty of Payment. The Guaranty hereunder is one of payment and performance, not collection, and the obligations of each Guarantor hereunder are independent of the Obligations of the other Loan Parties, and a separate action or actions may be brought and prosecuted against any Guarantor to enforce the terms and conditions of this Article XVII, irrespective of whether any action is brought against any other Loan Party or other Persons or whether any other Loan Party or other Persons are joined in any such action or actions. Each Guarantor waives any right to require that any resort be had by Agent or any Lender to any security held for payment of the Obligations or to any balance of any deposit account or credit on the books of Agent or any Lender in favor of any Loan Party or any other Person. No election to proceed in one form of action or proceedings, or against any Person, or on any Obligations, shall constitute a waiver of Agent's right to proceed in any other form of action or proceeding or against any other Person unless Agent has expressed any such right in writing. Without limiting the generality of the foregoing, no action or proceeding by Agent against any Loan Party under any document evidencing or securing indebtedness of any Loan Party to Agent shall diminish the liability of any Guarantor hereunder, except to the extent Agent receives actual payment on account of Obligations by such action or proceeding, notwithstanding the effect of any such election, action or proceeding upon the right of subrogation of any Guarantor in respect of any Loan Party.

17.5 Liabilities Absolute. The liability of each Guarantor hereunder shall be absolute, unlimited and unconditional and shall not be subject to any reduction, limitation, impairment, discharge or termination for any reason, including, without limitation, any claim of waiver, release, surrender, alteration or compromise, and shall not be subject to any claim, defense or setoff, counterclaim, recoupment or termination whatsoever by reason of the invalidity, illegality or unenforceability of any other Obligation or otherwise. Without limiting the generality of the foregoing, the obligations of each Guarantor shall not be discharged or impaired, released, limited or otherwise affected by:

(a) any change in the manner, place or terms of payment or performance, and/or any change or extension of the time of payment or performance of, release, renewal or alteration of, or any new agreements relating to any Obligation, any security therefor, or any liability incurred directly or indirectly in respect thereof, or any rescission of, or amendment, waiver or other modification of, or any consent to departure from, this Agreement or any Other Document, including any increase in the Obligations resulting from the extension of additional credit to any Loan Party or otherwise;

(b) any sale, exchange, release, surrender, loss, abandonment, realization upon any property by whomsoever at any time pledged or mortgaged to secure, or howsoever securing, all or any of the Obligations, and/or any offset there against, or failure to perfect, or continue the perfection of, any Lien in any such property, or delay in the perfection of any such Lien, or any amendment or waiver of or consent to departure from any other guaranty for all or any of the Obligations;

(c) the failure of Agent or any Lender to assert any claim or demand or to enforce any right or remedy against any other Loan Party or any other Person under the provisions of this Agreement or any Other Document or any other document or instrument executed and delivered in connection herewith or therewith;

(d) any settlement or compromise of any Obligation, any security therefor or any liability (including any of those hereunder) incurred directly or indirectly in respect thereof or hereof, and any subordination of the payment of all or any part thereof to the payment of any obligation (whether due or not) of any Loan Party to creditors of any Loan Party other than any other Loan Party;

(e) any manner of application of Collateral, or proceeds thereof, to all or any of the Obligations, or any manner of Disposition of any Collateral for all or any of the Obligations or any other assets of any Loan Party; and

(f) any other agreements or circumstance of any nature whatsoever that may or might in any manner or to any extent vary the risk of any Guarantor, or that might otherwise at law or in equity constitute a defense available to, or a discharge of, the Guaranty hereunder and/or the obligations of any Guarantor, or a defense to, or discharge of, any Loan Party or any other Person or party hereto or the Obligations or otherwise with respect to the Loans or other financial accommodations to the Loan Parties pursuant to this Agreement and/or the Other Documents.

17.6 Waiver of Notice. Agent shall have the right to do any of the above without notice to or the consent of any Guarantor and each Guarantor expressly waives any right to notice of, consent to, knowledge of and participation in any agreements relating to any of the above or any other present or future event relating to Obligations whether under this Agreement or otherwise or any right to challenge or question any of the above and waives any defenses of such Guarantor which might arise as a result of such actions (in each case other than the defense of Payment in Full of the Obligations).

17.7 Agent's Discretion. Agent may at any time and from time to time (whether prior to or after the revocation or termination of this Agreement) without the consent of, or notice to, any Guarantor, and without incurring responsibility to any Guarantor or impairing or releasing the Obligations, apply any sums by whomsoever paid or howsoever realized to any Obligations regardless of what Obligations remain unpaid.

17.8 Reinstatement.

(a) The Guaranty provisions herein set forth herein shall continue to be effective or be reinstated, as the case may be, if claim is ever made upon Agent or any Lender for repayment or recovery of any amount or amounts received by such Agent or such Lender in payment or on account of any of the Obligations and such Person repays all or part of said amount for any reason whatsoever, including, without limitation, by reason of any judgment, decree or order of any court or administrative body having jurisdiction over such Person or the respective property of each, or any settlement or compromise of any claim effected by such Person with any such claimant (including any Loan Party); and in such event each Guarantor hereby agrees that any such judgment, decree, order, settlement or compromise or other circumstances shall be binding upon such Guarantor, notwithstanding any revocation hereof or the cancellation of any note or other instrument evidencing any Obligation, and each Guarantor shall be and remain liable to Agent and/or Lenders for the amount so repaid or recovered to the same extent as if such amount had never originally been received by such Persons.

(b) Agent shall not be required to marshal any assets in favor of any Guarantor, or against or in payment of Obligations.

(c) No Guarantor shall be entitled to claim against any present or future security held by Agent from any Person for Obligations in priority to or equally with any claim of Agent, or assert any claim for any liability of any Loan Party to any Guarantor in priority to or equally with claims of Agent for Obligations, and no Guarantor shall be entitled to compete with Agent with respect to, or to advance any equal or prior claim to any security held by Agent for Obligations.

(d) If any Loan Party makes any payment to Agent, which payment is wholly or partly subsequently invalidated, declared to be fraudulent or preferential, set aside or required to be repaid to any Person under any federal or provincial statute or at common law or under equitable principles, then to the extent of such payment, the Obligation intended to be paid shall be revived and continued in full force and effect as if the payment had not been made, and the resulting revived Obligation shall continue to be guaranteed, uninterrupted, by each Guarantor hereunder.

(e) All present and future monies payable by any Loan Party to any Guarantor, whether arising out of a right of subrogation or otherwise, are assigned to Agent for its benefit and for the ratable benefit of Lenders as security for such Guarantor's liability to Agent and Lenders hereunder and are postponed and subordinated to Agent's prior right to Payment in Full of the Obligations. Except to the extent prohibited otherwise by this Agreement, if an Event of Default shall have occurred and be continuing, all monies received by any Guarantor from any Loan Party shall be held by such Guarantor as agent and trustee for Agent. This assignment, postponement and subordination shall only terminate when the Obligations are Paid in Full and this Agreement is irrevocably terminated.

(f) Each Loan Party acknowledges this assignment, postponement and subordination and, except as otherwise set forth herein, agrees that, after the occurrence and during the continuance of an Event of Default, it shall make no payments to any Guarantor without the prior written consent of Agent. Each Loan Party agrees to give full effect to the provisions hereof.

[signature pages follow]

~~<Conformed through:>~~

~~<First Amendment to Term Loan Credit and Security Agreement, dated as of April 19, 2017 > <Second Amendment to Term Loan Credit and Security Agreement, dated as of November 6, 2017>~~

~~<Third Amendment to Term Loan Credit and Security Agreement, dated as of February 14, 2018>~~

Each of the parties has signed this Agreement as of the day and year first above written.

BORROWER:

QUANTUM CORPORATION

By: _____
Name: _____
Title: _____

AGENT AND LENDER:

TCW ASSET MANAGEMENT COMPANY LLC,
as Agent and Lender

By: _____
Name: _____
Title: _____

Payment Account Designation:

[Bank Name: State Street Bank & Trust Co.
ABA: 011000028
Account Number: 10512614
Account Name: TCW Asset Management Company LLC
Ref: Quantum Corporation]

~~<Conformed through:>~~

~~<First Amendment to Term Loan Credit and Security Agreement, dated as of April 19, 2017 > <Second Amendment to Term Loan Credit and Security Agreement, dated as of November 6, 2017>~~

~~<Third Amendment to Term Loan Credit and Security Agreement, dated as of February 14, 2018>~~

Each of the parties has signed this Agreement as of the day and year first above written.

LENDERS:

TCW DIRECT LENDING, LLC
By: TCW Asset Management Company LLC, its Investment Advisor

By: _____
Name: _____
Title: _____

WEST VIRGINIA DIRECT LENDING LLC By: TCW Asset Management Company LLC, its Investment Advisor

By: _____
Name: _____
Title: _____

TCW SKYLINE LENDING, L.P.
By: TCW Asset Management Company LLC, its Investment Advisor

By: _____
Name: _____
Title: _____

THIS WARRANT AND THE SHARES ISSUABLE HEREUNDER HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR ANY APPLICABLE STATE SECURITIES LAWS, AND, EXCEPT AND PURSUANT TO THE PROVISIONS OF ARTICLE 5 BELOW, MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED WITHOUT AN EFFECTIVE REGISTRATION THEREOF UNDER THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS, OR PURSUANT TO RULE 144 OR AN EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS.

WARRANT TO PURCHASE STOCK

Company:	QUANTUM CORPORATION, a Delaware corporation
Number of Shares	98,958 shares
Class of Stock:	Common Stock
Warrant Price:	$2.40 per share, subject to adjustment per Section 1.1 (b) or Article 2
Issue Date:	September 30, 2018
Expiration Date:	September 30, 2023

THIS WARRANT TO PURCHASE STOCK (THIS "WARRANT") CERTIFIES THAT, for good and valuable consideration, the receipt of which is hereby acknowledged, TCW Skyline Lending, L.P. is entitled to purchase the number of fully paid and non-assessable shares of the class of securities (the "Shares") of QUANTUM CORPORATION (the "Company") at the Warrant Price, all as set forth above and as adjusted pursuant to the terms of this Warrant, subject to the provisions and upon the terms and conditions set forth in this Warrant. Capitalized terms used herein but not specifically defined herein shall have the meanings ascribed to them in that certain Term Loan Credit and Security Agreement, dated as of October 21, 2016 (as amended, restated, supplemented or otherwise modified from time to time, the "Credit Agreement"), by and among the Company, the financial institutions from time to time party thereto (collectively, the "Lenders"), the Holder, as Agent for the Lenders, and the other parties thereto.

ARTICLE 1
EXERCISE

1.1 Conditions to Exercise.

(a) This Warrant shall be exercisable for 98,958 shares of the Company's Common Stock (subject to adjustment as provided herein) in whole or in part at any time on or after February 1, 2019 until the Expiration Date.

(b) The exercise price for each share of Common Stock receivable hereunder shall be thelower of (x) $2.40 (as adjusted per Article 2) and (y) as determined on February 1, 2019 the lowest of the 5-day volume-weighted average closing prices of the Company's common stock for the last 5 trading days in the months of September 2018, October 2018, November 2018, December 2018 and January 2019.

(c) To the extent that the Company has Paid in Full (as defined in the Credit Agreement) in cash all of the Obligations (as defined in the Credit Agreement) under the Credit Agreement on or prior to October 31**,** 2018**,** then Quantum shall have the right to buy back all or any portion of the Warrant, for a price of $.001 per share multiplied by the Shares issuable under the portion of the Warrant being repurchased, and the Warrant would only be exercisable for such reduced amount as of February 1, 2019 until the Expiration Date. In order to exercise such repurchase right (if applicable), the Company must have given notice to the Holder on or prior to December 31**,** 2018**.**

1.2 Method of Exercise. Holder may exercise any portion of this Warrant that is exercisable by delivering a duly completed and executed Notice of Exercise in substantially the form attached as Appendix I to the principal office of the Company. Unless Holder is exercising the cashless exercise right set forth in Section 1.3, Holder shall also deliver to the Company a check, wire transfer (to an account designated in writing by the Company), or other form of payment acceptable to the Company for the aggregate Warrant Price for the Shares being purchased.

1.3 Cashless Exercise Right. In lieu of exercising this Warrant as specified in Section 1.2, Holder may from time to time, in its sole discretion, exercise this Warrant in whole or in part as to the portion of the Warrant that is exercisable and, in lieu of making the cash payment otherwise contemplated to be made to the Company upon such exercise for the aggregate Warrant Price pursuant to Section 1.2, elect instead to receive upon such exercise the "net number" of shares of Common Stock determined according to the following formula (a "Cashless Exercise"):

$$X = \frac{Y (A - B)}{A}$$

Where:

X	=	The number of Shares to be issued to Holder
Y	=	The number of Shares being exercised under this Warrant or, if only a portion of the Warrant is being exercised, the portion of the Warrant being canceled (at the date of such calculation)
A	=	The fair market value of one Share (at the date of such calculation)
B	=	The Warrant Price per share (as adjusted to the date of such calculation)

1.4 Calculation of FMV. For purposes of the calculation above, the "fair market value" of one Share shall be the average for the five trading days immediately prior to the date of determination thereof of the last reported sale price regular way on each such day, or, in the case no such sale takes place on any such day, the average of the reported closing bid and asked prices regular way of the shares of Common Stock on such day, in each case as quoted on the New York Stock Exchange, as reported by Bloomberg Markets, or such other principal securities exchange or inter-dealer quotation system on which the shares of Common Stock are then traded.

1.5 Delivery of Shares and New Warrant. Within two (2) business days after Holder exercises this Warrant in the manner set forth in Section 1.2 or Section 1.3 above, the Company shall deliver to Holder the Shares so acquired, provided that such Shares shall be deemed delivered upon the Company's delivery of evidence of a book-entry or similar position through The Depository Trust & Closing Corporation or any other depository or similar functionary, credited to an account for the benefit of Holder. If this Warrant has not been fully exercised and has not expired, then unless otherwise set forth in the Notice of Exercise a new warrant representing the Shares not so acquired shall be issued to Holder.

1.6 Treatment of Warrant at Acquisition. In the event of an Acquisition, either (a) Holder shall exercise or convert this Warrant in full (or shall be deemed to so convert pursuant to the immediately following sentence) with respect to all remaining Shares for which the Warrant is then exercisable and such exercise or conversion will be deemed effective immediately prior to the consummation of such Acquisition or (b) if Holder elects in writing not to exercise or convert the Warrant, this Warrant will expire upon the consummation of such Acquisition. The Company shall provide Holder with written notice of the foregoing (together with such reasonable information as Holder may request in connection with such contemplated Acquisition giving rise to such notice), which is to be delivered to Holder not less than ten (10) days prior to the closing of the proposed Acquisition and, unless the Company receives a notice in writing from Holder that it elects to have the unexercised portion of the Warrant expire, then if the Acquisition involves a price per share of Common Stock that exceeds the Warrant Price the unexercised portion of the Warrant shall be deemed to be automatically exercised pursuant to Section 1.3 immediately prior to the Acquisition.

For purposes of this Warrant, "Acquisition" shall mean: (i) the acquisition of the Company by another entity by means of any transaction or series of related transactions to which the Company is a party (including, without limitation, any stock acquisition, reorganization, merger or consolidation, but excluding any sale of stock for capital raising purposes and any transaction effected primarily for purposes of changing the Company's jurisdiction of incorporation) other than a transaction or series of related transactions in which the holders of the voting securities of the Company outstanding immediately prior to such transaction or series of related transactions retain, immediately after such transaction or series of transactions, at least a majority of the total voting power represented by the outstanding voting securities of the Company or such other surviving or resulting entity (or if the Company or such other surviving or resulting entity is a wholly-owned subsidiary immediately following such acquisition, its parent), or (ii) a sale, lease or other disposition of all or substantially all of the assets of the Company and its subsidiaries taken as a whole by means of any transaction or series of related transactions, except where such sale, lease or other disposition is to a wholly-owned subsidiary or affiliate of the Company.

1.7 Replacement of Warrant. On receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of loss, theft or destruction of this Warrant, upon delivery of an indemnity agreement reasonably satisfactory in form, substance and amount to the Company or, in the case of mutilation, upon surrender and cancellation of this Warrant, the Company at its expense shall, within a reasonable period of time, execute and deliver to Holder, in lieu of this Warrant, a new warrant of like tenor and amount.

ARTICLE 2
ADJUSTMENTS TO THE SHARES AND NOTIFICATION OF CERTAIN EVENTS

2.1 Fractional Shares. No fractional Shares shall be issuable upon exercise of this Warrant and the number of Shares to be issued shall be rounded down to the nearest whole Share. If a fractional share interest arises upon any exercise of this Warrant, the Company shall eliminate such fractional share interest by paying Holder an amount computed by multiplying the fractional interest by the fair market value, calculated as provided in Section 1.4 above, of a full Share.

2.2 Adjustments. Subject to the expiration of this Warrant pursuant to Section 5.1, the number and kind of shares purchasable hereunder and the Warrant Price therefor are subject to adjustment from time to time, as follows:

2.2.1 Merger or Reorganization. If at any time there shall be any reorganization, recapitalization, merger or consolidation (a "Reorganization") involving the Company (other than an Acquisition which is subject to the provisions of Section 1.6) in which shares of the Company's stock are converted into or exchanged for securities, cash or other property, then, as a part of such Reorganization, lawful provision shall be made so that the Holder shall thereafter be entitled to receive upon exercise of this Warrant, the kind and amount of securities, cash or other property of the successor corporation resulting from such Reorganization, equivalent in value to that which a holder of the Shares deliverable upon exercise of this Warrant would have been entitled in such Reorganization if the right to purchase the Shares hereunder had been exercised immediately prior to such Reorganization. In any such case, appropriate adjustment (as determined in good faith by the Board of Directors of the successor corporation) shall be made in the application of the provisions of this Warrant with respect to the rights and interests of the Holder after such Reorganization to the end that the provisions of this Warrant shall be applicable after the event, as near as reasonably may be, in relation to any shares or other securities deliverable after that event upon the exercise of this Warrant.

2.2.2 Reclassification of Shares. If the securities issuable upon exercise of this Warrant are changed into the same or a different number of securities of any other class or classes by reclassification, capital reorganization or otherwise (other than as otherwise provided for herein) (a "Reclassification"), then, in any such event, in lieu of the number of Shares which the Holder would otherwise have been entitled to receive, the Holder shall have the right thereafter to exercise this Warrant for a number of shares of such other class or classes of stock that a holder of the number of securities deliverable upon exercise of this Warrant immediately before that change would have been entitled to receive in such Reclassification (at the same aggregate Warrant Price as would have applied prior to such Reclassification), all subject to further adjustment as provided herein with respect to such other shares.

2.2.3 Subdivisions and Combinations. In the event that the outstanding shares of the Company's Common Stock are subdivided (by stock split, by payment of a stock dividend or otherwise) into a greater number of shares of such securities, the number of Shares issuable upon exercise of the rights under this Warrant immediately prior to such subdivision shall, concurrently with the effectiveness of such subdivision, be proportionately increased, and the Warrant Price shall be proportionately decreased, and in the event that the outstanding shares of Common Stock are combined (by reclassification or otherwise) into a lesser number of shares of such securities, the number of Shares issuable upon exercise of the rights under this Warrant immediately prior to such combination shall, concurrently with the effectiveness of such combination, be proportionately decreased, and the Warrant Price shall be proportionately increased.

2.2.4 Adjustment of Warrant Price Upon Issuance of Additional Shares of Common Stock. If at any time or from time to time prior to February 1, 2019, the Company shall issue or sell any additional shares of Common Stock or Common Stock Equivalents for a consideration per share less than the fair market value (other than Exempt Issuances, which shall not result in adjustments pursuant to this Section 2.2.4) then, effective on the date specified below, the Warrant Price then in effect shall be reduced to a price (calculated to the nearest one-hundredth of a cent) determined in accordance with the following formula:

$$WP_2 = WP_1 * (A + B) \div (A + C).$$

For purposes of the foregoing formula, the following definitions shall apply:

i) "WP_2" shall mean the Warrant Price in effect immediately after such issuance or deemed issuance of additional shares of Common Stock

ii) "WP_1" shall mean the Warrant Price in effect immediately prior to such issuance or deemed issuance of additional shares of Common Stock;

iii) "A" shall mean the number of shares of Common Stock Deemed Outstanding immediately prior to such issuance or deemed issuance of additional shares of Common Stock;

iv) "B" shall mean the number of shares of Common Stock Deemed Outstanding that would have been issued if such additional shares of Common Stock had been issued or deemed issued at a price per share equal to WP_1 (determined by dividing the aggregate consideration received by the Company in respect of such issue by WP_1); and

v) "C" shall mean the number of such additional shares of Common Stock issued in such transaction.

Upon each such adjustment of the Warrant Price hereunder, the number of Shares issuable upon exercise of this Warrant shall be adjusted to the number of shares of Common Stock determined by multiplying the Warrant Price in effect immediately prior to such adjustment by the number of Shares issuable upon exercise of this Warrant immediately prior to such adjustment and dividing the product thereof by the Warrant Price resulting from such adjustment.

"Exempt Issuances" means any issuance of additional shares of Common Stock or Common Stock Equivalents (a) for which an adjustment is otherwise provided under Section 2.2 hereof, (b) pursuant to the exercise of this Warrant (or any Warrant issued as a replacement for this Warrant or upon the transfer or partial exercise hereof) in whole or in part, (c) pursuant to the exercise of any Common Stock Equivalents outstanding on the date hereof, (d) pursuant to the issuance of Common Stock or Common Stock Equivalents granted or to be granted under an equity compensation plan approved by stockholders of the Company or (e) the issuance of shares of Common Stock or Common Stock Equivalents as consideration in connection with the acquisition of all or a controlling interest in another business (whether by merger, purchase of stock or assets or otherwise) if such issuance is approved by the board of directors of the Company.

"The "Common Stock Deemed Outstanding" means at any given time, the number of shares of Common Stock outstanding at such time, plus the number of shares of Common Stock issuable upon the conversion or exercise of Common Stock Equivalents then-outstanding regardless of whether such securities are actually exercisable at such time.

"Common Stock Equivalents" means evidences of indebtedness, shares of stock or other securities which are convertible into or exchangeable for, with or without payment of additional consideration, shares of Common Stock, either immediately or upon the arrival of a specified date or the happening of a specified event or both.

2.2.5 No Impairment. The Company shall not, by amendment of its charter documents or through any consolidation, merger, reorganization, transfer of assets, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of the Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the Holder against dilution or other impairment.

2.2.6 Notice of Adjustments. Upon any adjustment in accordance with this Section 2.2, the Company shall give notice thereof to the Holder, which notice shall state the event giving rise to the adjustment, the Warrant Price as adjusted and the number of securities or other property purchasable upon the exercise of the rights under this Warrant, setting forth in reasonable detail the method of calculation of each. The Company shall, upon the written request of any Holder, furnish or cause to be furnished to such Holder a certificate setting forth (i) such adjustments, (ii) the Warrant Price at the time in effect and (iii) the number of securities and the amount, if any, of other property that at the time would be received upon exercise of this Warrant.

2.3 Notification of Certain Events. Prior to the Expiration Date, in the event that the Company shall authorize:

2.3.1 the issuance of any dividend or other distribution on the capital stock of the Company (other than (i) dividends or distributions otherwise provided for in Section 2.2.3, or (ii) any repurchases of the Company's Common Stock), whether in cash, property, stock or other securities; or

2.3.2 the voluntary liquidation, dissolution or winding up of the Company,

the Company shall send to the Holder at least ten (10) days prior written notice of the date on which a record shall be taken for any such dividend or distribution specified in clause 2.3.1 or the expected effective date of any such other event specified in clause 2.3.2. The notice provisions set forth in this section may be shortened or waived prospectively or retrospectively by the consent of the Holder.

ARTICLE 3
REPRESENTATIONS AND COVENANTS OF THE COMPANY

3.1 Representations and Warranties. The Company hereby represents and warrants to Holder that all Shares which may be issued upon the exercise of the purchase right represented by this Warrant shall, upon issuance, be duly authorized, validly issued, fully paid and non-assessable, and free of any liens and encumbrances except for restrictions on transfer provided for herein or under applicable federal and state securities laws.

3.2 Reservation of Stock. The Company hereby represents and warrants to Holder that sufficient shares of the Company's Common Stock have been reserved and are available for issuance from its authorized and unissued shares of Common Stock for the purpose of effecting the exercise of this Warrant, and such shares will remain available at all times until the date this Warrant has been exercised in full or, if earlier, the Expiration Date.

3.3 Capitalization. Immediately prior to the issuance of this Warrant, the Company has 35,551,570 shares of Common Stock issued and outstanding, and 2,267,660 shares of Common Stock receivable under options, warrants and convertible securities of the Company.

ARTICLE 4
INVESTMENT REPRESENTATIONS AND COVENANTS OF HOLDER

With respect to the acquisition of this Warrant and any of the Shares, Holder hereby represents and warrants to, and agrees with, the Company as follows:

4.1 Purchase Entirely for Own Account. This Warrant is issued to Holder in reliance upon Holder's representation to the Company that this Warrant and the Shares will be acquired for investment for Holder's own account, not as a nominee or agent, and not with a view to the resale or distribution of any part thereof other than to an affiliate, and that Holder has no present intention of selling, granting any participation in, or otherwise distributing the same other than to an affiliate. By executing this Warrant, Holder further represents that Holder does not have any contract, undertaking, agreement or arrangement with any person, other than an affiliate, to sell, transfer or grant participations to such person or to any third person with respect to any of the Shares.

4.2 Reliance upon Holder's Representations. Subject to Section 5.12, Holder understands that this Warrant and the Shares are not registered under the Act on the ground that the issuance of such securities is exempt from registration under the Act, and that the Company's reliance on such exemption is predicated on Holder's representations set forth herein.

4.3 Accredited Investor Status. Holder represents to the Company that Holder is an Accredited Investor (as defined in the Act).

4.4 Restricted Securities. Holder understands that this Warrant and the Shares are "restricted securities" under the federal securities laws inasmuch as they are being acquired from the Company in a transaction not involving a public offering and that under such federal securities laws and applicable regulations such securities may be resold without registration under the Act only in certain limited circumstances.

4.5 Restrictions on Sale. Notwithstanding anything to the contrary contained herein, Holder agrees
that Holder, together with its affiliates will not sell on any one trading day more than 50,000 Shares obtained from the exercise of this Warrant or other warrants issued on the same issuance date as this Warrant without the prior written consent of the Company.

ARTICLE 5
MISCELLANEOUS

5.1 Term; Exercise Upon Expiration. Subject to the terms of this Warrant, including Sections 1.1 and 1.6, this Warrant is exercisable in whole or in part, at any time and from time to time on or before the Expiration Date set forth above. The Company agrees that Holder may terminate this Warrant, upon written notice to the Company, at any time in its sole discretion.

5.2 Legends. This Warrant and the Shares shall be imprinted with a legend in substantially the following form:

> THIS WARRANT AND THE SHARES ISSUABLE HEREUNDER HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR ANY APPLICABLE STATE SECURITIES LAWS, AND, EXCEPT AND PURSUANT TO THE PROVISIONS OF ARTICLE 5 BELOW, MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED WITHOUT AN EFFECTIVE REGISTRATION THEREOF UNDER THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS, OR PURSUANT TO RULE 144 OR AN EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS.

5.3 Compliance with Securities Laws on Transfer. Without limitation of Section 5.12, this Warrant and the Shares issuable upon exercise of this Warrant may not be transferred or assigned in whole or in part without (i) compliance with applicable federal and state securities laws by the transferor and the transferee, and (ii) if requested by Company, an opinion of counsel, reasonably satisfactory to Company, to the effect that such transfer or assignment is in compliance with applicable federal and state securities laws. The Company may issue stop transfer instructions to its transfer agent in connection with the restrictions in this Section 5.3.

5.4 Transfer Procedure. Subject to the provisions of Section 5.3, Holder may transfer all or part of this Warrant to its affiliates, and such affiliate shall then be entitled to all the rights and bound by all of the obligations of Holder under this Warrant and any related agreements, and the Company shall cooperate fully in ensuring that any stock issued upon exercise of this Warrant is issued in the name of the affiliate that exercises this Warrant. The terms and conditions of this Warrant shall inure to the benefit of, and be binding upon, the Company and the holder hereof and its respective permitted successors and assigns. Any transferee shall be bound by the obligations and restrictions of this Warrant as if such transferee was the original holder hereof.

5.5 Notices. All notices and other communications from the Company to Holder, or vice versa, shall be deemed delivered and effective when given personally or mailed by first-class registered or certified mail, postage prepaid, or sent via a nationally recognized overnight courier service, fee prepaid, or on the first business day after transmission by electronic mail, at such address or electronic mail address as may have been furnished to the Company or Holder, as the case may be, in writing by the Company or such Holder from time to time. Effective upon the receipt of the executed Warrant, all notices to Holder shall be addressed as follows until the Company receives notice of a change of address in connection with a transfer or otherwise:

TCW Skyline Lending, L.P.
Attn: Mark Gertzof
227 West Monroe Street, Suite 3225
Chicago, IL 60606
E-mail: mark.gertzof@tcw.com

All notices to the Company shall be addressed as follows:

Quantum Corporation
Attn: Shawn Hall
224 Airport Parkway, Suite 550
San Jose, CA 95510
E-mail: shawn.hall@quantum.com

5.6 Amendments: Waiver. This Warrant and any term hereof may be amended, changed, waived, discharged or terminated only by an instrument in writing signed by the party against which enforcement of such amendment, change, waiver, discharge or termination is sought.

5.7 Attorneys' Fees. In the event of any dispute between the parties concerning the terms and provisions of this Warrant, the party prevailing in such dispute shall be entitled to collect from the other party all costs reasonably incurred in such dispute, including reasonable and documented attorneys' fees.

5.8 Governing Law. This Warrant shall be governed by and construed in accordance with the laws of the State of California, without giving effect to its principles regarding conflicts of law.

5.9 Public Disclosure. The Company shall file a copy of this Warrant with the U.S. Securities and Exchange Commission ("SEC"), within the time periods required by applicable SEC rules and regulations, in order to comply with its obligations under federal securities laws.

5.10 Rights as a Stockholder. No holder of this Warrant, as such, shall be entitled to vote or receive dividends or be deemed the holder of Shares or any other securities of the Company which may at any time be issuable upon the exercise hereof for any purpose, nor shall anything contained herein be construed to confer upon Holder, as such, any of the rights of a stockholder of the Company or any right to vote for the election of directors or upon any matter submitted to stockholders at any meeting thereof, or to receive notice of meetings, or to receive dividends or subscription rights or otherwise until this Warrant shall have been exercised as provided herein.

5.11 Counterparts; Signatures. This Warrant may be executed in counterparts, all of which together shall constitute one and the same agreement. Any signature page delivered electronically or by facsimile shall be binding to the same extent as an original signature page with regards to any agreement subject to the terms hereof or any amendment thereto.

5.12 Registration Rights.

(a) If, at any time after February 1, 2019 where the Holder is not (upon reasonable advice of counsel) entitled to sell Shares obtained pursuant to this Warrant under Rule 144(b)(1) as a non-affiliate, the Holder will have the right to demand up to two (2) public registrations covering such Shares. Following a written request from the Holder, the Company will use its commercially reasonable efforts to expeditiously effect (but in any event no later than sixty (60) days after such request) the registration of such Person's interest in the Warrant and/or Shares whose holders request participation in such registration under the Securities Act. The Company may not include any other securities in any registration effected pursuant to this Section 5.12(a) (other than additional Shares obtained through the Warrant or under warrants issued to the Holder or its affiliates) without the prior written consent of the Holder. Notwithstanding the foregoing, to the extent that the Company is not eligible to register shares on a Form S-3 at a given time then the obligations of the Company to file new registration statements for the Holder under this Section 5.12(a) shall be suspended; provided that (x) the Company agrees to promptly comply with this Section 5.12(a) following any correction of matters leading to such S-3 ineligibility and (y) to the extent that the Company grants registration rights following the date of this Warrant to any person or entity that does not have similar suspension of obligations or otherwise grants more favorable rights, then the Holder shall be deemed to get the benefit of such more favorable rights and the suspension of obligations set forth in this sentence shall not apply. For the avoidance of doubt, in no event will a registration effected pursuant to this Section 5.12(a) be an underwritten public offering.

(b) If, at any time and from time to time, the Company proposes to register any of its shares of Common Stock under the Securities Act in connection with an underwritten public offering of such shares of Common Stock, then the Company will promptly give notice to the Holder of its intention to do so. Upon the request of the Holder received within ten (10) days after receipt of any such notice from the Company, the Company will cause the Holder's interest in the Shares to be registered under the Securities Act and registered or qualified, as the case may be, under any state securities laws; provided, however, that the obligation to give such notice and to cause such registration shall not apply to any registration (a) on Form S-8 (or any successor form), (b) of solely a dividend reinvestment plan or (c) for the sole purpose of offering registered securities to another Person in connection with the acquisition of assets or capital stock of such Person or in connection with a merger, consolidation, combination or similar transaction with such Person. In connection with any underwritten offering of securities on behalf of the Company or any other holders of the Company's capital stock, the Company is not required to include any interest in the Warrant or Shares held by the Holder unless the Holder agrees to the reasonable and customary terms of the underwriting; provided, however, that the total indemnification or other liability of the Holder thereunder shall be limited to the aggregate net cash proceeds received by the Holder from the sale of the Holder's interest in the Shares in such offering. The Company will include in any registration effected pursuant to this Section 5.12(b) (i) first, securities offered to be sold by the Company and by any holder of demand registration rights that is exercising such rights in connection with such registration, (ii) second, any interest in the Shares of the Holder requesting piggyback registration rights hereunder, in each case pro rata based on the number of Shares issued or issuable under the Warrant thereby (in such quantity as will not, in the written opinion of the underwriters, jeopardize the success of the offering), and (iii) third, any other securities requested to be included in such registration (in such quantity as will not, in the written opinion of the underwriters, jeopardize the success of the offering).

(c) The Company will pay all Registration Expenses in connection with all registrations (which, for purposes of this Section 5.12, shall include any qualifications, notifications and exemptions) under this Section 5.12. "Registration Expenses" means all expenses incident to the Company's performance of or compliance with Section 5.12, including, without limitation, all registration and filing fees (including fees of the SEC a national stock exchange or national securities market), all fees and expenses of complying with state securities or blue sky laws, all word processing, duplicating and printing expenses, messenger and delivery expenses, the fees and disbursements of counsel for the Company and of its independent public accountants, including the expenses of any special audits or "cold comfort" letters in underwritten offerings required by or incident to such performance and compliance, the reasonable fees and disbursements of the Holder's counsel not to exceed $20,000 for any registration statement and any fees and disbursements of underwriters customarily paid by issuers or sellers of securities, but excluding underwriting discounts and commissions and transfer taxes, if any.

[signature on following page]

QUANTUM CORPORATION

By: /s/ J. Michael Dodson
Name J. Michael Dodson
Title: CFO

Accepted and Agreed:

TCW SKYLINE LENDING, L.P.

By: /s/ Mark Gertzof
Name: Mark Gertzof
Title: Authorized Officer

APPENDIX I

NOTICE OF EXERCISE

Reference is made to that certain Warrant to Purchase Stock, dated September 30, 2018, issued by Quantum Corporation to [HOLDER] (the "Warrant").

1. The undersigned hereby elects to purchase _____ shares of the Common Stock of Quantum Corporation pursuant to the terms of the Warrant. **[As the Warrant is not fully exercised and has not expired, the Company will issue to Holder a new warrant representing the Shares not acquired. - IF APPLICABLE AND IF THE ELECTION NOT TO RECEIVE A NEW WARRANT DESCRIBED IN THE FIRST SENTENCE OF PARAGRAPH 3 DOES NOT APPLY]**

2. **[IF APPLICABLE - The undersigned elects to make a Cashless Exercise (as such term is defined in the Warrant) in the manner detailed in Section 1.3 of the Warrant.]**

3. **[The Warrant shall remain in full force and effect with respect to any Shares that remain exercisable under the Warrant following the exercise evidenced by this Notice of Exercise. - IF APPLICABLE AND IF THE ELECTION TO RECEIVE A NEW WARRANT DESCRIBED IN THE LAST SENTENCE OF PARAGRAPH 1 DOES NOT APPLY.]** The Warrant shall [also] apply to the shares receivable pursuant to this Notice of Exercise to the extent expressly set forth in the provisions of the Warrant**.**

4. Please issue the shares receivable pursuant to this Notice of Exercise **[(taking into account the Cashless Exercise)]** in the name of the undersigned; payment for any fractional shares owed pursuant to Section 2.1 of the Warrant should also be paid to the undersigned.

5. The undersigned represents it is acquiring the shares solely for its own account and not as a nominee for any other party and not with a view toward the resale or distribution thereof except in compliance with applicable securities laws.

[HOLDER]

_____
(Signature)

_____
(Name and Title)

Dated: _____, 20__

THIS WARRANT AND THE SHARES ISSUABLE HEREUNDER HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR ANY APPLICABLE STATE SECURITIES LAWS, AND, EXCEPT AND PURSUANT TO THE PROVISIONS OF ARTICLE 5 BELOW, MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED WITHOUT AN EFFECTIVE REGISTRATION THEREOF UNDER THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS, OR PURSUANT TO RULE 144 OR AN EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS.

WARRANT TO PURCHASE STOCK

Company:	QUANTUM CORPORATION, a Delaware corporation
Number of Shares	900,045 shares
Class of Stock:	Common Stock
Warrant Price:	$2.40 per share, subject to adjustment per Section 1.1 (b) or Article 2
Issue Date:	September 30, 2018
Expiration Date:	September 30, 2023

THIS WARRANT TO PURCHASE STOCK (THIS "WARRANT") CERTIFIES THAT, for good and valuable consideration, the receipt of which is hereby acknowledged, TCW Direct Lending, LLC is entitled to purchase the number of fully paid and non-assessable shares of the class of securities (the "Shares") of QUANTUM CORPORATION (the "Company") at the Warrant Price, all as set forth above and as adjusted pursuant to the terms of this Warrant, subject to the provisions and upon the terms and conditions set forth in this Warrant. Capitalized terms used herein but not specifically defined herein shall have the meanings ascribed to them in that certain Term Loan Credit and Security Agreement, dated as of October 21, 2016 (as amended, restated, supplemented or otherwise modified from time to time, the "Credit Agreement"), by and among the Company, the financial institutions from time to time party thereto (collectively, the "Lenders"), the Holder, as Agent for the Lenders, and the other parties thereto.

ARTICLE 1
EXERCISE

1.1 Conditions to Exercise.

(a) This Warrant shall be exercisable for 900,045 shares of the Company's Common Stock (subject to adjustment as provided herein) in whole or in part at any time on or after February 1, 2019 until the Expiration Date.

(b) The exercise price for each share of Common Stock receivable hereunder shall be thelower of (x) $2.40 (as adjusted per Article 2) and (y) as determined on February 1, 2019 the lowest of the 5-day volume-weighted average closing prices of the Company's common stock for the last 5 trading days in the months of September 2018, October 2018, November 2018, December 2018 and January 2019.

(c) To the extent that the Company has Paid in Full (as defined in the Credit Agreement) in cash all of the Obligations (as defined in the Credit Agreement) under the Credit Agreement on or prior to October 31, 2018, then Quantum shall have the right to buy back all or any portion of the Warrant, for a price of $.001 per share multiplied by the Shares issuable under the portion of the Warrant being repurchased, and the Warrant would only be exercisable for such reduced amount as of February 1, 2019 until the Expiration Date. In order to exercise such repurchase right (if applicable), the Company must have given notice to the Holder on or prior to December 31, 2018.

1.2 Method of Exercise. Holder may exercise any portion of this Warrant that is exercisable by delivering a duly completed and executed Notice of Exercise in substantially the form attached as Appendix 1 to the principal office of the Company. Unless Holder is exercising the cashless exercise right set forth in Section 1.3, Holder shall also deliver to the Company a check, wire transfer (to an account designated in writing by the Company), or other form of payment acceptable to the Company for the aggregate Warrant Price for the Shares being purchased.

1.3 Cashless Exercise Right. In lieu of exercising this Warrant as specified in Section 1.2, Holder may from time to time, in its sole discretion, exercise this Warrant in whole or in part as to the portion of the Warrant that is exercisable and, in lieu of making the cash payment otherwise contemplated to be made to the Company upon such exercise for the aggregate Warrant Price pursuant to Section 1.2, elect instead to receive upon such exercise the "net number" of shares of Common Stock determined according to the following formula (a "Cashless Exercise"):

$$X = \frac{Y (A - B)}{A}$$

Where:

X = The number of Shares to be issued to Holder

Y = The number of Shares being exercised under this Warrant or, if only a portion of the Warrant is being exercised, the portion of the Warrant being canceled (at the date of such calculation)

A = The fair market value of one Share (at the date of such calculation)

B = The Warrant Price per share (as adjusted to the date of such calculation)

1.4 Calculation of FMV. For purposes of the calculation above, the "fair market value" of one Share shall be the average for the five trading days immediately prior to the date of determination thereof of the last reported sale price regular way on each such day, or, in the case no such sale takes place on any such day, the average of the reported closing bid and asked prices regular way of the shares of Common Stock on such day, in each case as quoted on the New York Stock Exchange, as reported by Bloomberg Markets, or such other principal securities exchange or inter-dealer quotation system on which the shares of Common Stock are then traded.

1.5 Delivery of Shares and New Warrant. Within two (2) business days after Holder exercises this Warrant in the manner set forth in Section 1.2 or Section 1.3 above, the Company shall deliver to Holder the Shares so acquired, provided that such Shares shall be deemed delivered upon the Company's delivery of evidence of a book-entry or similar position through The Depository Trust & Closing Corporation or any other depository or similar functionary, credited to an account for the benefit of Holder. If this Warrant has not been fully exercised and has not expired, then unless otherwise set forth in the Notice of Exercise a new warrant representing the Shares not so acquired shall be issued to Holder.

1.6 Treatment of Warrant at Acquisition. In the event of an Acquisition, either (a) Holder shall exercise or convert this Warrant in full (or shall be deemed to so convert pursuant to the immediately following sentence) with respect to all remaining Shares for which the Warrant is then exercisable and such exercise or conversion will be deemed effective immediately prior to the consummation of such Acquisition or (b) if Holder elects in writing not to exercise or convert the Warrant, this Warrant will expire upon the consummation of such Acquisition. The Company shall provide Holder with written notice of the foregoing (together with such reasonable information as Holder may request in connection with such contemplated Acquisition giving rise to such notice), which is to be delivered to Holder not less than ten (10) days prior to the closing of the proposed Acquisition and, unless the Company receives a notice in writing from Holder that it elects to have the unexercised portion of the Warrant expire, then if the Acquisition involves a price per share of Common Stock that exceeds the Warrant Price the unexercised portion of the Warrant shall be deemed to be automatically exercised pursuant to Section 1.3 immediately prior to the Acquisition.

For purposes of this Warrant, "Acquisition" shall mean: (i) the acquisition of the Company by another entity by means of any transaction or series of related transactions to which the Company is a party (including, without limitation, any stock acquisition, reorganization, merger or consolidation, but excluding any sale of stock for capital raising purposes and any transaction effected primarily for purposes of changing the Company's jurisdiction of incorporation) other than a transaction or series of related transactions in which the holders of the voting securities of the Company outstanding immediately prior to such transaction or series of related transactions retain, immediately after such transaction or series of transactions, at least a majority of the total voting power represented by the outstanding voting securities of the Company or such other surviving or resulting entity (or if the Company or such other surviving or resulting entity is a wholly-owned subsidiary immediately following such acquisition, its parent), or (ii) a sale, lease or other disposition of all or substantially all of the assets of the Company and its subsidiaries taken as a whole by means of any transaction or series of related transactions, except where such sale, lease or other disposition is to a wholly-owned subsidiary or affiliate of the Company.

1.7 Replacement of Warrant. On receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of loss, theft or destruction of this Warrant, upon delivery of an indemnity agreement reasonably satisfactory in form, substance and amount to the Company or, in the case of mutilation, upon surrender and cancellation of this Warrant, the Company at its expense shall, within a reasonable period of time, execute and deliver to Holder, in lieu of this Warrant, a new warrant of like tenor and amount.

ARTICLE 2
ADJUSTMENTS TO THE SHARES AND NOTIFICATION OF CERTAIN EVENTS

2.1 Fractional Shares. No fractional Shares shall be issuable upon exercise of this Warrant and the number of Shares to be issued shall be rounded down to the nearest whole Share. If a fractional share interest arises upon any exercise of this Warrant, the Company shall eliminate such fractional share interest by paying Holder an amount computed by multiplying the fractional interest by the fair market value, calculated as provided in Section 1.4 above, of a full Share.

2.2 Adjustments. Subject to the expiration of this Warrant pursuant to Section 5.1, the number and kind of shares purchasable hereunder and the Warrant Price therefor are subject to adjustment from time to time, as follows:

2.2.1 Merger or Reorganization. If at any time there shall be any reorganization, recapitalization, merger or consolidation (a "Reorganization") involving the Company (other than an Acquisition which is subject to the provisions of Section 1.6) in which shares of the Company's stock are converted into or exchanged for securities, cash or other property, then, as a part of such Reorganization, lawful provision shall be made so that the Holder shall thereafter be entitled to receive upon exercise of this Warrant, the kind and amount of securities, cash or other property of the successor corporation resulting from such Reorganization, equivalent in value to that which a holder of the Shares deliverable upon exercise of this Warrant would have been entitled in such Reorganization if the right to purchase the Shares hereunder had been exercised immediately prior to such Reorganization. In any such case, appropriate adjustment (as determined in good faith by the Board of Directors of the successor corporation) shall be made in the application of the provisions of this Warrant with respect to the rights and interests of the Holder after such Reorganization to the end that the provisions of this Warrant shall be applicable after the event, as near as reasonably may be, in relation to any shares or other securities deliverable after that event upon the exercise of this Warrant.

2.2.2 Reclassification of Shares. If the securities issuable upon exercise of this Warrant are changed into the same or a different number of securities of any other class or classes by reclassification, capital reorganization or otherwise (other than as otherwise provided for herein) (a "Reclassification"), then, in any such event, in lieu of the number of Shares which the Holder would otherwise have been entitled to receive, the Holder shall have the right thereafter to exercise this Warrant for a number of shares of such other class or classes of stock that a holder of the number of securities deliverable upon exercise of this Warrant immediately before that change would have been entitled to receive in such Reclassification (at the same aggregate Warrant Price as would have applied prior to such Reclassification), all subject to further adjustment as provided herein with respect to such other shares.

2.2.3 Subdivisions and Combinations. In the event that the outstanding shares of the Company's Common Stock are subdivided (by stock split, by payment of a stock dividend or otherwise) into a greater number of shares of such securities, the number of Shares issuable upon exercise of the rights under this Warrant immediately prior to such subdivision shall, concurrently with the effectiveness of such subdivision, be proportionately increased, and the Warrant Price shall be proportionately decreased, and in the event that the outstanding shares of Common Stock are combined (by reclassification or otherwise) into a lesser number of shares of such securities, the number of Shares issuable upon exercise of the rights under this Warrant immediately prior to such combination shall, concurrently with the effectiveness of such combination, be proportionately decreased, and the Warrant Price shall be proportionately increased.

2.2.4 Adjustment of Warrant Price Upon Issuance of Additional Shares of Common Stock. If at any time or from time to time prior to February 1, 2019, the Company shall issue or sell any additional shares of Common Stock or Common Stock Equivalents for a consideration per share less than the fair market value (other than Exempt Issuances, which shall not result in adjustments pursuant to this Section 2.2.4) then, effective on the date specified below, the Warrant Price then in effect shall be reduced to a price (calculated to the nearest one-hundredth of a cent) determined in accordance with the following formula:

$$WP_2 = WP1 * (A + B) \div (A + C).$$

For purposes of the foregoing formula, the following definitions shall apply:

i) "WP_2" shall mean the Warrant Price in effect immediately after such issuance or deemed issuance of additional shares of Common Stock

ii) "WP_1" shall mean the Warrant Price in effect immediately prior to such issuance or deemed issuance of additional shares of Common Stock;

iii) "A" shall mean the number of shares of Common Stock Deemed Outstanding immediately prior to such issuance or deemed issuance of additional shares of Common Stock;

iv) "B" shall mean the number of shares of Common Stock Deemed Outstanding that would have been issued if such additional shares of Common Stock had been issued or deemed issued at a price per share equal to WP_1 (determined by dividing the aggregate consideration received by the Company in respect of such issue by WP_1); and

v) "C" shall mean the number of such additional shares of Common Stock issued in such transaction.

Upon each such adjustment of the Warrant Price hereunder, the number of Shares issuable upon exercise of this Warrant shall be adjusted to the number of shares of Common Stock determined by multiplying the Warrant Price in effect immediately prior to such adjustment by the number of Shares issuable upon exercise of this Warrant immediately prior to such adjustment and dividing the product thereof by the Warrant Price resulting from such adjustment.

"Exempt Issuances" means any issuance of additional shares of Common Stock or Common Stock Equivalents (a) for which an adjustment is otherwise provided under Section 2.2 hereof, (b) pursuant to the exercise of this Warrant (or any Warrant issued as a replacement for this Warrant or upon the transfer or partial exercise hereof) in whole or in part, (c) pursuant to the exercise of any Common Stock Equivalents outstanding on the date hereof, (d) pursuant to the issuance of Common Stock or Common Stock Equivalents granted or to be granted under an equity compensation plan approved by stockholders of the Company or (e) the issuance of shares of Common Stock or Common Stock Equivalents as consideration in connection with the acquisition of all or a controlling interest in another business (whether by merger, purchase of stock or assets or otherwise) if such issuance is approved by the board of directors of the Company.

"The "Common Stock Deemed Outstanding" means at any given time, the number of shares of Common Stock outstanding at such time, plus the number of shares of Common Stock issuable upon the conversion or exercise of Common Stock Equivalents then-outstanding regardless of whether such securities are actually exercisable at such time.

"Common Stock Equivalents" means evidences of indebtedness, shares of stock or other securities which are convertible into or exchangeable for, with or without payment of additional consideration, shares of Common Stock, either immediately or upon the arrival of a specified date or the happening of a specified event or both.

2.2.5 No Impairment. The Company shall not, by amendment of its charter documents or through any consolidation, merger, reorganization, transfer of assets, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of the Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the Holder against dilution or other impairment.

2.2.6 Notice of Adjustments. Upon any adjustment in accordance with this Section 2.2, the Company shall give notice thereof to the Holder, which notice shall state the event giving rise to the adjustment, the Warrant Price as adjusted and the number of securities or other property purchasable upon the exercise of the rights under this Warrant, setting forth in reasonable detail the method of calculation of each. The Company shall, upon the written request of any Holder, furnish or cause to be furnished to such Holder a certificate setting forth (i) such adjustments, (ii) the Warrant Price at the time in effect and (iii) the number of securities and the amount, if any, of other property that at the time would be received upon exercise of this Warrant.

2.3 Notification of Certain Events. Prior to the Expiration Date, in the event that the Company shall authorize:

2.3.1 the issuance of any dividend or other distribution on the capital stock of the Company (other than (i) dividends or distributions otherwise provided for in Section 2.2.3, or (ii) any repurchases of the Company's Common Stock), whether in cash, property, stock or other securities; or

2.3.2 the voluntary liquidation, dissolution or winding up of the Company,

the Company shall send to the Holder at least ten (10) days prior written notice of the date on which a record shall be taken for any such dividend or distribution specified in clause 2.3.1 or the expected effective date of any such other event specified in clause 2.3.2. The notice provisions set forth in this section may be shortened or waived prospectively or retrospectively by the consent of the Holder.

ARTICLE 3
REPRESENTATIONS AND COVENANTS OF THE COMPANY

3.1 Representations and Warranties. The Company hereby represents and warrants to Holder that all Shares which may be issued upon the exercise of the purchase right represented by this Warrant shall, upon issuance, be duly authorized, validly issued, fully paid and non-assessable, and free of any liens and encumbrances except for restrictions on transfer provided for herein or under applicable federal and state securities laws.

3.2 Reservation of Stock. The Company hereby represents and warrants to Holder that sufficient shares of the Company's Common Stock have been reserved and are available for issuance from its authorized and unissued shares of Common Stock for the purpose of effecting the exercise of this Warrant, and such shares will remain available at all times until the date this Warrant has been exercised in full or, if earlier, the Expiration Date.

3.3 Capitalization. Immediately prior to the issuance of this Warrant, the Company has 35,551,570 shares of Common Stock issued and outstanding, and 2,267,660 shares of Common Stock receivable under options, warrants and convertible securities of the Company.

ARTICLE 4
INVESTMENT REPRESENTATIONS AND COVENANTS OF HOLDER

With respect to the acquisition of this Warrant and any of the Shares, Holder hereby represents and warrants to, and agrees with, the Company as follows:

4.1 Purchase Entirely for Own Account. This Warrant is issued to Holder in reliance upon Holder's representation to the Company that this Warrant and the Shares will be acquired for investment for Holder's own account, not as a nominee or agent, and not with a view to the resale or distribution of any part thereof other than to an affiliate, and that Holder has no present intention of selling, granting any participation in, or otherwise distributing the same other than to an affiliate. By executing this Warrant, Holder further represents that Holder does not have any contract, undertaking, agreement or arrangement with any person, other than an affiliate, to sell, transfer or grant participations to such person or to any third person with respect to any of the Shares.

4.2 Reliance upon Holder's Representations. Subject to Section 5.12, Holder understands that this Warrant and the Shares are not registered under the Act on the ground that the issuance of such securities is exempt from registration under the Act, and that the Company's reliance on such exemption is predicated on Holder's representations set forth herein.

4.3 Accredited Investor Status. Holder represents to the Company that Holder is an Accredited Investor (as defined in the Act).

4.4 Restricted Securities. Holder understands that this Warrant and the Shares are "restricted securities" under the federal securities laws inasmuch as they are being acquired from the Company in a transaction not involving a public offering and that under such federal securities laws and applicable regulations such securities may be resold without registration under the Act only in certain limited circumstances.

4.5 Restrictions on Sale. Notwithstanding anything to the contrary contained herein, Holder agrees that Holder, together with its affiliates will not sell on any one trading day more than 50,000 Shares obtained from the exercise of this Warrant or other warrants issued on the same issuance date as this Warrant without the prior written consent of the Company.

ARTICLE 5
MISCELLANEOUS

5.1 Term; Exercise Upon Expiration. Subject to the terms of this Warrant, including Sections 1.1 and 1.6, this Warrant is exercisable in whole or in part, at any time and from time to time on or before the Expiration Date set forth above. The Company agrees that Holder may terminate this Warrant, upon written notice to the Company, at any time in its sole discretion.

5.2 Legends. This Warrant and the Shares shall be imprinted with a legend in substantially the following form:

> THIS WARRANT AND THE SHARES ISSUABLE HEREUNDER HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR ANY APPLICABLE STATE SECURITIES LAWS, AND, EXCEPT AND PURSUANT TO THE PROVISIONS OF ARTICLE 5 BELOW, MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED WITHOUT AN EFFECTIVE REGISTRATION THEREOF UNDER THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS, OR PURSUANT TO RULE 144 OR AN EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS.

5.3 Compliance with Securities Laws on Transfer. Without limitation of Section 5.12, this Warrant and the Shares issuable upon exercise of this Warrant may not be transferred or assigned in whole or in part without (i) compliance with applicable federal and state securities laws by the transferor and the transferee, and (ii) if requested by Company, an opinion of counsel, reasonably satisfactory to Company, to the effect that such transfer or assignment is in compliance with applicable federal and state securities laws. The Company may issue stop transfer instructions to its transfer agent in connection with the restrictions in this Section 5.3.

5.4 Transfer Procedure. Subject to the provisions of Section 5.3, Holder may transfer all or part of this Warrant to its affiliates, and such affiliate shall then be entitled to all the rights and bound by all of the obligations of Holder under this Warrant and any related agreements, and the Company shall cooperate fully in ensuring that any stock issued upon exercise of this Warrant is issued in the name of the affiliate that exercises this Warrant. The terms and conditions of this Warrant shall inure to the benefit of, and be binding upon, the Company and the holder hereof and its respective permitted successors and assigns. Any transferee shall be bound by the obligations and restrictions of this Warrant as if such transferee was the original holder hereof.

5.5 Notices. All notices and other communications from the Company to Holder, or vice versa, shall be deemed delivered and effective when given personally or mailed by first-class registered or certified mail, postage prepaid, or sent via a nationally recognized overnight courier service, fee prepaid, or on the first business day after transmission by electronic mail, at such address or electronic mail address as may have been furnished to the Company or Holder, as the case may be, in writing by the Company or such Holder from time to time. Effective upon the receipt of the executed Warrant, all notices to Holder shall be addressed as follows until the Company receives notice of a change of address in connection with a transfer or otherwise:

TCW Direct Lending, LLC
Attn: Mark Gertzof
227 West Monroe Street, Suite 3225
Chicago, IL 60606
E-mail: mark.gertzof@tcw.com

All notices to the Company shall be addressed as follows:

Quantum Corporation
Attn: Shawn Hall
224 Airport Parkway, Suite 550
San Jose, CA 95510
E-mail: shawn.hall@quantum.com

5.6 Amendments; Waiver. This Warrant and any term hereof may be amended, changed, waived, discharged or terminated only by an instrument in writing signed by the party against which enforcement of such amendment, change, waiver, discharge or termination is sought.

5.7 Attorneys' Fees. In the event of any dispute between the parties concerning the terms and provisions of this Warrant, the party prevailing in such dispute shall be entitled to collect from the other party all costs reasonably incurred in such dispute, including reasonable and documented attorneys' fees.

5.8 Governing Law. This Warrant shall be governed by and construed in accordance with the laws of the State of California, without giving effect to its principles regarding conflicts of law.

5.9 Public Disclosure. The Company shall file a copy of this Warrant with the U.S. Securities and Exchange Commission ("SEC"), within the time periods required by applicable SEC rules and regulations, in order to comply with its obligations under federal securities laws.

5.10 Rights as a Stockholder. No holder of this Warrant, as such, shall be entitled to vote or receive dividends or be deemed the holder of Shares or any other securities of the Company which may at any time be issuable upon the exercise hereof for any purpose, nor shall anything contained herein be construed to confer upon Holder, as such, any of the rights of a stockholder of the Company or any right to vote for the election of directors or upon any matter submitted to stockholders at any meeting thereof, or to receive notice of meetings, or to receive dividends or subscription rights or otherwise until this Warrant shall have been exercised as provided herein.

5.11 Counterparts; Signatures. This Warrant may be executed in counterparts, all of which together shall constitute one and the same agreement. Any signature page delivered electronically or by facsimile shall be binding to the same extent as an original signature page with regards to any agreement subject to the terms hereof or any amendment thereto.

5.12 Registration Rights.

(a) If, at any time after February 1, 2019 where the Holder is not (upon reasonable advice of counsel) entitled to sell Shares obtained pursuant to this Warrant under Rule 144(b)(1) as a non-affiliate, the Holder will have the right to demand up to two (2) public registrations covering such Shares. Following a written request from the Holder, the Company will use its commercially reasonable efforts to expeditiously effect (but in any event no later than sixty (60) days after such request) the registration of such Person's interest in the Warrant and/or Shares whose holders request participation in such registration under the Securities Act. The Company may not include any other securities in any registration effected pursuant to this Section 5.12(a) (other than additional Shares obtained through the Warrant or under warrants issued to the Holder or its affiliates) without the prior written consent of the Holder. Notwithstanding the foregoing, to the extent that the Company is not eligible to register shares on a Form S-3 at a given time then the obligations of the Company to file new registration statements for the Holder under this Section 5.12(a) shall be suspended; provided that (x) the Company agrees to promptly comply with this Section 5.12(a) following any correction of matters leading to such S-3 ineligibility and (y) to the extent that the Company grants registration rights following the date of this Warrant to any person or entity that does not have similar suspension of obligations or otherwise grants more favorable rights, then the Holder shall be deemed to get the benefit of such more favorable rights and the suspension of obligations set forth in this sentence shall not apply. For the avoidance of doubt, in no event will a registration effected pursuant to this Section 5.12(a) be an underwritten public offering.

(b) If, at any time and from time to time, the Company proposes to register any of its shares of Common Stock under the Securities Act in connection with an underwritten public offering of such shares of Common Stock, then the Company will promptly give notice to the Holder of its intention to do so. Upon the request of the Holder received within ten (10) days after receipt of any such notice from the Company, the Company will cause the Holder's interest in the Shares to be registered under the Securities Act and registered or qualified, as the case may be, under any state securities laws; provided, however, that the obligation to give such notice and to cause such registration shall not apply to any registration (a) on Form S-8 (or any successor form), (b) of solely a dividend reinvestment plan or (c) for the sole purpose of offering registered securities to another Person in connection with the acquisition of assets or capital stock of such Person or in connection with a merger, consolidation, combination or similar transaction with such Person. In connection with any underwritten offering of securities on behalf of the Company or any other holders of the Company's capital stock, the Company is not required to include any interest in the Warrant or Shares held by the Holder unless the Holder agrees to the reasonable and customary terms of the underwriting; provided, however, that the total indemnification or other liability of the Holder thereunder shall be limited to the aggregate net cash proceeds received by the Holder from the sale of the Holder's interest in the Shares in such offering. The Company will include in any registration effected pursuant to this Section 5.12(b) (i) first, securities offered to be sold by the Company and by any holder of demand registration rights that is exercising such rights in connection with such registration, (ii) second, any interest in the Shares of the Holder requesting piggyback registration rights hereunder, in each case pro rata based on the number of Shares issued or issuable under the Warrant thereby (in such quantity as will not, in the written opinion of the underwriters, jeopardize the success of the offering), and (iii) third, any other securities requested to be included in such registration (in such quantity as will not, in the written opinion of the underwriters, jeopardize the success of the offering).

(c) The Company will pay all Registration Expenses in connection with all registrations (which, for purposes of this Section 5.12, shall include any qualifications, notifications and exemptions) under this Section 5.12. "Registration Expenses" means all expenses incident to the Company's performance of or compliance with Section 5.12, including, without limitation, all registration and filing fees (including fees of the SEC a national stock exchange or national securities market), all fees and expenses of complying with state securities or blue sky laws, all word processing, duplicating and printing expenses, messenger and delivery expenses, the fees and disbursements of counsel for the Company and of its independent public accountants, including the expenses of any special audits or "cold comfort" letters in underwritten offerings required by or incident to such performance and compliance, the reasonable fees and disbursements of the Holder's counsel not to exceed $20,000 for any registration statement and any fees and disbursements of underwriters customarily paid by issuers or sellers of securities, but excluding underwriting discounts and commissions and transfer taxes, if any.

[signature on following page]

QUANTUM CORPORATION

By: /s/ J. Michael Dodson
Name: J. Michael Dodson
Title: CFO

Accepted and Agreed:

TCW DIRECT LENDING, LLC

By: /s/ Mark Gertzof
Name: Mark Gertzof
Title: Authorized Officer

APPENDIX I

NOTICE OF EXERCISE

Reference is made to that certain Warrant to Purchase Stock, dated September 30, 2018, issued by Quantum Corporation to [HOLDER] (the "Warrant").

1. The undersigned hereby elects to purchase _____ shares of the Common Stock of Quantum Corporation pursuant to the terms of the Warrant. **[As the Warrant is not fully exercised and has not expired, the Company will issue to Holder a new warrant representing the Shares not acquired. -IF APPLICABLE AND IF THE ELECTION NOT TO RECEIVE A NEW WARRANT DESCRIBED IN THE FIRST SENTENCE OF PARAGRAPH 3 DOES NOT APPLY]**

2. [**IF APPLICABLE—The undersigned elects to make a Cashless Exercise (as such term is defined in the Warrant) in the manner detailed in Section 1.3 of the Warrant.]**

3. **[The Warrant shall remain in full force and effect with respect to any Shares that remain exercisable under the Warrant following the exercise evidenced by this Notice of Exercise. —IF APPLICABLE AND IF THE ELECTION TO RECEIVE A NEW WARRANT DESCRIBED IN THE LAST SENTENCE OF PARAGRAPH 1 DOES NOT APPLY.]** The Warrant shall **[also]** apply to the shares receivable pursuant to this Notice of Exercise to the extent expressly set forth in the provisions of the Warrant.

4. Please issue the shares receivable pursuant to this Notice of Exercise **[(taking into account the Cashless Exercise)]** in the name of the undersigned; payment for any fractional shares owed pursuant to Section 2.1 of the Warrant should also be paid to the undersigned.

5. The undersigned represents it is acquiring the shares solely for its own account and not as a nominee for any other party and not with a view toward the resale or distribution thereof except in compliance with applicable securities laws.

[HOLDER]

_____

(Signature)

_____

(Name and Title)

Dated: _____, 20__

THIS WARRANT AND THE SHARES ISSUABLE HEREUNDER HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"). OR ANY APPLICABLE STATE SECURITIES LAWS, AND, EXCEPT AND PURSUANT TO THE PROVISIONS OF ARTICLE 5 BELOW, MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED WITHOUT AN EFFECTIVE REGISTRATION THEREOF UNDER THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS, OR PURSUANT TO RULE 144 OR AN EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS.

WARRANT TO PURCHASE STOCK

Company:	QUANTUM CORPORATION, a Delaware corporation
Number of Shares	900,045 shares
Class of Stock:	Common Stock
Warrant Price:	$2.39 per share, subject to adjustment per Section 1.1(b) or Article 2
Issue Date:	October 31, 2018
Expiration Date:	October 31, 2023

THIS WARRANT TO PURCHASE STOCK (THIS "WARRANT") CERTIFIES THAT, for good and valuable consideration, the receipt of which is hereby acknowledged, TCW Direct Lending, LLC is entitled to purchase the number of fully paid and non-assessable shares of the class of securities (the "Shares") of QUANTUM CORPORATION (the "Company") at the Warrant Price, all as set forth above and as adjusted pursuant to the terms of this Warrant, subject to the provisions and upon the terms and conditions set forth in this Warrant. Capitalized terms used herein but not specifically defined herein shall have the meanings ascribed to them in that certain Term Loan Credit and Security Agreement, dated as of October 21, 2016 (as amended, restated, supplemented or otherwise modified from time to time, the "Credit Agreement"), by and among the Company, the financial institutions from time to time party thereto (collectively, the "Lenders"), the Holder, as Agent for the Lenders, and the other parties thereto.

ARTICLE 1
EXERCISE

1.1 Conditions to Exercise.

(a) This Warrant shall be exercisable for 900,045 shares of the Company's Common Stock (subject to adjustment as provided herein) in whole or in part at any time on or after February 1, 2019 until the Expiration Date.

(b) The exercise price for each share of Common Stock receivable hereunder shall be thelower of (x) $2.39 (as adjusted per Article 2) and (y) as determined on February 1, 2019 the lowest of the 5-day volume-weighted average closing prices of the Company's common stock for the last 5 trading days in the months of October 2018, November 2018, December 2018 and January 2019.

(c) To the extent that the Company has Paid in Full (as defined in the Credit Agreement) in cash all of the Obligations (as defined in the Credit Agreement) under the Credit Agreement on or prior to November 30, 2018, then Quantum shall have the right to buy back up to fifty percent (50%) of this Warrant, for a price of $.001 per share multiplied by the Shares issuable under the portion of the Warrant being repurchased, and the Warrant would only be exercisable for such reduced amount as of February 1, 2019 until the Expiration Date. In order to exercise such repurchase right (if applicable), the Company must have given notice to the Holder on or prior to December 31, 2018.

1.2 Method of Exercise. Holder may exercise any portion of this Warrant that is exercisable by delivering a duly completed and executed Notice of Exercise in substantially the form attached as Appendix I to the principal office of the Company. Unless Holder is exercising the cashless exercise right set forth in Section 1.3, Holder shall also deliver to the Company a check, wire transfer (to an account designated in writing by the Company), or other form of payment acceptable to the Company for the aggregate Warrant Price for the Shares being purchased.

1.3 Cashless Exercise Right. In lieu of exercising this Warrant as specified in Section 1.2, Holder may from time to time, in its sole discretion, exercise this Warrant in whole or in part as to the portion of the Warrant that is exercisable and, in lieu of making the cash payment otherwise contemplated to be made to the Company upon such exercise for the aggregate Warrant Price pursuant to Section 1.2, elect instead to receive upon such exercise the "net number" of shares of Common Stock determined according to the following formula (a "Cashless Exercise"):

$$X = \frac{Y (A - B)}{A}$$

Where:

X = The number of Shares to be issued to Holder

Y = The number of Shares being exercised under this Warrant or, if only a portion of the Warrant is being exercised, the portion of the Warrant being canceled (at the date of such calculation)

A = The fair market value of one Share (at the date of such calculation)

B = The Warrant Price per share (as adjusted to the date of such calculation)

1.4 Calculation of FMV. For purposes of the calculation above, the "fair market value" of one Share shall be the average for the five trading days immediately prior to the date of determination thereof of the last reported sale price regular way on each such day, or, in the case no such sale takes place on any such day, the average of the reported closing bid and asked prices regular way of the shares of Common Stock on such day, in each case as quoted on the New York Stock Exchange, as reported by Bloomberg Markets, or such other principal securities exchange or inter-dealer quotation system on which the shares of Common Stock are then traded.

1.5 Delivery of Shares and New Warrant. Within two (2) business days after Holder exercises this Warrant in the manner set forth in Section 1.2 or Section 1.3 above, the Company shall deliver to Holder the Shares so acquired, provided that such Shares shall be deemed delivered upon the Company's delivery of evidence of a book-entry or similar position through The Depository Trust & Closing Corporation or any other depository or similar functionary, credited to an account for the benefit of Holder. If this Warrant has not been fully exercised and has not expired, then unless otherwise set forth in the Notice of Exercise a new warrant representing the Shares not so acquired shall be issued to Holder.

1.6 Treatment of Warrant at Acquisition. In the event of an Acquisition, either (a) Holder shall exercise or convert this Warrant in full (or shall be deemed to so convert pursuant to the immediately following sentence) with respect to all remaining Shares for which the Warrant is then exercisable and such exercise or conversion will be deemed effective immediately prior to the consummation of such Acquisition or (b) if Holder elects in writing not to exercise or convert the Warrant, this Warrant will expire upon the consummation of such Acquisition. The Company shall provide Holder with written notice of the foregoing (together with such reasonable information as Holder may request in connection with such contemplated Acquisition giving rise to such notice), which is to be delivered to Holder not less than ten (10) days prior to the closing of the proposed Acquisition and, unless the Company receives a notice in writing from Holder that it elects to have the unexercised portion of the Warrant expire, then if the Acquisition involves a price per share of Common Stock that exceeds the Warrant Price the unexercised portion of the Warrant shall be deemed to be automatically exercised pursuant to Section 1.3 immediately prior to the Acquisition.

For purposes of this Warrant, "Acquisition" shall mean: (i) the acquisition of the Company by another entity by means of any transaction or series of related transactions to which the Company is a party (including, without limitation, any stock acquisition, reorganization, merger or consolidation, but excluding any sale of stock for capital raising purposes and any transaction effected primarily for purposes of changing the Company's jurisdiction of incorporation) other than a transaction or series of related transactions in which the holders of the voting securities of the Company outstanding immediately prior to such transaction or series of related transactions retain, immediately after such transaction or series of transactions, at least a majority of the total voting power represented by the outstanding voting securities of the Company or such other surviving or resulting entity (or if the Company or such other surviving or resulting entity is a wholly-owned subsidiary immediately following such acquisition, its parent), or (ii) a sale, lease or other disposition of all or substantially all of the assets of the Company and its subsidiaries taken as a whole by means of any transaction or series of related transactions, except where such sale, lease or other disposition is to a wholly-owned subsidiary or affiliate of the Company.

1.7 Replacement of Warrant. On receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of loss, theft or destruction of this Warrant, upon delivery of an indemnity agreement reasonably satisfactory in form, substance and amount to the Company or, in the case of mutilation, upon surrender and cancellation of this Warrant, the Company at its expense shall, within a reasonable period of time, execute and deliver to Holder, in lieu of this Warrant, a new warrant of like tenor and amount.

ARTICLE 2
ADJUSTMENTS TO THE SHARES AND NOTIFICATION OF CERTAIN EVENTS

2.1 Fractional Shares. No fractional Shares shall be issuable upon exercise of this Warrant and the number of Shares to be issued shall be rounded down to the nearest whole Share. If a fractional share interest arises upon any exercise of this Warrant, the Company shall eliminate such fractional share interest by paying Holder an amount computed by multiplying the fractional interest by the fair market value, calculated as provided in Section 1.4 above, of a full Share.

2.2 Adjustments. Subject to the expiration of this Warrant pursuant to Section 5.1, the number and kind of shares purchasable hereunder and the Warrant Price therefor are subject to adjustment from time to time, as follows:

2.2.1 Merger or Reorganization. If at any time there shall be any reorganization, recapitalization, merger or consolidation (a "Reorganization") involving the Company (other than an Acquisition which is subject to the provisions of Section 1.6) in which shares of the Company's stock are converted into or exchanged for securities, cash or other property, then, as a part of such Reorganization, lawful provision shall be made so that the Holder shall thereafter be entitled to receive upon exercise of this Warrant, the kind and amount of securities, cash or other property of the successor corporation resulting from such Reorganization, equivalent in value to that which a holder of the Shares deliverable upon exercise of this Warrant would have been entitled in such Reorganization if the right to purchase the Shares hereunder had been exercised immediately prior to such Reorganization. In any such case, appropriate adjustment (as determined in good faith by the Board of Directors of the successor corporation) shall be made in the application of the provisions of this Warrant with respect to the rights and interests of the Holder after such Reorganization to the end that the provisions of this Warrant shall be applicable after the event, as near as reasonably may be, in relation to any shares or other securities deliverable after that event upon the exercise of this Warrant.

2.2.2 Reclassification of Shares. If the securities issuable upon exercise of this Warrant are changed into the same or a different number of securities of any other class or classes by reclassification, capital reorganization or otherwise (other than as otherwise provided for herein) (a "Reclassification"), then, in any such event, in lieu of the number of Shares which the Holder would otherwise have been entitled to receive, the Holder shall have the right thereafter to exercise this Warrant for a number of shares of such other class or classes of stock that a holder of the number of securities deliverable upon exercise of this Warrant immediately before that change would have been entitled to receive in such Reclassification (at the same aggregate Warrant Price as would have applied prior to such Reclassification), all subject to further adjustment as provided herein with respect to such other shares.

2.2.3 Subdivisions and Combinations. In the event that the outstanding shares of the Company's Common Stock are subdivided (by stock split, by payment of a stock dividend or otherwise) into a greater number of shares of such securities, the number of Shares issuable upon exercise of the rights under this Warrant immediately prior to such subdivision shall, concurrently with the effectiveness of such subdivision, be proportionately increased, and the Warrant Price shall be proportionately decreased, and in the event that the outstanding shares of Common Stock are combined (by reclassification or otherwise) into a lesser number of shares of such securities, the number of Shares issuable upon exercise of the rights under this Warrant immediately prior to such combination shall, concurrently with the effectiveness of such combination, be proportionately decreased, and the Warrant Price shall be proportionately increased.

2.2.4 Adjustment of Warrant Price Upon Issuance of Additional Shares of Common Stock. If at any time or from time to time prior to February 1, 2019, the Company shall issue or sell any additional shares of Common Stock or Common Stock Equivalents for a consideration per share less than the fair market value (other than Exempt Issuances, which shall not result in adjustments pursuant to this Section 2.2.4) then, effective on the date specified below, the Warrant Price then in effect shall be reduced to a price (calculated to the nearest one-hundredth of a cent) determined in accordance with the following formula:

$$WP_2 = WP_1 * (A + B) \div (A + C).$$

For purposes of the foregoing formula, the following definitions shall apply:

i) "WP_2" shall mean the Warrant Price in effect immediately after such issuance or deemed issuance of additional shares of Common Stock

ii) "WP_1" shall mean the Warrant Price in effect immediately prior to such issuance or deemed issuance of additional shares of Common Stock;

iii) "A" shall mean the number of shares of Common Stock Deemed Outstanding immediately prior to such issuance or deemed issuance of additional shares of Common Stock;

iv) "B" shall mean the number of shares of Common Stock Deemed Outstanding that would have been issued if such additional shares of Common Stock had been issued or deemed issued at a price per share equal to WP_1 (determined by dividing the aggregate consideration received by the Company in respect of such issue by WP_1); and

v) "C" shall mean the number of such additional shares of Common Stock issued in such transaction.

Upon each such adjustment of the Warrant Price hereunder, the number of Shares issuable upon exercise of this Warrant shall be adjusted to the number of shares of Common Stock determined by multiplying the Warrant Price in effect immediately prior to such adjustment by the number of Shares issuable upon exercise of this Warrant immediately prior to such adjustment and dividing the product thereof by the Warrant Price resulting from such adjustment.

"Exempt Issuances" means any issuance of additional shares of Common Stock or Common Stock Equivalents (a) for which an adjustment is otherwise provided under Section 2.2 hereof, (b) pursuant to the exercise of this Warrant (or any Warrant issued as a replacement for this Warrant or upon the transfer or partial exercise hereof) in whole or in part, (c) pursuant to the exercise of any Common Stock Equivalents outstanding on the date hereof, (d) pursuant to the issuance of Common Stock or Common Stock Equivalents granted or to be granted under an equity compensation plan approved by stockholders of the Company or (e) the issuance of shares of Common Stock or Common Stock Equivalents as consideration in connection with the acquisition of all or a controlling interest in another business (whether by merger, purchase of stock or assets or otherwise) if such issuance is approved by the board of directors of the Company.

"The "Common Stock Deemed Outstanding" means at any given time, the number of shares of Common Stock outstanding at such time, plus the number of shares of Common Stock issuable upon the conversion or exercise of Common Stock Equivalents then-outstanding regardless of whether such securities are actually exercisable at such time.

"Common Stock Equivalents" means evidences of indebtedness, shares of stock or other securities which are convertible into or exchangeable for, with or without payment of additional consideration, shares of Common Stock, either immediately or upon the arrival of a specified date or the happening of a specified event or both.

2.2.5 No Impairment. The Company shall not, by amendment of its charter documents or through any consolidation, merger, reorganization, transfer of assets, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of the Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the Holder against dilution or other impairment.

2.2.6 Notice of Adjustments. Upon any adjustment in accordance with this Section 2.2, the Company shall give notice thereof to the Holder, which notice shall state the event giving rise to the adjustment, the Warrant Price as adjusted and the number of securities or other property purchasable upon the exercise of the rights under this Warrant, setting forth in reasonable detail the method of calculation of each. The Company shall, upon the written request of any Holder, furnish or cause to be furnished to such Holder a certificate setting forth (i) such adjustments, (ii) the Warrant Price at the time in effect and (iii) the number of securities and the amount, if any, of other property that at the time would be received upon exercise of this Warrant.

2.3 Notification of Certain Events. Prior to the Expiration Date, in the event that the Company shall authorize:

2.3.1 the issuance of any dividend or other distribution on the capital stock of the Company (other than (i) dividends or distributions otherwise provided for in Section 2.2.3, or (ii) any repurchases of the Company's Common Stock), whether in cash, property, stock or other securities; or

2.3.2 the voluntary liquidation, dissolution or winding up of the Company,

the Company shall send to the Holder at least ten (10) days prior written notice of the date on which a record shall be taken for any such dividend or distribution specified in clause 2.3.1 or the expected effective date of any such other event specified in clause 2.3.2. The notice provisions set forth in this section may be shortened or waived prospectively or retrospectively by the consent of the Holder.

ARTICLE 3
REPRESENTATIONS AND COVENANTS OF THE COMPANY

3.1 Representations and Warranties. The Company hereby represents and warrants to Holder that all Shares which may be issued upon the exercise of the purchase right represented by this Warrant shall, upon issuance, be duly authorized, validly issued, fully paid and non-assessable, and free of any liens and encumbrances except for restrictions on transfer provided for herein or under applicable federal and state securities laws.

3.2 Reservation of Stock. The Company hereby represents and warrants to Holder that sufficient shares of the Company's Common Stock have been reserved and are available for issuance from its authorized and unissued shares of Common Stock for the purpose of effecting the exercise of this Warrant, and such shares will remain available at all times until the date this Warrant has been exercised in full or, if earlier, the Expiration Date.

3.3 Capitalization. Immediately prior to the issuance of this Warrant, the Company has 35,551,570 shares of Common Stock issued and outstanding, and 3,367,193 shares of Common Stock receivable under options, warrants and convertible securities of the Company.

ARTICLE 4
INVESTMENT REPRESENTATIONS AND COVENANTS OF HOLDER

With respect to the acquisition of this Warrant and any of the Shares, Holder hereby represents and warrants to, and agrees with, the Company as follows:

4.1 Purchase Entirely for Own Account. This Warrant is issued to Holder in reliance upon Holder's representation to the Company that this Warrant and the Shares will be acquired for investment for Holder's own account, not as a nominee or agent, and not with a view to the resale or distribution of any part thereof other than to an affiliate, and that Holder has no present intention of selling, granting any participation in, or otherwise distributing the same other than to an affiliate. By executing this Warrant, Holder further represents that Holder does not have any contract, undertaking, agreement or arrangement with any person, other than an affiliate, to sell, transfer or grant participations to such person or to any third person with respect to any of the Shares.

4.2 Reliance upon Holder's Representations. Subject to Section 5.12, Holder understands that this Warrant and the Shares are not registered under the Act on the ground that the issuance of such securities is exempt from registration under the Act, and that the Company's reliance on such exemption is predicated on Holder's representations set forth herein.

4.3 Accredited Investor Status. Holder represents to the Company that Holder is an Accredited Investor (as defined in the Act).

4.4 Restricted Securities. Holder understands that this Warrant and the Shares are "restricted securities" under the federal securities laws inasmuch as they are being acquired from the Company in a transaction not involving a public offering and that under such federal securities laws and applicable regulations such securities may be resold without registration under the Act only in certain limited circumstances.

4.5 Restrictions on Sale. Notwithstanding anything to the contrary contained herein, Holder agrees that Holder, together with its affiliates will not sell on any one trading day more than 50,000 Shares obtained from the exercise of this Warrant or other warrants issued on the same issuance date as this Warrant without the prior written consent of the Company.

ARTICLE 5
MISCELLANEOUS

5.1 Term; Exercise Upon Expiration. Subject to the terms of this Warrant, including Sections 1.1 and 1.6, this Warrant is exercisable in whole or in part, at any time and from time to time on or before the Expiration Date set forth above. The Company agrees that Holder may terminate this Warrant, upon written notice to the Company, at any time in its sole discretion.

5.2 Legends. This Warrant and the Shares shall be imprinted with a legend in substantially the following form:

> THIS WARRANT AND THE SHARES ISSUABLE HEREUNDER HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR ANY APPLICABLE STATE SECURITIES LAWS, AND, EXCEPT AND PURSUANT TO THE PROVISIONS OF ARTICLE 5 BELOW, MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED WITHOUT AN EFFECTIVE REGISTRATION THEREOF UNDER THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS, OR PURSUANT TO RULE 144 OR AN EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS.

5.3 Compliance with Securities Laws on Transfer. Without limitation of Section 5.12, this Warrant and the Shares issuable upon exercise of this Warrant may not be transferred or assigned in whole or in part without (i) compliance with applicable federal and state securities laws by the transferor and the transferee, and (ii) if requested by Company, an opinion of counsel, reasonably satisfactory to Company, to the effect that such transfer or assignment is in compliance with applicable federal and state securities laws. The Company may issue stop transfer instructions to its transfer agent in connection with the restrictions in this Section 5.3.

5.4 Transfer Procedure. Subject to the provisions of Section 5.3, Holder may transfer all or part of this Warrant to its affiliates, and such affiliate shall then be entitled to all the rights and bound by all of the obligations of Holder under this Warrant and any related agreements, and the Company shall cooperate fully in ensuring that any stock issued upon exercise of this Warrant is issued in the name of the affiliate that exercises this Warrant. The terms and conditions of this Warrant shall inure to the benefit of, and be binding upon, the Company and the holder hereof and its respective permitted successors and assigns. Any transferee shall be bound by the obligations and restrictions of this Warrant as if such transferee was the original holder hereof.

5.5 Notices. All notices and other communications from the Company to Holder, or vice versa, shall be deemed delivered and effective when given personally or mailed by first-class registered or certified mail, postage prepaid, or sent via a nationally recognized overnight courier service, fee prepaid, or on the first business day after transmission by electronic mail, at such address or electronic mail address as may have been furnished to the Company or Holder, as the case may be, in writing by the Company or such Holder from time to time. Effective upon the receipt of the executed Warrant, all notices to Holder shall be addressed as follows until the Company receives notice of a change of address in connection with a transfer or otherwise:

TCW Direct Lending, LLC
Attn: Mark Gertzof
227 West Monroe Street, Suite 3225
Chicago, IL 60606
E-mail: mark.gertzof@tcw.com

All notices to the Company shall be addressed as follows:

Quantum Corporation
Attn: Shawn Hall
224 Airport Parkway, Suite 550
San Jose, CA 95510
E-mail: shawn.hall@quantum.com

5.6 Amendments; Waiver. This Warrant and any term hereof may be amended, changed, waived, discharged or terminated only by an instrument in writing signed by the party against which enforcement of such amendment, change, waiver, discharge or termination is sought.

5.7 Attorneys' Fees. In the event of any dispute between the parties concerning the terms and provisions of this Warrant, the party prevailing in such dispute shall be entitled to collect from the other party all costs reasonably incurred in such dispute, including reasonable and documented attorneys' fees.

5.8 Governing Law. This Warrant shall be governed by and construed in accordance with the laws of the State of California, without giving effect to its principles regarding conflicts of law.

5.9 Public Disclosure. The Company shall file a copy of this Warrant with the U.S. Securities and Exchange Commission ("SEC"), within the time periods required by applicable SEC rules and regulations, in order to comply with its obligations under federal securities laws.

5.10 Rights as a Stockholder. No holder of this Warrant, as such, shall be entitled to vote or receive dividends or be deemed the holder of Shares or any other securities of the Company which may at any time be issuable upon the exercise hereof for any purpose, nor shall anything contained herein be construed to confer upon Holder, as such, any of the rights of a stockholder of the Company or any right to vote for the election of directors or upon any matter submitted to stockholders at any meeting thereof, or to receive notice of meetings, or to receive dividends or subscription rights or otherwise until this Warrant shall have been exercised as provided herein.

5.11 Counterparts; Signatures. This Warrant may be executed in counterparts, all of which together shall constitute one and the same agreement. Any signature page delivered electronically or by facsimile shall be binding to the same extent as an original signature page with regards to any agreement subject to the terms hereof or any amendment thereto.

5.12 Registration Rights.

(a) If, at any time after February 1, 2019 where the Holder is not (upon reasonable advice of counsel) entitled to sell Shares obtained pursuant to this Warrant under Rule 144(b)(1) as a non-affiliate, the Holder will have the right to demand up to two (2) public registrations covering such Shares. Following a written request from the Holder, the Company will use its commercially reasonable efforts to expeditiously effect (but in any event no later than sixty (60) days after such request) the registration of such Person's interest in the Warrant and/or Shares whose holders request participation in such registration under the Securities Act. The Company may not include any other securities in any registration effected pursuant to this Section 5.12(a) (other than additional Shares obtained through the Warrant or under warrants issued to the Holder or its affiliates) without the prior written consent of the Holder. Notwithstanding the foregoing, to the extent that the Company is not eligible to register shares on a Form S-3 at a given time then the obligations of the Company to file new registration statements for the Holder under this Section 5.12(a) shall be suspended; provided that (x) the Company agrees to promptly comply with this Section 5.12(a) following any correction of matters leading to such S-3 ineligibility and (y) to the extent that the Company grants registration rights following the date of this Warrant to any person or entity that does not have similar suspension of obligations or otherwise grants more favorable rights, then the Holder shall be deemed to get the benefit of such more favorable rights and the suspension of obligations set forth in this sentence shall not apply. For the avoidance of doubt, in no event will a registration effected pursuant to this Section 5.12(a) be an underwritten public offering.

(b) If, at any time and from time to time, the Company proposes to register any of its shares of Common Stock under the Securities Act in connection with an underwritten public offering of such shares of Common Stock, then the Company will promptly give notice to the Holder of its intention to do so. Upon the request of the Holder received within ten (10) days after receipt of any such notice from the Company, the Company will cause the Holder's interest in the Shares to be registered under the Securities Act and registered or qualified, as the case may be, under any state securities laws; provided, however, that the obligation to give such notice and to cause such registration shall not apply to any registration (a) on Form S-8 (or any successor form), (b) of solely a dividend reinvestment plan or (c) for the sole purpose of offering registered securities to another Person in connection with the acquisition of assets or capital stock of such Person or in connection with a merger, consolidation, combination or similar transaction with such Person. In connection with any underwritten offering of securities on behalf of the Company or any other holders of the Company's capital stock, the Company is not required to include any interest in the Warrant or Shares held by the Holder unless the Holder agrees to the reasonable and customary terms of the underwriting; provided, however, that the total indemnification or other liability of the Holder thereunder shall be limited to the aggregate net cash proceeds received by the Holder from the sale of the Holder's interest in the Shares in such offering. The Company will include in any registration effected pursuant to this Section 5.12(b) (i) first, securities offered to be sold by the Company and by any holder of demand registration rights that is exercising such rights in connection with such registration, (ii) second, any interest in the Shares of the Holder requesting piggyback registration rights hereunder, in each case pro rata based on the number of Shares issued or issuable under the Warrant thereby (in such quantity as will not, in the written opinion of the underwriters, jeopardize the success of the offering), and (iii) third, any other securities requested to be included in such registration (in such quantity as will not, in the written opinion of the underwriters, jeopardize the success of the offering).

(c) The Company will pay all Registration Expenses in connection with all registrations (which, for purposes of this Section 5.12, shall include any qualifications, notifications and exemptions) under this Section 5.12. "Registration Expenses" means all expenses incident to the Company's performance of or compliance with Section 5.12, including, without limitation, all registration and filing fees (including fees of the SEC a national stock exchange or national securities market), all fees and expenses of complying with state securities or blue sky laws, all word processing, duplicating and printing expenses, messenger and delivery expenses, the fees and disbursements of counsel for the Company and of its independent public accountants, including the expenses of any special audits or "cold comfort" letters in underwritten offerings required by or incident to such performance and compliance, the reasonable fees and disbursements of the Holder's counsel not to exceed $20,000 for any registration statement and any fees and disbursements of underwriters customarily paid by issuers or sellers of securities, but excluding underwriting discounts and commissions and transfer taxes, if any.

[signature on following page]

QUANTUM CORPORATION

By: /s/ J. Michael Dodson
Name: J. Michael Dodson
Title: Chief Financial Officer

Accepted and Agreed:

TCW DIRECT LENDING, LLC

By: /s/ Mark Gertzof
Name: Mark Gertzof
Title: Authorized Officer

APPENDIX I

NOTICE OF EXERCISE

Reference is made to that certain Warrant to Purchase Stock, dated October 31, 2018, issued by Quantum Corporation to [HOLDER] (the "Warrant").

1. The undersigned hereby elects to purchase _____ shares of the Common Stock of Quantum Corporation pursuant to the terms of the Warrant. **[As the Warrant is not fully exercised and has not expired, the Company will issue to Holder a new warrant representing the Shares not acquired. -IF APPLICABLE AND IF THE ELECTION NOT TO RECEIVE A NEW WARRANT DESCRIBED IN THE FIRST SENTENCE OF PARAGRAPH 3 DOES NOT APPLY]**

2. **[IF APPLICABLE - The undersigned elects to make a Cashless Exercise (as such term is defined in the Warrant) in the manner detailed in Section 1.3 of the Warrant.]**

3. **[The Warrant shall remain in full force and effect with respect to any Shares that remain exercisable under the Warrant following the exercise evidenced by this Notice of Exercise. - IF APPLICABLE AND IF THE ELECTION TO RECEIVE A NEW WARRANT DESCRIBED IN THE LAST SENTENCE OF PARAGRAPH 1 DOES NOT APPLY.]** The Warrant shall [also] apply to the shares receivable pursuant to this Notice of Exercise to the extent expressly set forth in the provisions of the Warrant.

4. Please issue the shares receivable pursuant to this Notice of Exercise **[(taking into account the Cashless Exercise)]** in the name of the undersigned; payment for any fractional shares owed pursuant to Section 2.1 of the Warrant should also be paid to the undersigned.

5. The undersigned represents it is acquiring the shares solely for its own account and not as a nominee for any other party and not with a view toward the resale or distribution thereof except in compliance with applicable securities laws.

[HOLDER]

_____

(Signature)

_____

(Name and Title)

Dated: _____, 20____

THIS WARRANT AND THE SHARES ISSUABLE HEREUNDER HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR ANY APPLICABLE STATE SECURITIES LAWS, AND, EXCEPT AND PURSUANT TO THE PROVISIONS OF ARTICLE 5 BELOW, MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED WITHOUT AN EFFECTIVE REGISTRATION THEREOF UNDER THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS, OR PURSUANT TO RULE 144 OR AN EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS.

WARRANT TO PURCHASE STOCK

Company:	QUANTUM CORPORATION, a Delaware corporation
Number of Shares	900,045 shares
Class of Stock:	Common Stock
Warrant Price:	$2.40 per share, subject to adjustment per Section 1.1(b) or Article 2
Issue Date:	November 30, 2018
Expiration Date:	November 30, 2023

THIS WARRANT TO PURCHASE STOCK (THIS "WARRANT") CERTIFIES THAT, for good and valuable consideration, the receipt of which is hereby acknowledged, TCW Direct Lending, LLC is entitled to purchase the number of fully paid and non-assessable shares of the class of securities (the "Shares") of QUANTUM CORPORATION (the "Company") at the Warrant Price, all as set forth above and as adjusted pursuant to the terms of this Warrant, subject to the provisions and upon the terms and conditions set forth in this Warrant. Capitalized terms used herein but not specifically defined herein shall have the meanings ascribed to them in that certain Term Loan Credit and Security Agreement, dated as of October 21, 2016 (as amended, restated, supplemented or otherwise modified from time to time, the "Credit Agreement"), by and among the Company, the financial institutions from time to time party thereto (collectively, the "Lenders"), the Holder, as Agent for the Lenders, and the other parties thereto.

ARTICLE 1
EXERCISE

1.1 Conditions to Exercise.

(a) This Warrant shall be exercisable for 900,045 shares of the Company's Common Stock (subject to adjustment as provided herein) in whole or in part at any time on or after February 1, 2019 until the Expiration Date.

(b) The exercise price for each share of Common Stock receivable hereunder shall be thelower of (x) $2.40 (as adjusted per Article 2) and (y) as determined on February 1, 2019 the lowest of the 5-day volume-weighted average closing prices of the Company's common stock for the last 5 trading days in the months of November 2018, December 2018 and January 2019.

(c) To the extent that the Company has Paid in Full (as defined in the Credit Agreement) in cash all of the Obligations (as defined in the Credit Agreement) under the Credit Agreement on or prior to December 30, 2018, then Quantum shall have the right to buy back up to fifty percent (50%) of this Warrant, for a price of $.001 per share multiplied by the Shares issuable under the portion of the Warrant being repurchased, and the Warrant would only be exercisable for such reduced amount as of February 1, 2019 until the Expiration Date. In order to exercise such repurchase right (if applicable), the Company must have given notice to the Holder on or prior to January 31, 2019.

1.2 Method of Exercise. Holder may exercise any portion of this Warrant that is exercisable by delivering a duly completed and executed Notice of Exercise in substantially the form attached as Appendix I to the principal office of the Company. Unless Holder is exercising the cashless exercise right set forth in Section 1.3, Holder shall also deliver to the Company a check, wire transfer (to an account designated in writing by the Company), or other form of payment acceptable to the Company for the aggregate Warrant Price for the Shares being purchased.

1.3 Cashless Exercise Right. In lieu of exercising this Warrant as specified in Section 1.2, Holder may from time to time, in its sole discretion, exercise this Warrant in whole or in part as to the portion of the Warrant that is exercisable and, in lieu of making the cash payment otherwise contemplated to be made to the Company upon such exercise for the aggregate Warrant Price pursuant to Section 1.2, elect instead to receive upon such exercise the "net number" of shares of Common Stock determined according to the following formula (a "Cashless Exercise"):

$$X = \frac{Y (A - B)}{A}$$

Where:

X = The number of Shares to be issued to Holder

Y = The number of Shares being exercised under this Warrant or, if only a portion of the Warrant is being exercised, the portion of the Warrant being canceled (at the date of such calculation)

A = The fair market value of one Share (at the date of such calculation)

B = The Warrant Price per share (as adjusted to the date of such calculation)

1.4 Calculation of FMV. For purposes of the calculation above, the "fair market value" of one Share shall be the average for the five trading days immediately prior to the date of determination thereof of the last reported sale price regular way on each such day, or, in the case no such sale takes place on any such day, the average of the reported closing bid and asked prices regular way of the shares of Common Stock on such day, in each case as quoted on the New York Stock Exchange, as reported by Bloomberg Markets, or such other principal securities exchange or inter-dealer quotation system on which the shares of Common Stock are then traded.

1.5 Delivery of Shares and New Warrant. Within two (2) business days after Holder exercises this Warrant in the manner set forth in Section 1.2 or Section 1.3 above, the Company shall deliver to Holder the Shares so acquired, provided that such Shares shall be deemed delivered upon the Company's delivery of evidence of a book-entry or similar position through The Depository Trust & Closing Corporation or any other depository or similar functionary, credited to an account for the benefit of Holder. If this Warrant has not been fully exercised and has not expired, then unless otherwise set forth in the Notice of Exercise a new warrant representing the Shares not so acquired shall be issued to Holder.

1.6 Treatment of Warrant at Acquisition. In the event of an Acquisition, either (a) Holder shall exercise or convert this Warrant in full (or shall be deemed to so convert pursuant to the immediately following sentence) with respect to all remaining Shares for which the Warrant is then exercisable and such exercise or conversion will be deemed effective immediately prior to the consummation of such Acquisition or (b) if Holder elects in writing not to exercise or convert the Warrant, this Warrant will expire upon the consummation of such Acquisition. The Company shall provide Holder with written notice of the foregoing (together with such reasonable information as Holder may request in connection with such contemplated Acquisition giving rise to such notice), which is to be delivered to Holder not less than ten (10) days prior to the closing of the proposed Acquisition and, unless the Company receives a notice in writing from Holder that it elects to have the unexercised portion of the Warrant expire, then if the Acquisition involves a price per share of Common Stock that exceeds the Warrant Price the unexercised portion of the Warrant shall be deemed to be automatically exercised pursuant to Section 1.3 immediately prior to the Acquisition.

For purposes of this Warrant, "Acquisition" shall mean: (i) the acquisition of the Company by another entity by means of any transaction or series of related transactions to which the Company is a party (including, without limitation, any stock acquisition, reorganization, merger or consolidation, but excluding any sale of stock for capital raising purposes and any transaction effected primarily for purposes of changing the Company's jurisdiction of incorporation) other than a transaction or series of related transactions in which the holders of the voting securities of the Company outstanding immediately prior to such transaction or series of related transactions retain, immediately after such transaction or series of transactions, at least a majority of the total voting power represented by the outstanding voting securities of the Company or such other surviving or resulting entity (or if the Company or such other surviving or resulting entity is a wholly-owned subsidiary immediately following such acquisition, its parent), or (ii) a sale, lease or other disposition of all or substantially all of the assets of the Company and its subsidiaries taken as a whole by means of any transaction or series of related transactions, except where such sale, lease or other disposition is to a wholly-owned subsidiary or affiliate of the Company.

1.7 Replacement of Warrant. On receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of loss, theft or destruction of this Warrant, upon delivery of an indemnity agreement reasonably satisfactory in form, substance and amount to the Company or, in the case of mutilation, upon surrender and cancellation of this Warrant, the Company at its expense shall, within a reasonable period of time, execute and deliver to Holder, in lieu of this Warrant, a new warrant of like tenor and amount.

ARTICLE 2
ADJUSTMENTS TO THE SHARES AND NOTIFICATION OF CERTAIN EVENTS

2.1 Fractional Shares. No fractional Shares shall be issuable upon exercise of this Warrant and the number of Shares to be issued shall be rounded down to the nearest whole Share. If a fractional share interest arises upon any exercise of this Warrant, the Company shall eliminate such fractional share interest by paying Holder an amount computed by multiplying the fractional interest by the fair market value, calculated as provided in Section 1.4 above, of a lull Share.

2.2 Adjustments. Subject to the expiration of this Warrant pursuant to Section 5.1, the number and kind of shares purchasable hereunder and the Warrant Price therefor are subject to adjustment from time to time, as follows:

2.2.1 Merger or Reorganization. If at any time there shall be any reorganization, recapitalization, merger or consolidation (a "Reorganization") involving the Company (other than an Acquisition which is subject to the provisions of Section 1.6) in which shares of the Company's stock are converted into or exchanged for securities, cash or other property, then, as a part of such Reorganization, lawful provision shall be made so that the Holder shall thereafter be entitled to receive upon exercise of this Warrant, the kind and amount of securities, cash or other property of the successor corporation resulting from such Reorganization, equivalent in value to that which a holder of the Shares deliverable upon exercise of this Warrant would have been entitled in such Reorganization if the right to purchase the Shares hereunder had been exercised immediately prior to such Reorganization. In any such case, appropriate adjustment (as determined in good faith by the Board of Directors of the successor corporation) shall be made in the application of the provisions of this Warrant with respect to the rights and interests of the Holder after such Reorganization to the end that the provisions of this Warrant shall be applicable after the event, as near as reasonably may be, in relation to any shares or other securities deliverable after that event upon the exercise of this Warrant.

2.2.2 Reclassification of Shares. If the securities issuable upon exercise of this Warrant are changed into the same or a different number of securities of any other class or classes by reclassification, capital reorganization or otherwise (other than as otherwise provided for herein) (a "Reclassification"), then, in any such event, in lieu of the number of Shares which the Holder would otherwise have been entitled to receive, the Holder shall have the right thereafter to exercise this Warrant for a number of shares of such other class or classes of stock that a holder of the number of securities deliverable upon exercise of this Warrant immediately before that change would have been entitled to receive in such Reclassification (at the same aggregate Warrant Price as would have applied prior to such Reclassification), all subject to further adjustment as provided herein with respect to such other shares.

2.2.3 Subdivisions and Combinations. In the event that the outstanding shares of the Company's Common Stock are subdivided (by stock split, by payment of a stock dividend or otherwise) into a greater number of shares of such securities, the number of Shares issuable upon exercise of the rights under this Warrant immediately prior to such subdivision shall, concurrently with the effectiveness of such subdivision, be proportionately increased, and the Warrant Price shall be proportionately decreased, and in the event that the outstanding shares of Common Stock are combined (by reclassification or otherwise) into a lesser number of shares of such securities, the number of Shares issuable upon exercise of the rights under this Warrant immediately prior to such combination shall, concurrently with the effectiveness of such combination, be proportionately decreased, and the Warrant Price shall be proportionately increased.

2.2.4 Adjustment of Warrant Price Upon Issuance of Additional Shares of Common Stock. If at any time or from time to time prior to February 1, 2019, the Company shall issue or sell any additional shares of Common Stock or Common Stock Equivalents for a consideration per share less than the fair market value (other than Exempt Issuances, which shall not result in adjustments pursuant to this Section 2.2.4) then, effective on the date specified below, the Warrant Price then in effect shall be reduced to a price (calculated to the nearest one-hundredth of a cent) determined in accordance with the following formula:

$$WP_2 = WP_1 * (A + B) \div (A + C).$$

For purposes of the foregoing formula, the following definitions shall apply:

i) "WP_2" shall mean the Warrant Price in effect immediately after such issuance or deemed issuance of additional shares of Common Stock

ii) "WP_1" shall mean the Warrant Price in effect immediately prior to such issuance or deemed issuance of additional shares of Common Stock;

iii) "A" shall mean the number of shares of Common Stock Deemed Outstanding immediately prior to such issuance or deemed issuance of additional shares of Common Stock;

iv) "B" shall mean the number of shares of Common Stock Deemed Outstanding that would have been issued if such additional shares of Common Stock had been issued or deemed issued at a price per share equal to WP_1 (determined by dividing the aggregate consideration received by the Company in respect of such issue by WP_1); and

v) "C" shall mean the number of such additional shares of Common Stock issued in such transaction.

Upon each such adjustment of the Warrant Price hereunder, the number of Shares issuable upon exercise of this Warrant shall be adjusted to the number of shares of Common Stock determined by multiplying the Warrant Price in effect immediately prior to such adjustment by the number of Shares issuable upon exercise of this Warrant immediately prior to such adjustment and dividing the product thereof by the Warrant Price resulting from such adjustment.

"Exempt Issuances" means any issuance of additional shares of Common Stock or Common Stock Equivalents (a) for which an adjustment is otherwise provided under Section 2.2 hereof, (b) pursuant to the exercise of this Warrant (or any Warrant issued as a replacement for this Warrant or upon the transfer or partial exercise hereof) in whole or in part, (c) pursuant to the exercise of any Common Stock Equivalents outstanding on the date hereof, (d) pursuant to the issuance of Common Stock or Common Stock Equivalents granted or to be granted under an equity compensation plan approved by stockholders of the Company or (e) the issuance of shares of Common Stock or Common Stock Equivalents as consideration in connection with the acquisition of all or a controlling interest in another business (whether by merger, purchase of stock or assets or otherwise) if such issuance is approved by the board of directors of the Company.

"The "Common Stock Deemed Outstanding" means at any given time, the number of shares of Common Stock outstanding at such time, plus the number of shares of Common Stock issuable upon the conversion or exercise of Common Stock Equivalents then-outstanding regardless of whether such securities are actually exercisable at such time.

"Common Stock Equivalents" means evidences of indebtedness, shares of stock or other securities which are convertible into or exchangeable for, with or without payment of additional consideration, shares of Common Stock, either immediately or upon the arrival of a specified date or the happening of a specified event or both.

2.2.5 No Impairment. The Company shall not, by amendment of its charter documents or through any consolidation, merger, reorganization, transfer of assets, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of the Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the Holder against dilution or other impairment.

2.2.6 Notice of Adjustments. Upon any adjustment in accordance with this Section 2.2, the Company shall give notice thereof to the Holder, which notice shall state the event giving rise to the adjustment, the Warrant Price as adjusted and the number of securities or other property purchasable upon the exercise of the rights under this Warrant, setting forth in reasonable detail the method of calculation of each. The Company shall, upon the written request of any Holder, furnish or cause to be furnished to such Holder a certificate setting forth (i) such adjustments, (ii) the Warrant Price at the time in effect and (iii) the number of securities and the amount, if any, of other property that at the time would be received upon exercise of this Warrant.

2.3 Notification of Certain Events. Prior to the Expiration Date, in the event that the Company shall authorize:

2.3.1 the issuance of any dividend or other distribution on the capital stock of the Company (other than (i) dividends or distributions otherwise provided for in Section 2.2.3, or (ii) any repurchases of the Company's Common Stock), whether in cash, property, stock or other securities; or

2.3.2 the voluntary liquidation, dissolution or winding up of the Company,

the Company shall send to the Holder at least ten (10) days prior written notice of the date on which a record shall be taken for any such dividend or distribution specified in clause 2.3.1 or the expected effective date of any such other event specified in clause 2.3.2. The notice provisions set forth in this section may be shortened or waived prospectively or retrospectively by the consent of the Holder.

ARTICLE 3
REPRESENTATIONS AND COVENANTS OF THE COMPANY

3.1 Representations and Warranties. The Company hereby represents and warrants to Holder that all Shares which may be issued upon the exercise of the purchase right represented by this Warrant shall, upon issuance, be duly authorized, validly issued, fully paid and non-assessable, and free of any liens and encumbrances except for restrictions on transfer provided for herein or under applicable federal and state securities laws.

3.2 Reservation of Stock. The Company hereby represents and warrants to Holder that sufficient shares of the Company's Common Stock have been reserved and are available for issuance from its authorized and unissued shares of Common Stock for the purpose of effecting the exercise of this Warrant, and such shares will remain available at all times until the date this Warrant has been exercised in full or, if earlier, the Expiration Date.

3.3 Capitalization. Immediately prior to the issuance of this Warrant, the Company has 35,551,570 shares of Common Stock issued and outstanding, and 4,457,558 shares of Common Stock receivable under options, warrants and convertible securities of the Company.

ARTICLE 4
INVESTMENT REPRESENTATIONS AND COVENANTS OF HOLDER

With respect to the acquisition of this Warrant and any of the Shares, Holder hereby represents and warrants to, and agrees with, the Company as follows:

4.1 Purchase Entirely for Own Account. This Warrant is issued to Holder in reliance upon Holder's representation to the Company that this Warrant and the Shares will be acquired for investment for Holder's own account, not as a nominee or agent, and not with a view to the resale or distribution of any part thereof other than to an affiliate, and that Holder has no present intention of selling, granting any participation in, or otherwise distributing the same other than to an affiliate. By executing this Warrant, Holder further represents that Holder does not have any contract, undertaking, agreement or arrangement with any person, other than an affiliate, to sell, transfer or grant participations to such person or to any third person with respect to any of the Shares.

4.2 Reliance upon Holder's Representations. Subject to Section 5.12, Holder understands that this Warrant and the Shares are not registered under the Act on the ground that the issuance of such securities is exempt from registration under the Act, and that the Company's reliance on such exemption is predicated on Holder's representations set forth herein.

4.3 Accredited Investor Status. Holder represents to the Company that Holder is an Accredited Investor (as defined in the Act).

4.4 Restricted Securities. Holder understands that this Warrant and the Shares are "restricted securities" under the federal securities laws inasmuch as they are being acquired from the Company in a transaction not involving a public offering and that under such federal securities laws and applicable regulations such securities may be resold without registration under the Act only in certain limited circumstances.

4.5 Restrictions on Sale. Notwithstanding anything to the contrary contained herein, Holder agrees that Holder, together with its affiliates will not sell on any one trading day more than 50,000 Shares obtained from the exercise of this Warrant or other warrants issued on the same issuance date as this Warrant without the prior written consent of the Company.

ARTICLE 5
MISCELLANEOUS

5.1 Term; Exercise Upon Expiration. Subject to the terms of this Warrant, including Sections 1.1 and 1.6, this Warrant is exercisable in whole or in part, at any time and from time to time on or before the Expiration Date set forth above. The Company agrees that Holder may terminate this Warrant, upon written notice to the Company, at any time in its sole discretion.

5.2 Legends. This Warrant and the Shares shall be imprinted with a legend in substantially the following form:

> THIS WARRANT AND THE SHARES ISSUABLE HEREUNDER HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR ANY APPLICABLE STATE SECURITIES LAWS, AND, EXCEPT AND PURSUANT TO THE PROVISIONS OF ARTICLE 5 BELOW, MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED WITHOUT AN EFFECTIVE REGISTRATION THEREOF UNDER THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS, OR PURSUANT TO RULE 144 OR AN EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS.

5.3 Compliance with Securities Laws on Transfer. Without limitation of Section 5.12, this Warrant and the Shares issuable upon exercise of this Warrant may not be transferred or assigned in whole or in part without (i) compliance with applicable federal and state securities laws by the transferor and the transferee, and (ii) if requested by Company, an opinion of counsel, reasonably satisfactory to Company, to the effect that such transfer or assignment is in compliance with applicable federal and state securities laws. The Company may issue stop transfer instructions to its transfer agent in connection with the restrictions in this Section 5.3.

5.4 Transfer Procedure. Subject to the provisions of Section 5.3, Holder may transfer all or part of this Warrant to its affiliates, and such affiliate shall then be entitled to all the rights and bound by all of the obligations of Holder under this Warrant and any related agreements, and the Company shall cooperate fully in ensuring that any stock issued upon exercise of this Warrant is issued in the name of the affiliate that exercises this Warrant. The terms and conditions of this Warrant shall inure to the benefit of, and be binding upon, the Company and the holder hereof and its respective permitted successors and assigns. Any transferee shall be bound by the obligations and restrictions of this Warrant as if such transferee was the original holder hereof.

5.5 Notices. All notices and other communications from the Company to Holder, or vice versa, shall be deemed delivered and effective when given personally or mailed by first-class registered or certified mail, postage prepaid, or sent via a nationally recognized overnight courier service, fee prepaid, or on the first business day after transmission by electronic mail, at such address or electronic mail address as may have been furnished to the Company or Holder, as the case may be, in writing by the Company or such Holder from time to time. Effective upon the receipt of the executed Warrant, all notices to Holder shall be addressed as follows until the Company receives notice of a change of address in connection with a transfer or otherwise:

TCW Direct Lending, LLC
Attn: Mark Gertzof
227 West Monroe Street, Suite 3225
Chicago, IL 60606
E-mail: mark.gertzof@tcw.com

All notices to the Company shall be addressed as follows:

Quantum Corporation
Attn: Shawn Hall
224 Airport Parkway, Suite 550
San Jose, CA 95510
E-mail: shawn.hall@quantum.com

5.6 Amendments; Waiver. This Warrant and any term hereof may be amended, changed, waived, discharged or terminated only by an instrument in writing signed by the party against which enforcement of such amendment, change, waiver, discharge or termination is sought.

5.7 Attorneys' Fees. In the event of any dispute between the parties concerning the terms and provisions of this Warrant, the party prevailing in such dispute shall be entitled to collect from the other party all costs reasonably incurred in such dispute, including reasonable and documented attorneys' fees.

5.8 Governing Law. This Warrant shall be governed by and construed in accordance with the laws of the State of California, without giving effect to its principles regarding conflicts of law.

5.9 Public Disclosure. The Company shall file a copy of this Warrant with the U.S. Securities and Exchange Commission ("SEC"), within the time periods required by applicable SEC rules and regulations, in order to comply with its obligations under federal securities laws.

5.10 Rights as a Stockholder. No holder of this Warrant, as such, shall be entitled to vote or receive dividends or be deemed the holder of Shares or any other securities of the Company which may at any time be issuable upon the exercise hereof for any purpose, nor shall anything contained herein be construed to confer upon Holder, as such, any of the rights of a stockholder of the Company or any right to vote for the election of directors or upon any matter submitted to stockholders at any meeting thereof, or to receive notice of meetings, or to receive dividends or subscription rights or otherwise until this Warrant shall have been exercised as provided herein.

5.11 Counterparts; Signatures. This Warrant may be executed in counterparts, all of which together shall constitute one and the same agreement. Any signature page delivered electronically or by facsimile shall be binding to the same extent as an original signature page with regards to any agreement subject to the terms hereof or any amendment thereto.

5.12 Registration Rights.

(a) If, at any time after February 1, 2019 where the Holder is not (upon reasonable advice of counsel) entitled to sell Shares obtained pursuant to this Warrant under Rule 144(b)(1) as a non-affiliate, the Holder will have the right to demand up to two (2) public registrations covering such Shares. Following a written request from the Holder, the Company will use its commercially reasonable efforts to expeditiously effect (but in any event no later than sixty (60) days after such request) the registration of such Person's interest in the Warrant and/or Shares whose holders request participation in such registration under the Securities Act. The Company may not include any other securities in any registration effected pursuant to this Section 5.12(a) (other than additional Shares obtained through the Warrant or under warrants issued to the Holder or its affiliates) without the prior written consent of the Holder. Notwithstanding the foregoing, to the extent that the Company is not eligible to register shares on a Form S-3 at a given time then the obligations of the Company to file new registration statements for the Holder under this Section 5.12(a) shall be suspended; provided that (x) the Company agrees to promptly comply with this Section 5.12(a) following any correction of matters leading to such S-3 ineligibility and (y) to the extent that the Company grants registration rights following the date of this Warrant to any person or entity that does not have similar suspension of obligations or otherwise grants more favorable rights, then the Holder shall be deemed to get the benefit of such more favorable rights and the suspension of obligations set forth in this sentence shall not apply. For the avoidance of doubt, in no event will a registration effected pursuant to this Section 5.12(a) be an underwritten public offering.

(b) If, at any time and from time to time, the Company proposes to register any of its shares of Common Stock under the Securities Act in connection with an underwritten public offering of such shares of Common Stock, then the Company will promptly give notice to the Holder of its intention to do so. Upon the request of the Holder received within ten (10) days after receipt of any such notice from the Company, the Company will cause the Holder's interest in the Shares to be registered under the Securities Act and registered or qualified, as the case may be, under any state securities laws; provided, however, that the obligation to give such notice and to cause such registration shall not apply to any registration (a) on Form S-8 (or any successor form), (b) of solely a dividend reinvestment plan or (c) for the sole purpose of offering registered securities to another Person in connection with the acquisition of assets or capital stock of such Person or in connection with a merger, consolidation, combination or similar transaction with such Person. In connection with any underwritten offering of securities on behalf of the Company or any other holders of the Company's capital stock, the Company is not required to include any interest in the Warrant or Shares held by the Holder unless the Holder agrees to the reasonable and customary terms of the underwriting; provided, however, that the total indemnification or other liability of the Holder thereunder shall be limited to the aggregate net cash proceeds received by the Holder from the sale of the Holder's interest in the Shares in such offering. The Company will include in any registration effected pursuant to this Section 5.12(b) (i) first, securities offered to be sold by the Company and by any holder of demand registration rights that is exercising such rights in connection with such registration, (ii) second, any interest in the Shares of the Holder requesting piggyback registration rights hereunder, in each case pro rata based on the number of Shares issued or issuable under the Warrant thereby (in such quantity as will not, in the written opinion of the underwriters, jeopardize the success of the offering), and (iii) third, any other securities requested to be included in such registration (in such quantity as will not, in the written opinion of the underwriters, jeopardize the success of the offering).

(c) The Company will pay all Registration Expenses in connection with all registrations (which, for purposes of this Section 5.12, shall include any qualifications, notifications and exemptions) under this Section 5.12. "Registration Expenses" means all expenses incident to the Company's performance of or compliance with Section 5.12, including, without limitation, all registration and filing fees (including fees of the SEC a national stock exchange or national securities market), all fees and expenses of complying with state securities or blue sky laws, all word processing, duplicating and printing expenses, messenger and delivery expenses, the fees and disbursements of counsel for the Company and of its independent public accountants, including the expenses of any special audits or "cold comfort" letters in underwritten offerings required by or incident to such performance and compliance, the reasonable fees and disbursements of the Holder's counsel not to exceed $20,000 for any registration statement and any fees and disbursements of underwriters customarily paid by issuers or sellers of securities, but excluding underwriting discounts and commissions and transfer taxes, if any.

[signature on following page]

QUANTUM CORPORATION

By: /s/ J. Michael Dodson
Name: J. Michael Dodson
Title: CFO

Accepted and Agreed:

TCW DIRECT LENDING, LLC

By: /s/ Mark Gertzof
Name: Mark Gertzof
Title: Authorized Officer

APPENDIX I

NOTICE OF EXERCISE

Reference is made to that certain Warrant to Purchase Stock, dated November 30, 2018, issued by Quantum Corporation to [HOLDER] (the "Warrant").

1. The undersigned hereby elects to purchase shares of the Common Stock of Quantum Corporation pursuant to the terms of the Warrant. **[As the Warrant is not fully exercised and has not expired, the Company will issue to Holder a new warrant representing the Shares not acquired. –IF APPLICABLE AND IF THE ELECTION NOT TO RECEIVE A NEW WARRANT DESCRIBED IN THE FIRST SENTENCE OF PARAGRAPH 3 DOES NOT APPLY]**

2. **[IF APPLICABLE - The undersigned elects to make a Cashless Exercise (as such term is defined in the Warrant) in the manner detailed in Section 1.3 of the Warrant.]**

3 . **[The Warrant shall remain in full force and effect with respect to any Shares that remain exercisable under the Warrant following the exercise evidenced by this Notice of Exercise. - IF APPLICABLE AND IF THE ELECTION TO RECEIVE A NEW WARRANT DESCRIBED IN THE LAST SENTENCE OF PARAGRAPH 1 DOES NOT APPLY.]** The Warrant shall **[also]** apply to the shares receivable pursuant to this Notice of Exercise to the extent expressly set forth in the provisions of the Warrant.

4. Please issue the shares receivable pursuant to this Notice of Exercise **[(taking into account the Cashless Exercise)]** in the name of the undersigned; payment for any fractional shares owed pursuant to Section 2.1 of the Warrant should also be paid to the undersigned.

5. The undersigned represents it is acquiring the shares solely for its own account and not as a nominee for any other party and not with a view toward the resale or distribution thereof except in compliance with applicable securities laws.

[HOLDER]

_____

(Signature)

_____

(Name and Title)

Dated: , 20

Exhibit 10.73

WARRANT REPURCHASE AGREEMENT

This WARRANT REPURCHASE AGREEMENT, made and entered into as of January 16, 2019 (this "Agreement"), is by and between Quantum Corporation, a Delaware corporation (the "Company"), and TCW Direct Lending, LLC ("TCW Direct"), TCW Skyline Lending, L.P. ("TCW Skyline") and West Virginia Direct Lending LLC ("WV Direct" and, together with TCW Direct and TCW Skyline collectively, the "TCW Entities").

WHEREAS, TCW Direct owns a warrant issued on November 30, 2018 to purchase 900,045 shares of common stock of the Company ("Common Stock") (such warrant, the "TCW Direct Warrant"), TCW Skyline owns a warrant issued on November 30, 2018 to purchase 98,958 shares of Common Stock (the "TCW Skyline Warrant") and WV Direct owns a warrant issued on November 30, 2018 to purchase 100,530 shares of Common Stock (the "WV Direct Warrant" and, together with the TCW Direct Warrant and the TCW Skyline Warrant, the "TCW Warrants");

WHEREAS, pursuant to the terms of the TCW Warrants, the Company has the right to buy back up to fifty percent (50%) of each of the TCW Warrants if the Company satisfies certain requirements; and

WHEREAS, (a) (i) the Company desires to repurchase from TCW Direct that portion of the TCW Direct Warrant exercisable for 450,022 shares of Common Stock, (ii) the Company desires to repurchase from TCW Skyline that portion of the TCW Skyline Warrant exercisable for 49,479 shares of Common Stock and (iii) the Company desires to repurchase from WV Direct that portion of the WV Direct Warrant exercisable for 50,265 shares of Common Stock (collectively, the "Repurchase Warrants"), and (b) the Company has provided the required notice for such repurchases pursuant to each of the TCW Warrants.

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants and agreements herein contained, the sufficiency of which is hereby acknowledged, the parties hereto agree as follows:

ARTICLE I
SATISFACTION OF REQUIREMENTS; REPURCHASE OF SHARES

1.1 Satisfaction of Requirements.

(a) The parties agree that the Company has Paid in Full (as defined in the Term Loan Credit and Security Agreement, dated as of October 21, 2016 (as amended, restated, supplemented or otherwise modified from time to time, the "Credit Agreement")) in cash all of the Obligations (as defined in the Credit Agreement) under the Credit Agreement as of December 27, 2018 (the "Refinancing") and that the Company notified the TCW Entities of the Refinancing on December 26, 2018.

(b) The parties further agree that the Refinancing and the notification thereof constitute full satisfaction of the requirements necessary to allow the Company to repurchase a portion of each TCW Warrant as set forth in Section 1.1(c) of each of the TCW Warrants.

1.2 Repurchase.

(a) Subject to the terms and conditions of this Agreement, the TCW Entities hereby sell, assign and transfer to the Company with effect on and as of the date of this Agreement (the "Repurchase Date"), and the Company hereby repurchases and acquires from the TCW Entities with effect on and as of the Repurchase Date, the Repurchase Warrants. Upon payment in full of the purchase price in accordance with Section 1.2(b) below, the Repurchase Warrants will be null and void and of no further force or effect and any and all rights, preferences and privileges of the TCW Entities with respect to the Repurchase Warrants will be forfeited, released and cancelled for all purposes.

(b) The aggregate purchase price to be paid by the Company to the TCW Entities on or prior to the Repurchase Date in exchange for the Repurchase Warrants shall be $549.78, payable by check or wire transfer to the individual TCW Entities as follows: (i) $450.03 to TCW Direct in immediately available funds to an account designated by TCW Direct; (ii) $49.48 to TCW Skyline in immediately available funds to an account designated by TCW Skyline; and (iii) to $50.27 to WV Direct in immediately available funds to an account designated by WV Direct.

(c) The parties hereby confirm that following the execution of this Agreement and completion of the transactions contemplated hereby: (i) the TCW Direct Warrant shall be exercisable for and shall require the issuance by the Company of up to 450,023 shares of Common Stock, subject to the terms of the TCW Direct Warrant, (ii) the TCW Skyline Warrant shall be exercisable for and shall require the issuance by the Company of up to 49,479 shares of Common Stock, subject to the terms of the TCW Skyline Warrant and (iii) the WV Direct Warrant shall be exercisable for and shall require the issuance by the Company of up to 50,265 shares of Common Stock, subject to the terms of the WV Direct Warrant.

(d) Aside from the repurchase of the Repurchase Warrants expressly set forth in Section 1.2 of this Agreement, the TCW Warrants shall remain in full force and effect in accordance with their terms in all respects.

ARTICLE 2
MISCELLANEOUS

2.1 Entire Agreement. This Agreement contains the entire agreement between the parties hereto with respect to the subject matter hereof, and supersedes all negotiations, representations, warranties, commitments, offers, contracts and writings prior to the date hereof.

2.2 Severability. If any provision of this Agreement shall be held invalid or unenforceable by any court of competent jurisdiction or as a result of future legislative action, such holding or action shall be strictly construed and shall not affect the validity or effect of any other provision hereof.

2.3 Successors and Assigns. This Agreement will bind and will inure to the benefit of the respective successors and assigns of the parties hereto.

2.4 Amendments; Waiver. This Agreement and any term hereof may be amended, changed, waived, discharged or terminated only by an instrument in writing signed by the party against which enforcement of such amendment, change, waiver, discharge or termination is sought.

2.5 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of California, without giving effect to its principles regarding conflicts of law.

2.6 Counterparts; Signatures. This Agreement may be executed in one or more counterparts, and signature pages may be delivered by portable document format (PDF) or any electronic signature complying with the U.S. federal ESIGN Act of 2000 (e.g., www.docusign.com), each of which shall be deemed an original, but all of which, together, shall constitute one and the same instrument.

[signature pages to follow]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

COMPANY:

QUANTUM CORPORATION

By: /s/ J. Michael Dodson
Name: J. Michael Dodson
Title: Chief Financial Officer

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

TCW DIRECT LENDING, LLC

By: /s/ Suzanne Grosso
Name: Suzanne Grosso
Title: Managing Director

TCW SKYLINE LENDING, L.P.

By: /s/ Suzanne Grosso
Name: Suzanne Grosso
Title: Managing Director

WEST VIRGINIA DIRECT LENDING LLC

By: /s/ Suzanne Grosso
Name: Suzanne Grosso
Title: Managing Director

Exhibit 10.74

[Execution]

FOURTH AMENDMENT AND JOINDER TO
REVOLVING CREDIT AND SECURITY AGREEMENT

THIS FOURTH AMENDMENT AND JOINDER TO REVOLVING CREDIT AND SECURITY AGREEMENT (this "Amendment"), with an effective date of August 23, 2018, is entered into by and among QUANTUM CORPORATION, a Delaware corporation ("Quantum"), QUANTUM LTO HOLDINGS, LLC, a Delaware limited liability company ("Quantum LTO" and together with Quantum and each other Person joined to the Credit Agreement as a borrower from time to time, collectively, the "Borrowers" and each a "Borrower"), the financial institutions which are now or which hereafter become a party to the Credit Agreement as lenders (collectively, the "Lenders" and each a "Lender"), and PNC BANK, NATIONAL ASSOCIATION ("PNC"), in its capacity as agent for the Lenders (in such capacity, together with its successors and assigns, "Agent").

RECITALS

A. Agent, the Lenders and the Borrowers are parties to that certain Revolving Credit and Security Agreement, dated as of October 21, 2016, as amended by the First Amendment to Revolving Credit and Security Agreement, dated as of April 19, 2017, the Second Amendment to Revolving Credit and Security Agreement, dated as of November 6, 2017, and the Third Amendment to Revolving Credit and Security Agreement, dated as of February 14, 2018 (as amended hereby and as the same may be further amended, modified, supplemented, renewed, restated or replaced from time to time, the "Credit Agreement"), pursuant to which the Lenders have made and may hereafter make certain loans and have provided and may hereafter provide certain financial accommodations to the Borrowers.

B. Quantum has notified Agent and Lenders that Quantum has formed Quantum LTO as a wholly-owned Subsidiary on or about August 17, 2018 and, pursuant to Section 7.12 of the Credit Agreement, requests that Quantum LTO join the Credit Agreement as a Borrower and become jointly and severally liable for the obligations of the other Borrowers thereunder and under the Other Documents and grant to Agent, for its benefit and for the ratable benefit of each Lender and each other Secured Party, a security interest in its Collateral to secure the Obligations.

C. The Borrowers have requested that Agent and the Lenders make certain amendments to the Credit Agreement as set forth herein, and Agent and the Lenders have agreed to make such amendments, subject to the terms and conditions set forth herein.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants herein contained, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree as follows:

1. Definitions.

(a) Interpretation. Capitalized terms used herein and not defined shall have the meanings given to such terms in the Credit Agreement.

(b) New Definitions. The following defined terms are hereby added to Section 1.2 of the Credit Agreement in their proper alphabetical order:

"Beneficial Owner" shall mean, for each Loan Party, each of the following: (a) each individual, if any, who, directly or indirectly, owns 25% or more of such Loan Party's Equity Interests; and (b) a single individual with significant responsibility to control, manage, or direct such Loan Party.

"Certificate of Beneficial Ownership " shall mean, for each Loan Party, the certificate in form and substance acceptable to Agent (as amended or modified by Agent from time to time in its sole discretion), certifying, among other things, the Beneficial Owner of such Loan Party.

"Eligible Recurring Royalty Revenue Receivables" shall mean Receivables of a Borrower which satisfy all of the criteria of Eligible Receivables other than clause (a) of the definition thereof; provided that (a) such Receivables are owing from a Specified Recurring Royalty Revenue Customer and (b) such Receivables shall only be Eligible Recurring Royalty Revenue Receivables to the extent they constitute payments in respect of Recurring Royalty Revenue for the quarters ending June 30, 2018 and September 30, 2018.

"Fourth Amendment" shall mean the Fourth Amendment to Revolving Credit and Security Agreement, dated as of the Fourth Amendment Effective Date, by and among Agent, Lenders and the Borrowers.

"Fourth Amendment Effective Date" shall mean August 23, 2018.

"LIBOR Termination Date" shall have the meaning set forth in Section 3.8.2(a) hereof.

"Overnight Bank Funding Rate" shall mean, for any, day the rate per annum (based on a year of 360 days and actual days elapsed) comprised of both overnight federal funds and overnight Eurocurrency borrowings by U.S.-managed banking offices of depository institutions, as such composite rate shall be determined by the Federal Reserve Bank of New York, as set forth on its public website from time to time, and as published on the next succeeding Business Day as the overnight bank funding rate by such Federal Reserve Bank (or by such other recognized electronic source (such as Bloomberg) selected by Agent for the purpose of displaying such rate) (an "Alternate Source"); provided, that if such day is not a Business Day, the Overnight Bank Funding Rate for such day shall be such rate on the immediately preceding Business Day; provided, further, that if such rate shall at any time, for any reason, no longer exist, a

comparable replacement rate determined by Agent at such time (which determination shall be conclusive absent manifest error). If the Overnight Bank Funding Rate determined as above would be less than zero, then such rate shall be deemed to be zero. The rate of interest charged shall be adjusted as of each Business Day based on changes in the Overnight Bank Funding Rate without notice to the Borrowers.

"Recurring Royalty Revenue Borrowing Period" shall mean the period commencing on the Fourth Amendment Effective Date and ending on the earlier of (x) December 15, 2018 and (y) the date of receipt by Borrowers of the payment in respect of the Recurring Royalty Revenue from the Specified Recurring Royalty Revenue Customers for the quarter ending September 30, 2018.

"Specified Recurring Royalty Revenue Customers" shall mean the following Customers of the Borrowers (together with their respective Affiliates): (a) Fuji, (b) Sony, (c) Maxell, and (d) any other Customer which Agent may approve after the Fourth Amendment Effective Date in its sole discretion.

(c) Amendments to Definitions.

(i) Alternate Base Rate. The definition of "Alternate Base Rate" in Section 1.2 of the Credit Agreement is hereby amended by deleting such definition in its entirety and replacing it with the following:

" 'Alternate Base Rate' shall mean, for any day, a rate per annum equal to the highest of (a) the Base Rate in effect on such day, (b) the sum of the Overnight Bank Funding Rate in effect on such day plus one half of one percent (0.5%), and (c) the sum of the Daily LIBOR Rate in effect on such day plus one percent (1.0%), so long as a Daily LIBOR Rate is offered, ascertainable and not unlawful. Any change in the Alternate Base Rate (or any component thereof) shall take effect at the opening of business on the day such change occurs."

(ii) Alternate Source. The definition of "Alternate Source" in Section 1.2 of the Credit Agreement is hereby amended by deleting such definition in its entirety and replacing it with the following:

" 'Alternate Source' shall have the meaning set forth in the definition of "Overnight Bank Funding Rate"."

(iii) EBITDA. The definition of "EBITDA" in Section 1.2 of the Credit Agreement is hereby amended by deleting clauses (c)(i), (c)(vi) and (c)(viii) of such definition in their entirety and replacing them with the following:

"(i) (x) extraordinary, unusual, or non-recurring non-cash costs, non-cash expenses and non-cash losses, and (y) extraordinary, unusual, or non-recurring cash costs, cash expenses and cash losses in an aggregate amount not to exceed $750,000 in any fiscal quarter, commencing with the fiscal quarter commencing on July 1, 2018,"

"(vi) service parts lower of cost or market adjustment up to an aggregate amount not to exceed $2,000,000 in any fiscal quarter,"

"(viii) reasonable transaction costs and expenses (whether or not capitalized through amortization): (A) incurred in connection with this Agreement and the Term Loan Agreement: (1) during the period from the Closing Date through and including the fiscal year ending on or about March 31, 2017 up to an aggregate amount not to exceed $750,000, and (2) in addition to, but without duplication of, the transaction costs and expenses described in clauses (B) and (C) below, during any fiscal year ending thereafter up to an aggregate amount not to exceed $500,000 in any fiscal year, (B) actually incurred in connection with the Second Amendment, the Third Amendment, the Fourth Amendment and the corresponding amendments to the Term Loan Agreement and the Intercreditor Agreement (other than, for the avoidance of doubt, any costs and expenses incurred in connection with the Repayment Transaction (as defined in the Fourth Amendment)); and (C) actually incurred in connection with the warrants issued to the Term Loan Lenders in connection with the amendments to the Term Loan Agreement executed and delivered in connection with the Second Amendment, the Third Amendment and the Fourth Amendment,".

(iv) EBITDA. The definition of "EBITDA" in Section 1.2 of the Credit Agreement is hereby further amended by (x) deleting "and" appearing at the end of clause (c)(xviii) of such definition, (y) deleting "minus" appearing at the end of clause (c)(xix) of such definition and replacing it with "and"; and (z) inserting the following new clause (c)(xx) at the end of clause (c) of such definition:

"(xx) reasonable fees, costs and expenses incurred in connection with the SEC Inquiry and the Repayment Transaction (as defined in the Fourth Amendment) in an aggregate amount for all such fees, costs and expenses described under this clause (xx) not to exceed $4,000,000 in any fiscal quarter."

(v) EBITDA. The definition of "EBITDA" in Section 1.2 of the Credit Agreement is hereby further amended by deleting clause (d) of such definition and replacing it with the following:

"(d) Reserved."

(vi) Federal Funds Effective Rate. The definition of "Federal Funds Effective Rate" in Section 1.2 of the Credit Agreement is hereby amended by deleting such definition in its entirety and replacing it with the following:

" 'Federal Funds Effective Rate' shall mean, for any day, the rate per annum (based on a year of 360 days and actual days elapsed and rounded upward to the nearest 1/100 of 1%) calculated by the Federal Reserve Bank of New York (or any successor), based on such day's overnight federal funds transactions by

depositary institutions, as determined in such matter as such Federal Reserve Bank (or any successor) shall set forth on its public website from time to time, and as published on the next succeeding Business Day by such Federal Reserve Bank as the "Federal Funds Effective Rate"; provided, if such Federal Reserve Bank (or its successor) does not publish such rate on any day, the "Federal Funds Effective Rate" for such day shall be the Federal Funds Effective Rate for the last day on which such rate was announced."

(vii) Fee Letter. The definition of "Fee Letter" in Section 1.2 of the Credit Agreement is hereby amended by deleting such definition in its entirety and replacing it with the following:

" 'Fee Letter' shall mean the Second Amended and Restated Fee Letter, dated as of the Fourth Amendment Effective Date, by and among Borrowers and Agent."

(viii) Intercreditor Agreement. The definition of "Intercreditor Agreement" in Section 1.2 of the Credit Agreement is hereby amended by deleting such definition in its entirety and replacing it with the following:

" 'Intercreditor Agreement' shall mean that certain Intercreditor Agreement, dated as of the Closing Date, as amended by Amendment No. 1 to Intercreditor Agreement, dated as of November 6, 2017, Amendment No. 2 to Intercreditor Agreement, dated as of February 14, 2018, and Amendment No. 3 to Intercreditor Agreement, dated as of the Fourth Amendment Effective Date, between Agent and Term Loan Agent, as the same may be further amended, modified, supplemented, renewed, restated or replaced in accordance with the terms thereof."

(ix) LIBOR Rate. The definition of "LIBOR Rate" in Section 1.2 of the Credit Agreement is hereby amended by deleting such definition in its entirety and replacing it with the following:

" 'LIBOR Rate' shall mean for any LIBOR Rate Loan for the then current Interest Period relating thereto, the interest rate per annum determined by Agent by dividing (the resulting quotient rounded upwards, if necessary, to the nearest 1/100th of 1% per annum) (a) the rate which appears on the Bloomberg Page BBAM1 (or on such other substitute Bloomberg page that displays rates at which U.S. dollar deposits are offered by leading banks in the London interbank deposit market), or the rate which is quoted by another source selected by Agent as an authorized information vendor for the purpose of displaying rates at which U.S. dollar deposits are offered by leading banks in the London interbank deposit market (a "LIBOR Alternate Source"), at approximately 11:00 a.m., London time, two (2) Business Days prior to the commencement of such Interest Period as the London interbank offered rate for U.S. Dollars for an amount comparable to such LIBOR Rate Loan and having a borrowing date and a maturity comparable to such Interest Period (or (x) if there shall at any time, for any reason, no longer

exist a Bloomberg Page BBAM1 (or any substitute page) or any LIBOR Alternate Source, a comparable replacement rate determined by Agent at such time (which determination shall be conclusive absent manifest error), (y) if the LIBOR Rate is unascertainable as set forth in Section 3.8.2(i) hereof, a comparable replacement rate determined in accordance with Section 3.8.2 hereof), by (b) a number equal to 1.00 minus the Reserve Percentage; provided, however, that if the LIBOR Rate determined as provided above would be less than zero, such rate shall be deemed to be zero for purposes of this Agreement. The LIBOR Rate shall be adjusted with respect to any LIBOR Rate Loan that is outstanding on the effective date of any change in the Reserve Percentage as of such effective date. Agent shall give reasonably prompt notice to the Borrowing Agent of the LIBOR Rate as determined or adjusted in accordance herewith, which determination shall be conclusive absent manifest error."

(x) Maturity Date. The definition of "Maturity Date" in Section 1.2 of the Credit Agreement is hereby amended by deleting such definition in its entirety and replacing it with the following:

" 'Maturity Date' shall mean January 31, 2019."

(xi) Minimum PNC Qualified Cash Amount. The definition of "Minimum PNC Qualified Cash Amount" in Section 1.2 of the Credit Agreement is hereby amended by deleting such definition in its entirety and replacing it with the following:

" 'Minimum PNC Qualified Cash Amount' shall mean $5,000,000."

(xii) Payment in Full; Paid in Full. The definition of "Payment in Full" and "Paid in Full" in Section 1.2 of the Credit Agreement is hereby amended by deleting such definition in its entirety and replacing it with the following:

" 'Payment in Full' or 'Paid in Full' shall mean (a) the final payment or repayment and satisfaction in full in immediately available funds of all of the Obligations, including without limitation all fees or charges that have accrued hereunder or under any Other Document and are unpaid and the obligations of the Loans Parties under Section 16.9 hereof (other than (i) contingent indemnification Obligations which pursuant to the express terms of this Agreement or any of the Other Documents survive the termination hereof or thereof but are not then asserted and are unknown, (ii) Obligations with respect to any Lender-Provided Hedge with respect to which the counterparty providing such Lender-Provided Hedge has agreed that such Lender-Provided Hedge may remain outstanding, and (iii) Obligations with respect to any Cash Management Products and Services with respect to which the Person providing such Cash Management Products and Services has agreed that such Cash Management Products and Services may remain outstanding), (b) the receipt by Agent of cash collateral in order to secure any contingent Obligations for which a claim or demand for payment has been made on or prior to such time or in respect of matters or circumstances known to Agent or a Lender at such time that are reasonably expected to result in any loss,

cost, damage, or expense (including attorneys' fees and legal expenses), such cash collateral to be in such amount as Agent reasonably determines is appropriate to secure such contingent Obligations, and (c) the termination of this Agreement and all of the Commitments of the Lenders. If after receipt of any payment of, or proceeds of Collateral applied to the payment of, any of the Obligations, Agent or any Lender is required to surrender or return such payment or proceeds to any Person for any reason, then the Obligations intended to be satisfied by such payment or proceeds shall be reinstated and continue as if such payment or proceeds had not been received by Agent or such Lender."

(xiii) Pledge Agreement. The definition of "Pledge Agreement" in Section 1.2 of the Credit Agreement is hereby amended by deleting such definition in its entirety and replacing it with the following:

" 'Pledge Agreement' shall mean the Collateral Pledge Agreement, dated as of the Closing Date, by Quantum in favor of Agent, as amended by the Pledged Collateral Addendum, dated as of the Fourth Amendment Effective Date, between Quantum and Agent, and any other pledge agreement executed and delivered by any Loan Party or other Person in favor of Agent to secure the Obligations."

(xiv) Term Loan Agreement. The definition of "Term Loan Agreement" in Section 1.2 of the Credit Agreement is hereby amended by deleting such definition in its entirety and replacing it with the following:

" 'Term Loan Agreement' shall mean the Term Loan Credit and Security Agreement, dated as of the Closing Date, as amended by the First Amendment to Term Loan Credit and Security Agreement, dated as of April 19, 2017, the Second Amendment to Term Loan Credit and Security Agreement, dated as of November 6, 2017, the Third Amendment to Term Loan Credit and Security Agreement, dated as of February 14, 2018, and the Fourth Amendment to Term Loan Credit and Security Agreement, dated as of the Fourth Amendment Effective Date, by and among Term Loan Agent, Term Loan Lenders and the Loan Parties, as the same may be further amended, modified, supplemented, renewed, restated or replaced from time to time."

2. Amount of Revolving Advances. Section 2.1(a) of the Credit Agreement is hereby amended by deleting the first sentence of such Section in its entirety and replacing it with the following:

"(a) Amount of Revolving Advances. Subject to the terms and conditions set forth in this Agreement, each Lender holding a Revolving Commitment, severally and not jointly, will make Revolving Advances to Borrowers in aggregate amounts outstanding at any time equal to such Lender's Revolving Commitment Percentage of the lesser of (x) the Maximum Revolving Advance Amount, less the outstanding amount of Swing Loans, less the aggregate Maximum Undrawn Amount of all outstanding Letters of Credit or (y) an amount equal to the result of the following (hereinafter, the "Formula Amount"):

(i) the sum of (A) up to 90% of Eligible Receivables (other than Eligible Extended Terms Receivables and Eligible Recurring Royalty Revenue Receivables) and (B) up to 90% of Eligible Insured Foreign Receivables, plus

(ii) the lesser of (A) up to 90% of Eligible Extended Terms Receivables and (B) $4,000,000;plus

(iii) solely during the Recurring Royalty Revenue Borrowing Period, the lesser of (A) up to 75% of the estimated amount of Eligible Recurring Royalty Revenue Receivables as provided by the Specified Recurring Royalty Revenue Customers to the Borrowers and approved by Agent in its Permitted Discretion, and (B) $5,250,000; plus

(iv) the least of (A) up to 60% of the cost of the Eligible Inventory, (B) up to 85% of the appraised net orderly liquidation value of Eligible Inventory (as evidenced by an Inventory appraisal satisfactory to Agent in its Permitted Discretion), or (C) $17,500,000 in the aggregate at any one time, minus

(v) the aggregate Maximum Undrawn Amount of all outstanding Letters of Credit, minus

(vi) such reserves as Agent may reasonably deem proper and necessary from time to time."

3. Alternate Rate of Interest. Section 3.8 of the Credit Agreement is hereby amended by deleting such Section in its entirety and replacing it with the following:

"3.8 Alternative Rate of Interest 3.8.1 Basis for Determining Interest Rate Inadequate or Unfair. In the event that Agent or any Lender shall have determined that:(a) reasonable means do not exist for ascertaining the LIBOR Rate applicable pursuant to Section 2.2 hereof for any Interest Period;

(b) Dollar deposits in the relevant amount and for the relevant maturity are not available in the London interbank market, with respect to an outstanding LIBOR Rate Loan, a proposed LIBOR Rate Loan, or a proposed conversion of a Domestic Rate Loan into a LIBOR Rate Loan;

(c) the making, maintenance or funding of any LIBOR Rate Loan has been made impracticable or unlawful by compliance by Agent or such Lender in good faith with any Applicable Law or any interpretation or application thereof by any Governmental Body or with any request or directive of any such Governmental Body (whether or not having the force of law); or

(d) the LIBOR Rate will not adequately and fairly reflect the cost to such Lender of the establishment or maintenance of any LIBOR Rate Loan, then Agent shall give Borrowing Agent prompt written or telephonic notice of such determination. If such notice is given prior to a LIBOR Termination Date (as defined below) or prior to the date on which Section 3.8.2(a)(ii) hereof applies, (i) any such requested LIBOR Rate Loan shall be made as a Domestic Rate Loan, unless Borrowing Agent shall notify Agent no later than 10:00 a.m. two (2) Business Days prior to the date of such proposed borrowing, that its request for such borrowing shall be cancelled or made as an unaffected type of LIBOR Rate Loan, (ii) any Domestic Rate Loan or LIBOR Rate Loan which was to have been converted to an affected type of LIBOR Rate Loan shall be continued as or converted into a Domestic Rate Loan, or, if Borrowing Agent shall notify Agent, no later than 10:00 a.m. two (2) Business Days prior to the proposed conversion, shall be maintained as an unaffected type of LIBOR Rate Loan, and (iii) any outstanding affected LIBOR Rate Loans shall be converted into a Domestic Rate Loan, or, if Borrowing Agent shall notify Agent, no later than 10:00 a.m. two (2) Business Days prior to the last Business Day of the then current Interest Period applicable to such affected LIBOR Rate Loan, shall be converted into an unaffected type of LIBOR Rate Loan, on the last Business Day of the then current Interest Period for such affected LIBOR Rate Loans (or sooner, if any Lender cannot continue to lawfully maintain such affected LIBOR Rate Loan). Until such notice has been withdrawn, Lenders shall have no obligation to make an affected type of LIBOR Rate Loan or maintain outstanding affected LIBOR Rate Loans and no Borrower shall have the right to convert a Domestic Rate Loan or an unaffected type of LIBOR Rate Loan into an affected type of LIBOR Rate Loan.

3.8.2 Successor LIBOR Rate Index.

(a) If Agent determines (which determination shall be final and conclusive, absent manifest error) that either (i) (A) the circumstances set forth in Section 3.8.1(a) hereof have arisen and are unlikely to be temporary, or (B) the circumstances set forth in Section 3.8.1(a) hereof have not arisen but the applicable supervisor or administrator (if any) of the LIBOR Rate or a Governmental Body having jurisdiction over Agent has made a public statement identifying the specific date after which the LIBOR Rate shall no longer be used for determining interest rates for loans (either such date, a "LIBOR Termination Date"), or (ii) a rate other than the LIBOR Rate has become a widely recognized benchmark rate for newly originated loans in Dollars in the U.S. market, then Agent may (in consultation with the Borrower) choose a replacement index for the LIBOR Rate and make adjustments to applicable margins and related amendments to this Agreement as referred to below such that, to the extent practicable, the all-in interest rate based on the replacement index will be substantially equivalent to the all-in LIBOR Rate-based interest rate in effect prior to its replacement.

(b) Agent and the Borrower shall enter into an amendment to this Agreement to reflect the replacement index, the adjusted margins and such other related amendments as may be appropriate, in the discretion of Agent, for the implementation and administration of the replacement index-based rate.

Notwithstanding anything to the contrary in this Agreement or the Other Documents (including, without limitation, Section 16.2), such amendment shall become effective without any further action or consent of any other party to this Agreement at 5:00 p.m. on the tenth (10th) Business Day after the date a draft of the amendment is provided to the Lenders, unless Agent receives, on or before such tenth (10th) Business Day, a written notice from the Required Lenders stating that such Lenders object to such amendment.

(c) Selection of the replacement index, adjustments to the applicable margins, and amendments to this Agreement (i) will be determined with due consideration to the then-current market practices for determining and implementing a rate of interest for newly originated loans in the United States and loans converted from a LIBOR Rate-based rate to a replacement index-based rate, and (ii) may also reflect adjustments to account for (x) the effects of the transition from the LIBOR Rate to the replacement index and (y) yield- or risk-based differences between the LIBOR Rate and the replacement index.

(d) Until an amendment reflecting a new replacement index in accordance with this Section 3.8.2 is effective, each advance, conversion and renewal of a LIBOR Rate Loan will continue to bear interest with reference to the LIBOR Rate; provided however, that if the Administrative Agent determines (which determination shall be final and conclusive, absent manifest error) that a LIBOR Termination Date has occurred, then following the LIBOR Termination Date, all LIBOR Rate Loans shall automatically be converted to Domestic Rate Loans until such time as an amendment reflecting a replacement index and related matters as described above is implemented.

(e) Notwithstanding anything to the contrary contained herein, if at any time the replacement index is less than zero, at such times, such index shall be deemed to be zero for purposes of this Agreement."

4. Ownership and Location of Collateral. Section 4.4(b) of the Credit Agreement is hereby amended by deleting each reference to "the Closing Date" and replacing it with "the Fourth Amendment Effective Date".

5. Appraisals. Section 4.7 of the Credit Agreement is hereby amended by deleting such Section in its entirety and replacing it with the following:

"4.7 Appraisals. Agent may, in its Permitted Discretion, at any time after the Closing Date and from time to time, (a) engage the services of an independent appraisal firm or firms of reputable standing, satisfactory to Agent, for the purpose of appraising the then current values of the Loan Parties' assets (including without limitation Inventory, Intellectual Property and the LTO Program) and (b) engage the services of an independent financial advisor, and such advisor shall at all times be granted by Borrowers and their Subsidiaries with full access to, and shall at all times have the right to audit, check and inspect, the books, records, audits, correspondence and all other papers relating to the

operation of each Loan Party's business. Absent the occurrence and continuance of an Event of Default at such time, Agent shall consult with Borrowing Agent as to the identity of any such firms; provided that it is agreed by the parties hereto that (x) Gordon Brothers Asset Advisors, LLC shall be deemed to be an acceptable firm for purposes of appraising the value of the LTO Program and (y) FTI Consulting, Inc. shall be deemed to be an acceptable financial advisor. In the event the value of the Loan Parties' assets, as so determined pursuant to any such appraisal, is less than anticipated by Agent, such that the Revolving Advances are in excess of such Advances permitted hereunder, then, promptly upon Agent's demand for same, the Borrowers shall make mandatory prepayments of then outstanding Revolving Advances so as to eliminate the excess Advances. All of the fees and out-of-pocket costs and expenses of any appraisals conducted pursuant to this Section 4.7 shall be paid for when due, in full and without deduction, off-set or counterclaim by Borrowers. Notwithstanding the foregoing, (i) no more than two (2) appraisals of Inventory and no more than two (2) appraisals of Intellectual Property (which may include, without limitation, an appraisal of the LTO Program) shall be conducted at the expense of the Borrowers during any consecutive twelve (12) month period, and (ii) if an Event of Default shall exist, then notwithstanding anything to the contrary in the foregoing clause (i), there shall be no limitation on the number or frequency of appraisals which may be conducted at the expense of the Borrowers."

6. Deposit Accounts. Section 4.8(j) of the Credit Agreement is hereby amended by deleting the reference to "the Closing Date" and replacing it with "the Fourth Amendment Effective Date".

7. Representations and Warranties

(a) Solvency; No Litigation. Sections 5.8(a) and (b) of the Credit Agreement are hereby amended by deleting each reference to "the Closing Date" and replacing it with "the Fourth Amendment Effective Date".

(b) Intellectual Property. Section 5.9 of the Credit Agreement is hereby amended by deleting the reference to "the Closing Date" and replacing it with "the Fourth Amendment Effective Date".

(c) Business and Property of the Loan Parties. Section 5.18 of the Credit Agreement is hereby amended by deleting the reference to "the Closing Date" in the second sentence of such Section and replacing it with "the Fourth Amendment Effective Date".

(d) Certificate of Beneficial Ownership. Section 5.20 of the Credit Agreement is hereby amended by deleting such Section in its entirety and replacing it with the following:

"5.20 Certificate of Beneficial Ownership. The Certificate of Beneficial Ownership executed and delivered to Agent and Lenders for each Loan Party on or prior to the Fourth Amendment Effective Date, as updated from time to time in accordance with this Agreement, is accurate, complete and correct as of the Fourth Amendment Effective Date and as of the date any such update is delivered."

(e) Equity Interests. Section 5.21 of the Credit Agreement is hereby amended by deleting the reference to "the Closing Date" and replacing it with "the Fourth Amendment Effective Date".

(f) Letter of Credit Rights. Section 5.23 of the Credit Agreement is hereby amended by deleting the reference to "the Closing Date" and replacing it with "the Fourth Amendment Effective Date".

8. Financial Covenants. Section 6.5 of the Credit Agreement is hereby amended by deleting such Section in its entirety and replacing it with the following:

"6.5 Financial Covenants.

(a) Reserved.

(b) Minimum EBITDA. Maintain as of the end of each fiscal quarter, EBITDA of Quantum and its Subsidiaries, on a consolidated basis, of not less than the amount set forth below for each fiscal quarter period then ended set forth below:

Fiscal Quarter Ending	Minimum EBITDA
September 30, 2018	$ 4,600,000
December 31, 2018	$ 8,500,000

(c) Reserved.

(d) Minimum PNC Qualified Cash. Maintain at all times PNC Qualified Cash in an amount of not less than the Minimum PNC Qualified Cash Amount."

9. Affirmative Covenants. Article VI of the Credit Agreement is hereby amended by inserting the following new Sections 6.15, 6.16 and 6.17 to the end of such Article:

"6.15 Certificate of Beneficial Ownership and Other Additional Information. Provide to Agent and the Lenders, promptly upon request: (a) confirmation of the accuracy of the information set forth in the most recent Certificate of Beneficial Ownership provided to Agent and Lenders; (b) a new Certificate of Beneficial Ownership, in form and substance acceptable to Agent and each Lender, when the individual(s) to be identified as a Beneficial Owner have changed; and (c) such other information and documentation as may reasonably be requested by Agent or any Lender from time to time for purposes of compliance by Agent or such Lender with Applicable Laws (including without limitation the USA Patriot Act and other "know your customer" and anti-money laundering rules and regulations), and any policy or procedure implemented by Agent or such Lender to comply therewith.

6.16 LTO Program.

(a) Subject to Section 18(b) of the Fourth Amendment, ensure that (i) all of the rights and interests under, in and to the LTO Program, the Recurring Royalty Revenue, all Format Development Agreements and any other contracts related to the foregoing, and (ii) all Intellectual Property necessary to, and primarily used in, the LTO Program, are owned by, in the name of and registered under, as applicable, LTO Subsidiary; and

(b) Upon the occurrence of any Default or Event of Default, and at the reasonable request of Agent, promptly transfer to LTO Subsidiary any additional rights or interests relating to the LTO Program, including without limitation any Intellectual Property used in the LTO Program and any employees engaged in work relating to, or servicing, the LTO Program.

6.17 Repayment Transaction Status Report. Cause, no less frequently than once each week, the President or Chief Financial Officer of Quantum and the Investment Banker (as defined in the Fourth Amendment) to either (a) have a teleconference (at times during each such week that are mutually convenient for the Loan Parties and Agent) with Agent and each Lender that elects to participate in such teleconference to discuss the then current status of the Repayment Transaction (as defined in the Fourth Amendment) or (b) provide a written process update (which may be delivered via email) in reasonable detail regarding the current status of the Repayment Transaction (as defined in the Fourth Amendment)."

10. Negative Covenants. Article VII of the Credit Agreement is hereby amended by inserting the following new Section 7.20 to the end of such Article:

"7.20 Quantum LTO as a Special Purpose Vehicle. Permit Quantum LTO to incur any Indebtedness other than (a) the Obligations, (b) the guaranty of the Term Loan Indebtedness, and (c) liabilities arising in connection with the LTO Program in the ordinary course of business."

11. Information as to Borrowers.

(a) Section 9.2 of the Credit Agreement is hereby amended by deleting clause (d) in the first sentence of such Section in its entirety and replacing it with the following:

"(d) promptly following Agent's request, (i) the estimated amount of Eligible Recurring Royalty Revenue Receivables as provided by the Specified Recurring Royalty Revenue Customers to the Borrowers and (ii) such other schedules, documents, reports and/or information regarding the Collateral or the financial condition of the Loan Parties and their Subsidiaries as Agent may reasonably request".

(b) Section 9.7 of the Credit Agreement is hereby amended by deleting such Section in its entirety and replacing it with the following:

"9.7 Annual Financial Statements. Furnish Agent (i) on or before January 31, 2019, for the fiscal year ending March 31, 2018, and (ii) within ninety (90) days after the end of each fiscal year ending thereafter, audited financial statements of Quantum and its Subsidiaries, on a consolidated basis and unaudited financial statements of Quantum and its Subsidiaries, on a consolidating basis (which shall consist of a balance sheet and statements of income, stockholders' equity and cash flow), from the beginning of the current fiscal year to the end of such fiscal year and the balance sheet as at the end of such fiscal year, all prepared in accordance with GAAP, and in reasonable detail and audited by independent certified public accountants reasonably acceptable to Agent (the "Accountants") and certified without qualification (except, with respect to the fiscal year ending March 31, 2018, (x) any qualification solely due to the projected, potential or possible failure to comply with any covenant under this Agreement or the Term Loan Agreement during the one year period following the date such certification is delivered or (y) a " going concern" statement or qualification solely due to the impending maturity of the Obligations and the Term Loan Indebtedness). The reports described in this Section shall be accompanied by a Compliance Certificate."

(c) Article IX of the Credit Agreement is hereby amended by inserting the following new Sections 9.19, 9.20 and 9.21 to the end of such Article:

"9.19 Weekly Information Report. Furnish Agent, weekly (no later than Thursday of each week (or, if Thursday is not a Business Day, on the next succeeding Business Day)) (a) an information report, in form to be mutually agreed upon by Quantum and Agent, which such report shall in any event include, without limitation, actual accounts payable aging for the prior week and actual cash receipts and cash disbursements for the prior week, and (b) Quantum's quarterly revenue forecast, updated as of the Tuesday of such week (or, if Tuesday is not a Business Day, on the next succeeding Business Day), prepared in good faith based upon assumptions which the Borrowers believe to be reasonable in light of the conditions existing at the time of delivery thereof (collectively, each a "Weekly Information Report").

9.20 Monthly Cash Flow Forecast Report. Furnish Agent, monthly (no later than ten (10) Business Days after the end of each month), a thirteen (13) week cash flow forecast, commencing as of the first day of the week in which it was delivered, prepared by Quantum and covering Quantum and its Subsidiaries on a consolidated basis, which cash flow forecast shall be in form and substance reasonably satisfactory to Agent and prepared in good faith based upon assumptions which the Borrowers believe to be reasonable in light of the conditions existing at the time of delivery thereof (each a "Cash Flow Forecast").

9.21 Variance Report. Furnish Agent, weekly (no later than Friday of each week (or, if Friday is not a Business Day, on the next succeeding Business Day)), (a) commencing with the first full week after the first Cash Flow Forecast required pursuant to Section 9.20 hereof has been received, a variance report comparing the actual cash receipts and cash disbursements for the prior week to the forecasted results for such week as set forth in the most recently received Cash Flow Forecast and (b) a variance report comparing the quarterly revenue forecast from the most recently received Weekly Information Report to the quarterly revenue forecast from the immediately preceding Weekly Information Report."

12. Events of Default.

(a) Financial Information. Section 10.3 of the Credit Agreement is hereby amended by deleting such Section in its entirety and replacing it with the following:

"10.3 Financial Information. Failure by any Loan Party to (a) furnish financial information when due under Sections 9.7, 9.9, 9.12, 9.13, 9.19, 9.20 or 9.21 of this Agreement, or (b) permit the inspection of its books or records or access to its premises for audits and appraisals in accordance with the terms of Section 4.6 hereof;".

(b) Noncompliance. Sections 10.5(a) and (b) of the Credit Agreement are hereby amended by deleting such Sections in their entirety and replacing them with the following:

"(a) failure or neglect of any Loan Party to perform, keep or observe any term, provision, condition or covenant contained in Sections 4.1, 4.2, 4.6, 4.8, 6.2 (solely if a Loan Party is not in good standing in its jurisdiction of incorporation or formation), 6.5, 6.6(a), 6.14, 6.16, any Section of Article VII (other than Section 7.16), or Sections 9.1, 9.2, 9.5(a) or 16.18 of this Agreement;

(b) failure or neglect of any Loan Party to perform, keep or observe any other term, provision, condition or covenant contained in Sections 4.4, 4.5, 4.7, 4.12, 6.3, 6.11, 6.15, 6.17, 9.4, 9.5(b), 9.6, 9.10, 9.11, 9.17 or 9.18 of this Agreement which is not cured within fifteen (15) days after the earlier of (x) knowledge of such failure or neglect by a Responsible Officer of any Loan Party or (y) the receipt by Borrowing Agent of written notice of such failure or neglect from Agent or any Lender (provided that such fifteen (15) day period shall not apply in the case of any failure or neglect to perform, keep or observe any term, provision, condition or covenant which is not capable of being cured at all or within such fifteen (15) day period); or".

13. Notices. Section 16.6 of the Credit Agreement is hereby amended by deleting the addresses for notices to Agent and PNC and replacing them with the following:

"(A) Ifto Agent or PNC at:

PNC Bank, National Association
One North Franklin Street, 25th Floor
Chicago, IL 60606
Attention: Relationship Manager
Facsimile: (312) 454-2919

with a copy to:

Blank Rome LLP
The Chrysler Building
405 Lexington Avenue
New York, NY 10174-0208
Attention: Michael J. Loesberg, Esq.
Facsimile: (212) 885-5001"

14. Exhibits and Schedules to Credit Agreement.

(a) The Schedules to the Credit Agreement are hereby amended as of the Fourth Amendment Effective Date as set forth on Schedule II attached hereto.

(b) Exhibit 1.2(b) to the Credit Agreement is hereby amended by deleting such Exhibit in its entirety and replacing it with Exhibit 1.2(b) attached hereto.

15. New Borrower Joinder. Quantum LTO has agreed to join the Credit Agreement as a Borrower pursuant to the terms hereof and thereof. Accordingly, each Loan Party hereby agrees as follows:

(a) Quantum LTO acknowledges and confirms that it has received a copy of the Credit Agreement and the schedules and exhibits thereto, in each case as amended to date (including by this Amendment).

(b) Quantum LTO hereby acknowledges, agrees and confirms that, by its execution of this Amendment, Quantum LTO will become a party to the Credit Agreement and a "Borrower" for all purposes of the Credit Agreement and the Other Documents, and shall have all of the obligations of a Borrower thereunder as if it had originally executed the Credit Agreement and such Other Documents. Quantum LTO hereby ratifies, as of the Fourth Amendment Effective Date, and agrees to be bound by, all of the terms, provisions and conditions contained in the Credit Agreement and in the Other Documents applicable to the Borrowers and/or the Loan Parties, including without limitation (i) all of the representations and warranties set forth in Article V of the Credit Agreement, (ii) all of the affirmative covenants set forth in Article VI of the Credit Agreement, and (iii) all of the negative covenants set forth in Article VII of the Credit Agreement.

(c) Without limiting the generality of the foregoing, Quantum LTO hereby (i) assigns, pledges and grants to Agent, for its benefit and for the ratable benefit of each Lender and each other Secured Party, a continuing security interest in and to and Lien on all of its Collateral, whether now owned or existing or hereafter created, acquired or arising and wheresoever located, to secure the prompt payment and performance to Agent and each Lender (and each other holder of any Obligations) of the Obligations, and (ii) unconditionally guarantees, as a primary obligor and not merely as a surety, jointly and severally with each other Guarantor when and as due, whether at maturity, by acceleration, by notice of prepayment or otherwise, the due and punctual performance of all Obligations. In furtherance of the foregoing, Quantum LTO hereby authorizes Agent to file against it, one or more financing, continuation or amendment statements pursuant to the Uniform Commercial Code in form and substance satisfactory to Agent (which statements may have a description of collateral which is broader than that set forth herein, including without limitation a description of Collateral as "all assets" and/or "all personal property" of Quantum LTO).

(d) Quantum LTO hereby agrees that at any time and from time to time, upon the reasonable request of Agent, it will execute and deliver such other and further agreements, documents and instruments and do such other further acts and things as Agent may reasonably request in order to effect the purposes of the joinder set forth in this Section. In addition, and in accordance with Article XV of the Credit Agreement, Quantum LTO hereby irrevocably designates Borrowing Agent to be its attorney and agent and in such capacity to (i) borrow, (ii) request Advances, (iii) sign and endorse notes, (iv) execute and deliver all instruments, documents, applications, security agreements and all other agreements, documents, instruments, certificates, notices and further assurances now or hereafter required under the Credit Agreement or the Other Documents, (v) make elections regarding interest rates, and (vi) otherwise take action under and in connection with the Credit Agreement and the Other Documents, all on behalf of and in the name of Quantum LTO, and hereby authorizes Agent to pay over or credit all proceeds of Advances in accordance with the request of Borrowing Agent.

16. Representations and Warranties. In addition to the continuing representations and warranties heretofore or hereafter made by the Loan Parties to Agent and Lenders pursuant to the Credit Agreement and the Other Documents, each Loan Party hereby represents and warrants to Agent and each Lender as follows:

(a) each Loan Party has full power, authority and legal right to enter into this Amendment and to perform all its respective Obligations hereunder;

(b) this Amendment has been duly executed and delivered by each Loan Party;

(c) this Amendment constitutes the legal, valid and binding obligation of each Loan Party enforceable in accordance with its terms, except as such enforceability may be limited by any applicable bankruptcy, insolvency, moratorium or similar laws affecting creditors' rights generally;

(d) the execution, delivery and performance of this Amendment (i) are within each Loan Party's corporate powers, as applicable, (ii) have been duly authorized by all necessary corporate action, as applicable, (iii) are not in contravention of law or the terms of such Loan Party's Organizational Documents or to the conduct of such Loan Party's business or of any Material Contract or undertaking to which such Loan Party is a party or by which such Loan Party is bound, including without limitation the Term Loan Documents, (iv) will not conflict with or violate any law or regulation, or any judgment, order or decree of any Governmental Body, (v) will not require the Consent of any Governmental Body, any party to a Material Contract or any other Person, except (x) any Consents of any party to a Material Contract or any other Person (other than a Governmental Body) with respect to which the failure to obtain could not reasonably be expected, individually or in the aggregate to have a Material Adverse Effect, (y) any immaterial Consents of any Governmental Body, or (z) those Consents set forth on Schedule 5.1 to the Credit Agreement, all of which will have been duly obtained, made or complied with prior to the Fourth Amendment Effective Date and which are in full force and effect on the Fourth Amendment Effective Date, and (vi) will not conflict with, nor result in any breach in any of the provisions of or constitute a default under or result in the creation of any Lien except Permitted Encumbrances upon any asset of such Loan Party under the provisions of any material agreement, instrument, or other document to which such Loan Party is a party or by which it or its property is a party or by which it may be bound, including without limitation the Term Loan Documents;

(e) each Loan Party is duly formed or incorporated, as applicable, and in good standing under the laws of the state of its incorporation or formation, as applicable, and is good standing in such state and is qualified to do business in any state where the failure to be so qualified could reasonably be expected to result in a Material Adverse Effect;

(f) each of the representations and warranties made by any Loan Party in the Credit Agreement and the Other Documents, each as amended hereby, are true and correct in all material respects (except that such materiality qualifier shall not be applicable to any representations and warranties that are qualified or modified by materiality in the text thereof) as if made on the date of this Amendment and after giving effect to this Amendment and the transactions contemplated hereby, except to the extent that any such representation or warranty is made as of an earlier and/or specified date, in which case such representation or warranty shall have been true and correct in all material respects (except that such materiality qualifier shall not be applicable to any representations and warranties that are qualified or modified by materiality in the text thereof)) as of such earlier or specified date; and

(g) after giving effect to the transactions contemplated by this Amendment, on the date of this Amendment, no Default or Event of Default exists or has occurred and is continuing.

17. Conditions Precedent. The effectiveness of this Amendment is expressly conditioned upon the satisfaction of each of the following conditions precedent in a manner satisfactory to Agent:

(a) Agent shall have received this Amendment, duly authorized, executed and delivered by each Loan Party;

(b) Agent shall have received, in each case in form and substance reasonably satisfactory to Agent, each of the documents set forth on Schedule I attached hereto, duly authorized, executed and delivered by the parties thereto (as applicable);

(c) Agent shall have received payment from Borrowers of all fees payable to Agent and Lenders on the Fourth Amendment Effective Date pursuant to the terms of the Fee Letter and all other fees, charges and disbursements of Agent and its counsel required to be paid pursuant to the Credit Agreement in connection with the preparation, execution and delivery of this Amendment;

(d) all proceedings taken in connection with the transactions contemplated by this Amendment and all documents, instruments and other legal matters incident thereto shall be reasonably satisfactory to Agent and its counsel; and

(e) on the date of this Amendment and after giving effect to the provisions of this Amendment and the transactions contemplated hereby, no Default or Event of Default shall exist or have occurred and be continuing.

18. Conditions Subsequent.

(a) On or prior to August 30, 2018 (or such later date as Agent shall agree to in writing in its sole discretion), the Loan Parties shall deliver to Agent, in form and substance satisfactory to Agent, appropriate loss payable endorsements naming Agent as mortgagee and/or lender loss payee (as applicable) as its interests may appear with respect to all insurance coverage of the Loan Parties referred to in clauses (i) and (iii) of Section 6.6 of the Credit Agreement, and providing (i) that all proceeds under such policies shall be payable to Agent,

(ii) no such insurance shall be affected by any act or neglect of the insured or owner of the property described in such policy, and (iii) that such policy and loss payable clauses may not be cancelled, amended or terminated unless at least thirty (30) days prior written notice is given to Agent (or in the case of non-payment, at least ten (10) days prior written notice).

(b) On or prior to September 22, 2018 (or such later date as Agent shall agree to in writing in its sole discretion), Quantum shall (i) transfer to Quantum LTO all of its rights, title and interest under, in and to (x) the LTO Program, the Recurring Royalty Revenue, all Format Development Agreements and any other contracts related to the foregoing, and (y) all Intellectual Property necessary to, and primarily used in, the LTO Program and (ii) take all action that Agent may reasonably request in order to perfect Agent's Lien upon, or to enable Agent to protect, exercise or enforce its rights in, the Collateral of Quantum LTO (including, but not limited to, executing and delivering an assignment of security interest in all of Quantum LTO's Intellectual Property), in each case in form and substance reasonably satisfactory to Agent.

(c) Each Loan Party, will, and will cause each of its Subsidiaries to, comply with each of the Milestones (as defined below) set forth below on or prior to the applicable date for compliance indicated below with respect to such Milestone.

(d) Any failure by the Loan Parties to comply with the requirements of this Section shall constitute an immediate Event of Default.

19. Repayment Transaction and Related Milestones. The Loan Parties have notified Agent and the Lenders that the Loan Parties have retained Armory Securities, LLC (the "Investment Banker") to pursue a refinancing or other transaction that results in the Payment in Full of all of the Obligations and the termination of the Credit Agreement and the Other Documents pursuant to the terms of a payoff letter reasonably acceptable to Agent (the "Repayment Transaction") with one or more Potential Repayment Transaction Parties (as defined below). The Loan Parties hereby (i) authorize the Investment Banker to meet with Agent, Lenders, and each of their respective advisors (in person and telephonically), and provide to Agent such information and reports as Agent may request from time to time, and (ii) agree, at all times, to (x) continue to retain the Investment Banker for the purpose of effectuating the Repayment Transaction, (y) not interfere with the Investment Banker or with the performance of the Investment Banker's responsibilities and (z) diligently pursue the Repayment Transaction and take all commercially reasonable steps to consummate the Repayment Transaction. In furtherance of the foregoing, the Loan Parties, will, and will cause each of their Subsidiaries to, comply with each of the milestones (the "Milestones") set forth below (and failure by the Loan Parties to comply with any Milestone as of the date indicated below therefor (or such later date as Agent shall agree to in writing in its sole discretion) will constitute an immediate Event of Default):

(a) List of Potential Repayment Transaction Parties. On or before August 24, 2018 (or such later date as Agent shall agree to in writing in its sole discretion), Borrowers will provide to Agent a list of financial institutions and/or investors that Borrowers, in consultation with the Investment Bank, have identified as a potential financing source or transaction counterparty, as applicable, for the Repayment Transaction (each, a "Potential Repayment Transaction Party"); provided, that if negotiations cease with any Potential Repayment Transaction Party in respect of the Repayment Transaction, such financial institution or other third party shall no longer be considered a "Potential Repayment Transaction Party" for purposes of this Section;

(b) Distribution of "Teaser" and Non-Disclosure Agreement. On or before August 31, 2018 (or such later date as Agent shall agree to in writing in its sole discretion), Borrowers will cause the Investment Bank to distribute a "teaser" regarding the Loan Parties' assets and businesses, and a non-disclosure agreement with respect to the Repayment Transaction, in each case in form and substance reasonably acceptable to Agent;

(c) Establishment of Data Site. On or before August 31, 2018 (or such later date as Agent shall agree to in writing in its sole discretion), Borrowers will cause the Investment Banker to (i) establish a data site with respect to the Repayment Transaction and (ii) permit each Potential Repayment Transaction Party which has executed a non-disclosure agreement, in form and substance reasonably satisfactory to the Borrowers (an "NDA") to obtain access thereto;

(d) Distribution of CIM. On or before August 31, 2018 (or such later date as Agent shall agree to in writing in its sole discretion), Borrowers will cause the Investment Banker to distribute a confidential information memorandum, in form and substance reasonably acceptable to Agent, with respect to the Repayment Transaction to each Potential Repayment Transaction Party which has executed an NDA;

(e) Term Sheet. On or before October 15, 2018 (or such later date as Agent shall agree to in writing in its sole discretion), Borrowers will provide to Agent copies of one or more non-binding term sheets (at least one of which (i) shall contain reasonable and market diligence and closing conditions for a transaction of the type which would, if consummated, result in the consummation of the Repayment Transaction, and (ii) set forth the material economic terms of a proposed transaction which, if consummated, would be sufficient to result in the consummation of a Repayment Transaction ("Sufficient Terms")); and

(f) Commitment Letter/Draft Documentation. On or before November 30, 2018 (or such later date as Agent shall agree to in writing in its sole discretion), Borrowers will provide to Agent either (i) executed copies of at least one binding commitment letter, setting forth Sufficient Terms and a reasonable timeline for closing of a Repayment Transaction on or prior to January 31, 2019, or (ii) copies of draft documentation that has been provided to the Borrowers by a Potential Repayment Transaction Party containing Sufficient Terms.

20. Reaffirmation. Each Loan Party hereby ratifies and reaffirms (a) all of its payment and performance obligations, contingent or otherwise, under the Credit Agreement and each of the Other Documents to which it is a party, and (b) its grant to Agent of a security interest in the Collateral under the Credit Agreement and each of the Other Documents to which it is a party.

21. Acknowledgments. To induce Agent and Lenders to enter into this Amendment, Borrowers and each other Loan Party acknowledge that:

(a) as of the Fourth Amendment Effective Date, (i) Agent and Lenders have performed without default all obligations required of Agent and Lenders under the Credit Agreement and each of the Other Documents; and (ii) there are no disputes with or claims against Agent or Lenders, or any knowledge of any facts giving rise to any disputes or claims, related to the Credit Agreement or any of the Other Documents, including, without limitation, any disputes or claims or knowledge of facts giving rise thereto, that involve a breach or violation on the part of Agent or any Lender of the terms and conditions of the Credit Agreement or any of the Other Documents; and

(b) no Loan Party has any valid defense to the enforcement of their respective obligations set forth in the Credit Agreement, the Other Documents or this Amendment, as applicable, by reason of any circumstance, action, cause or thing whatsoever which arises at any time on or prior to the day and date of this Amendment.

22. Governing Law. This Amendment and all matters relating hereto or arising herefrom (whether arising under contract law, tort law or otherwise) shall, in accordance with Section 5-1401 of the General Obligations Law of the State of New York, be governed by and construed in accordance with the laws of the State of New York.

23. Effect of this Agreement. Except as expressly amended pursuant hereto, no other changes or modifications to the Credit Agreement or any of the Other Documents are intended or implied, and in all other respects, the Credit Agreement and each of the Other Documents is hereby specifically ratified, restated and confirmed by all parties hereto as of the date of this Amendment. To the extent that any provision of the Credit Agreement or any of the Other Documents are inconsistent with the provisions of this Amendment, the provisions of this Amendment shall control.

24. Binding Effect. This Amendment shall bind and inure to the benefit of the respective successors and permitted assigns of each of the parties hereto.

25. Further Assurances. The Loan Parties shall execute and deliver such further documents and take such further action as may be reasonably requested by Agent to effectuate the provisions and purposes of this Amendment.

26. Counterparts; Electronic Signature. This Amendment may be executed in any number of and by different parties hereto on separate counterparts, all of which, when so executed, shall be deemed an original, but all such counterparts shall constitute one and the same agreement. Any signature delivered by a party by facsimile or electronic transmission (including email transmission of a .pdf image) shall be deemed to be an original signature hereto.

27. Release. In consideration of the agreements of Agent and Lenders contained herein and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, each Loan Party, on behalf of itself and its respective successors, assigns, and other legal representatives, hereby absolutely, unconditionally and irrevocably releases, remises and forever discharges Agent and Lenders, their respective successors and assigns, and their respective present and former shareholders, affiliates, subsidiaries, divisions, predecessors, directors, officers, attorneys, employees, agents and other representatives (Agent, each Lender and all such other Persons being hereinafter referred to collectively as the "Releasees" and individually as a "Releasee"), of and from all demands, actions, causes of action, suits, covenants, contracts, controversies, agreements, promises, sums of money, accounts, bills, reckonings, damages and any and all other claims, counterclaims, defenses, rights of set-off, demands and liabilities whatsoever (individually, a "Claim" and collectively, "Claims") of every name and nature, known or unknown, suspected or unsuspected, as of the date of this Amendment, both at law and in equity, which such Loan Party, or any of its respective successors, assigns, or other legal representatives may now or hereafter own, hold, have or claim to have against the Releasees or any of them for, upon, or by reason of any circumstance, action, cause or thing whatsoever which arises at any time on or prior to the day and date of this Amendment, in each case for or on account of, or in relation to, or in any way in connection with any of the Credit Agreement, any of the Other Documents or transactions thereunder or related thereto; provided that nothing contained herein shall release any Releasee from any Claims resulting from the gross negligence, willful misconduct or material breach of the Credit Agreement or any of the Other Documents by any Releasee as determined by a court of competent jurisdiction in a final non-appealable judgment or order or for any Claim arising with respect to obligations arising under this Amendment or the documents entered into as of the Fourth Amendment Effective Date.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the parties have entered into this Amendment as of the date first above written.

BORROWERS:

QUANTUM CORPORATION

By: /s/ J. Michael Dodson
Name: J. Michael Dodson
Title: Chief Financial Officer

QUANTUM LTO HOLDINGS, LLC

By: /s/ J. Michael Dodson
Name: J. Michael Dodson
Title: Chief Financial Officer

AGENT AND LENDERS:

PNC BANK, NATIONAL ASSOCIATION,
as Agent and Lender

By: /s/ Daniela Piemonte
Name: Daniela Piemonte
Title: Assistant Vice President

Exhibit 10.75

Quantum Corporation
224 Airport Parkway
Suite 300
San Jose, CA 95110-1382
USA

+1 [408] 944-4000

www.quantum.com

Lewis Moorehead
11615 N. 99th St.
Scottsdale, AZ 85260

October 3, 2018

Dear Lewis,

I am pleased to confirm our offer to you to join Quantum in the position of Chief Accounting Officer reporting to Mike Dodson, Chief Financial Officer. Your start date will be October 22, 2018 and your office location will be Bellevue, WA.

You will receive an annual salary of $300,000.00 divided equally by 26 pay periods, at $11,538.46 per pay period. In addition, you will be eligible to participate in Quantum's Incentive Plan (QIP) which is the annual bonus program. Your target payout in that plan will be 50% of your annual salary, although the actual amount will be determined as described in the plan, based on Quantum's Corporate and/or business specific results, as well as your own performance. The bonus targets and terms of the Quantum Incentive Plan are subject to annual re-evaluation. Quantum will also cover all usual and customary expenses per our Travel policy and incurred because of the commute to the Bellevue office or any other work-related travel.

The Company has recommended to the Leadership and Compensation Committee of the Board of Directors that a total of 50,000 Restricted Stock Units (RSUs) and 50,000 Performance Stock Units (PSUs). The RSU Grants and PSU Grant will be made effective as of the first business day on which the Company becomes current with respect to its filings under the Securities Exchange Act of 1934, as amended (the "Grant Date"). If the Company experiences a "Change in Control" (as defined in the Company's 2012 Long-Term Incentive Plan (the "Plan")) before the Grant Date, and you remain a Service Provider (as defined in the Plan) up to the Change of Control, the Company will provide for economic equivalent payments or benefits to you as if the RSU Grants and PSU Grant had been made immediately prior to the Change of Control (provided that, in this case, the RSU Grants and PSU Grant will not actually be made and the economic equivalent payments or benefits will be in lieu of the RSU Grants and PSU Grant).

The PSUs will be eligible to vest based on performance metrics based on the achievement of specified levels of the average closing prices of a Share on the New York Stock Exchange (symbol: QTM) as quoted in the Wall Street Journal during any sixty (60) day trading period (the "60-Day Average Price") occurring during the time frames specified below, subject to the LCC's certification of the performance criteria which must occur within 10 calendar days of satisfying the applicable price targets, subject to your continued service with the Company through the later of the achievement date and the vest date as follows:

- 16,666 Shares will be earned, if, at any time between June 1, 2018 and May 31, 2022, the60-Day Average Price is at least $4.00 and will vest upon the later of the LCC certification and May 31, 2019.

Quantum.

- An additional 16,666 Shares will be earned, if, at any time between June 1, 2018 and May 31, 2022, the 60-Day Average Price is at least $5.00 and will vest upon the later of the LCC certification and May 31, 2020.
- An additional 16,667 Shares will be earned, if, at any time between June 1, 2018 and May 31, 2022, the 60-Day Average Price is at least $6.00 and will vest upon the later of the LCC certification and May 31, 2021.

Subject to the approval of the Board or Leadership and Compensation Committee of the Board (the "LCC"), as applicable, and the Company's standard practice in place at the time, you will be eligible for another annual equity grant in connection with the Company's fiscal year beginning April 1, 2019.

Quantum's flexible benefit program provides a full range of benefits for you and your qualified dependents. Additionally, you will be eligible to participate in Quantum's Deferred Compensation Program. A benefit overview packet will be mailed immediately upon your acceptance and you will receive a detailed review of our benefits program during your orientation. Information relating to the Deferred Compensation program will be sent to you within 30 days of your hire date. Your orientation will be scheduled with a representative of HR and will occur shortly after your hire date.

During your employment with Quantum you will have access to confidential and proprietary information, which Quantum vigorously protects. Therefore, this offer is conditioned on your execution and delivery to Quantum of its Proprietary Information and Inventions Agreement. You will receive these documents as part of a separate mailing that will also include your orientation packet. You are requested to bring the required documents with you on your first day.

During your employment with Quantum, you will also devote your full business efforts and time to Quantum. For the duration of your employment with Quantum, you agree not to actively engage in any other employment, occupation, or consulting or other business activity for any direct or indirect remuneration (including membership on a board of directors) without the prior approval of the Chief Executive Officer; provided, however, that you may, without the approval of the Chief Executive Officer, serve in any capacity with any civic, educational, or charitable organization provided that such services do not interfere with your obligations to Quantum. Notwithstanding the foregoing, in no event, during the term of your employment with Quantum, will you engage in any other employment, occupation, consulting or other business activity directly related to the business in which Quantum is now involved or becomes involved during the term of your employment, or engage in any other activities that conflict with your obligations to Quantum.

In accepting this offer, you are representing to Quantum that (a) you are not a party to any employment agreement or other contract or arrangement which prohibits your full-time employment with Quantum, (b) you do not know of any conflict which would restrict your employment with Quantum and (c) you have not and will not bring with you to your employment with Quantum any documents, records or other confidential information belonging to former employers. We ask that, if you have not already done so, you disclose to Quantum any and all agreements relating to your prior employment that may affect your eligibility to be employed by Quantum or limit the manner in which you may be employed.

To comply with government mandated confirmation of employment eligibility, please complete the "Lists of Acceptable Documents" as approved by the United States Department of Justice for establishing identity and employment eligibility - the "I-9" process - which will be mailed to you with your benefits information. Please bring these documents to your orientation. Also, please review and sign the "Agreement Covering the Protection of Company Private and Proprietary Information." That document can also be returned during your orientation.

Quantum.

To confirm your acceptance of our offer, please sign one copy of this letter, and return a pdf copy of the document to Terri Longbella, VP, WW Human Resources. This offer is contingent upon successful completion of security background verification.

This offer supersedes any and all other written or verbal offers. Employment at Quantum is at will – either you or Quantum has the right to terminate your employment at any time for any reason, with or without cause. You understand and agree that neither your job performance nor promotions, commendations, bonuses or the like from Quantum give rise to or in any way serve as the basis for modification, amendment, or extension, by implication or otherwise, of your at-will employment with Quantum.

Lewis, I am very excited to have you join our leadership team and look forward to our partnership in driving future Quantum success.

Sincerely,

Terri Longbella

Terri Longbella
VP, WW Human Resources

ACCEPTANCE

I accept this offer of employment and acknowledge that my employment with Quantum will be on an at-will basis.

/s/ Lewis Moorehead	10/7/2018
Lewis Moorehead	Date

Quantum.

Quantum

Quantum Corporation
224 Airport Parkway
Suite 550
San Jose, CA 95110
USA

+1 [408] 944-4000

April 4, 2019

John A. Fichthorn
875 Third Avenue, 15th Floor
New York, NY 10022

Dear John:

We are pleased to offer you the opportunity to serve on the Board of Directors (the "Board'') of Quantum Corporation (''Quantum"), which is effective today, based upon the approval of the Quantum Board at its meeting held earlier today.

Under the current Board compensation program, your Board retainer will be $50,000 per annum. You will be paid additional retainers based upon the committee(s) to which you will be appointed. These retainers are paid in cash, generally in quarterly installments, and will be prorated for partial periods of service. Quantum will also reimburse you for any reasonable travel or incidental expenses associated with performing your duties as a Board member.

We will recommend to the Leadership and Compensation Committee that a promise to grant you restricted stock units (RSUs) with a total value of $33,333 be awarded to you, based upon the average closing stock price for the thirty days prior to the day your "promise grant" is awarded. The number of RSUs to be awarded will be determined at the time of award based on the company's closing stock price on the date of the Leadership and Compensation Committee's approval, which occurs on the first business day of every month. These RSUs will vest 100% on the date of the Company's next annual stockholder meeting. Once the RSUs have been approved, you will receive documentation from E*Trade, Quantum's Stock Administrator, within two (2) months from your start date. If you remain a Board member, you will receive an annual stock grant thereafter, currently set at a total value of $100,000 per annum. Details regarding the annual stock program are subject to change.

To confirm your acceptance of our offer, please sign one copy of this letter, complete the enclosed documents, and return them to Noah D. Mesel via email at noah.mesel@quantum.com or by mail to: Noah D. Mesel, Quantum Corporation, 224 Airport Parkway, Suite 550, San Jose, CA 95110.·

Please contact me if you have any questions. Welcome to Quantum and I look forward to working with you.

Sincerely,

/s/ Jamie Lerner
Jamie Lerner
President & CEO
Quantum Corporation

I understand and accept the terms of this agreement and agree to comply with all Quantum and Board policies and procedures, including those described in Quantum's Business Conduct and Ethic's Policy, Section 16 Policy, Insider Trading Policy, and Corporate Governance Principles.

Signed: /s/ John A. Fichthorn Date: 4/30/19
John A. Fichthorn

Enclosures (These will be sent to you electronically):

Director Change in Control Agreement

Director Indemnification Agreement

The High Road: Quantum's Business Conduct & Ethics Policy

Section 16 Policy Documentation

Insider Trading Policy

Corporate Governance Principles

EFT Form

W-9

cc: Compensation
Legal

Exhibit 21.1

QUANTUM CORPORATION
SUBSIDIARIES OF THE REGISTRANT

1. A.C.N. 120.786.012 Pty. Ltd., an Australian company
2. Advanced Digital Information Corporation, a Washington corporation
3. Certance (US) Holdings, Inc., a Delaware corporation
4. Certance Holdings Corporation, a Delaware corporation
5. Certance LLC, a Delaware limited liability company
6. Quantum Beteiligungs GmbH, a German corporation
7. Quantum Boehmenkirch GmbH & Co. KG, a German corporation
8. Quantum Engineering Australia Pty. Ltd., an Australian company
9. Quantum International Inc., a Delaware corporation
10. Quantum Korea Co. Ltd., a Korean corporation
11. Quantum LTO Holdings, LLC, a Delaware corporation
12. Quantum Peripherals (Europe) SARL, a Swiss corporation
13. Quantum SARL, a French corporation
14. Quantum Storage Australia Pty. Ltd., an Australian corporation
15. Quantum Storage GmbH, a Swiss corporation
16. Quantum Storage Japan Corporation, a Japanese corporation
17. Quantum Storage Singapore Pte. Ltd., a Singapore private company
18. Quantum Storage UK Ltd., a United Kingdom corporation

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on FormS-8 (Nos. 333-147621, 333-175208, 333-184854, 333-200052, 333-218576, and 333-221476) of Quantum Corporation of our report dated August 6, 2019 relating to the consolidated financial statements and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

Armanino LLP
San Ramon, California

August 6, 2019

EXHIBIT 31.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO EXCHANGE ACT RULE 13a-14(a)/15d-14(a)
AS ADOPTED PURSUANT TO SECTION 302
OF THE SARBANES-OXLEY ACT OF 2002

I, James J. Lerner, certify that:

1. I have reviewed this annual report on Form 10-K of Quantum Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize, and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 6, 2019

/S/ James J. Lerner
James J. Lerner
Chairman and Chief Executive Officer
(Principal Executive Officer)

EXHIBIT 31.2

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO EXCHANGE ACT RULE 13a-14(a)/15d-14(a)
AS ADOPTED PURSUANT TO SECTION 302
OF THE SARBANES-OXLEY ACT OF 2002

I, J. Michael Dodson, certify that:

1. I have reviewed this annual report on Form 10-K of Quantum Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize, and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 6, 2019

/S/ J. Michael Dodson

J. Michael Dodson
Chief Financial Officer
(Principal Financial Officer)

EXHIBIT 32.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002

I, James J. Lerner, do hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

- The Annual Report on Form 10-K of the Company for the fiscal year ended July 28, 2018, as filed with the Securities and Exchange Commission (the "Report"), fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 6, 2019

/S/ James J. Lerner

James J. Lerner
Chairman and Chief Executive Officer
(Principal Executive Officer)

EXHIBIT 32.2

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002

I, J. Michael Dodson, do hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

- The Annual Report on Form 10-K of the Company for the fiscal year ended July 28, 2018, as filed with the Securities and Exchange Commission (the "Report"), fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 6, 2019

/S/ J. Michael Dodson

J. Michael Dodson
Chief Financial Officer
(Principal Financial Officer)