

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

**FORM 10-K**

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

**For the fiscal year ended March 31, 2004**

**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**  
(State or Other Jurisdiction of  
Incorporation or Organization)

**94-2665054**  
(I.R.S. Employer Identification No.)

**1650 Technology Drive Suite 800, San Jose, California**  
(Address of Principal Executive Offices)

**95110**  
(Zip Code)

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

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

<u>Title of each class</u>
QUANTUM CORPORATION-DLT & STORAGE SYSTEMS GROUP COMMON STOCK
RIGHTS TO PURCHASE SERIES B JUNIOR PARTICIPATING PREFERRED STOCK

<u>Name of each exchange on which registered</u>
NEW YORK STOCK EXCHANGE
NEW YORK STOCK EXCHANGE

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

4.375% CONVERTIBLE SUBORDINATED NOTES DUE 2010

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 if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

Indicate by check mark whether the registrant is an accelerated filer (as defined in Rule 12b-2 of the Act). Yes ☒ No ☐.

The aggregate market value of Quantum Corporation's common stock, \$0.01 par value per share, held by nonaffiliates of the Registrant was approximately \$297.9 million on September 26, 2003, the last day of the Registrant's most recently completed second fiscal quarter, based on the closing sales price of the Registrant's common stock on that date on the New York Stock Exchange. For purposes of this disclosure, shares of common stock held by persons who hold more than 5% of the outstanding shares of common stock and shares held by officers and directors of the Registrant have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily conclusive.

As of the close of business on June 3, 2004, there were approximately 180.5 million shares of Quantum Corporation's common stock issued and outstanding.

**DOCUMENTS INCORPORATED BY REFERENCE**

The Registrant's definitive Proxy Statement for the Annual Meeting of Stockholders to be held on September 2, 2004, which the Registrant will file with the Securities and Exchange Commission within 120 days after the end of the fiscal year covered by this report, is incorporated by reference in Part III of this Form 10-K to the extent stated herein.

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## PART I

This report contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Forward-looking statements in this report usually contain the words “will,” “estimate,” “anticipate,” “expect,” “believe” or similar expressions and variations or negatives of these words. All forward-looking statements including, but not limited to, (1) our expectation that media royalties will continue to be a significant source of our DLTape revenues, (2) our expectation that we will continue to derive a substantial majority of our revenue from products based on our tape technology, (3) our expectation that we will continue to focus on improving our cost structure, (4) our belief that our existing facilities are adequate to meet our business needs for the next 12 months, (5) our forecast that the current installed base of tape drives will result in continued demand for tape media cartridges, (6) our expectation that downward pressure on media and tape sales will continue to adversely impact our business, including further erosion of our prices (7) our intention to pursue product initiatives in order to further improve gross margins, increase operating efficiencies and effectiveness, and reduce operating costs, (8) our expectation that any debentures that we issue after the date of this Annual Report on Form 10-K in connection with our acquisition of M4 Data will total approximately \$3 million in principal amount, (9) our expectation that our purchases of property and equipment will continue at about the same level in fiscal year 2005 as purchase levels in fiscal year 2004, (10) our belief that our existing cash and capital resources will be sufficient to meet all currently planned expenditures and sustain our operations for the next 12 months, (11) our expectation that we will continue to devote substantial management and financial resources to improve existing products and introduce new products, (12) our belief that our ultimate liability in any infringement claim made by any third party will not be material to us, (13) our expectation that we may make additional acquisitions in the future, (14) our expectation that our contractual commitments that involve future payments will obligate us to make payments totaling: no more than \$54.9 million within one year of March 31, 2004; no more than \$9.7 million between the first and second anniversary of March 31, 2004; no more than \$5.1 million between the second and the third anniversary of March 31, 2004; and no more than \$222.7 million after the third anniversary of March 31, 2004, (15) our expectation that we will incur additional charges associated with future cost reduction activities in fiscal years 2005 through 2008 that will total no more than \$7.3 million, and (16) our belief that our total foreign exchange rate exposure is not significant, are inherently uncertain as they are based on management’s expectations and assumptions concerning future events, and they are subject to numerous known and unknown risks and uncertainties. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof. As a result, our actual results may differ materially from the forward-looking statements contained herein. Factors that could cause actual results to differ materially from those described herein include, but are not limited to, (1) the amount of orders received in future periods; (2) our ability to timely ship our products; (3) uncertainty regarding IT spending and the corresponding uncertainty in the demand for tape drives and tape automation products; (4) our continued receipt of media royalties from media manufacturers at or above historical levels; (5) a continued trend toward centralization of storage; (6) our ability to achieve anticipated pricing, cost and gross margin levels, particularly on tape drives, given lower volumes and continuing price and cost pressures; (7) the successful execution of our strategy to expand our businesses into new directions; (8) our ability to successfully introduce new products; (9) our ability to achieve and capitalize on changes in market demand; (10) acceptance of, and demand for, our products; (11) our ability to maintain supplier relationships; and (12) those factors discussed under “Risk Factors” elsewhere in this Annual Report on Form 10-K. Our forward-looking statements are not guarantees of future performance. We disclaim any obligation to update information in any forward-looking statement.

## **ITEM 1. Business**

### **Business Description**

Quantum Corporation (“Quantum”, the “Company”, “us” or “we”) (NYSE:DSS), founded in 1980, is a global leader in storage, delivering reliable backup, recovery and archive solutions that meet demanding requirements for data integrity and availability with superior price performance and comprehensive service and support. We are the world's largest supplier of half-inch cartridge tape drives, and our DLTtape™ Technology is standard for tape backup, recovery, and archive business-critical data for the mid-range enterprise. We offer the broadest portfolio of tape autoloaders and libraries and are one of the pioneers in the disk-based backup market, providing solutions that emulate a tape library but are optimized for backup and recovery.

Previously, Quantum was also in the hard disk drive business and operated as Quantum’s Hard Disk Drive group (“HDD”). This business was acquired by Maxtor Corporation (“Maxtor”) on April 2, 2001.

### **Business Summary**

Quantum has two data storage business segments: the DLTtape business and the Storage Systems business. Our DLTtape business consists of tape drive and tape media cartridge product lines. Our Storage Systems business consists of tape automation systems and service and includes disk-based backup systems.

While continuing to develop and introduce new products in the storage market during fiscal year 2004, we have also continued to take steps to reduce costs in order to return to profitability. In recent years, our business has experienced declining total revenues, lower gross margins and operating losses. The factors driving these trends included, among other things, the generally weak economic conditions that persisted between 2000 and 2002, and to a lesser extent in 2003, which resulted in generally lower prices and unit sales because of reduced customer spending on Information Technology (“IT”), and increased competition from other computer equipment manufacturers. Because of these trends and the reduced corporate infrastructure that we required following the disposition of HDD to Maxtor at the beginning of fiscal year 2002, which represented a major corporate realignment for Quantum, we have taken numerous cost reduction actions. Spending on IT has increased in recent quarters and this has benefited our business. However, the overall impact of the negative trends has not been fully reversed or offset and we had operating losses in fiscal year 2004. The cost reduction steps we are taking are aimed at eventually returning Quantum to profitability on a consistent basis.

### **DLTtape**

In our DLTtape business, we design, develop, license, service, and market tape drives, including DLTtape and Super DLTtape™ drives (collectively referred to as “tape drives”) as well as tape media cartridges, including DLTtape and Super DLTtape media cartridges (collectively referred to as “tape media cartridges”). Our DLTtape drives are targeted at the “value” or “price sensitive” segment of the tape drive market. Our Super DLTtape drives are targeted at the “performance sensitive” segment of the tape drive market. We earn approximately two-thirds of our revenue by selling tape drives and the tape media cartridges used by tape drives. Most of our media revenue from royalties is paid to us by manufacturers who license our tape media cartridge technology. Super DLTtape Technology has a higher storage capacity and transfer rate than DLTtape technology. Both DLTtape and Super DLTtape products are used to back up large amounts of data stored on network servers. DLTtape and Super DLTtape are based on our half-inch Digital Linear Tape technology that is used in mid-range UNIX and NT system backup and archive applications.

DLTtape and Super DLTtape drives store data on DLTtape and Super DLTtape media cartridges, respectively. Historical use of tape drives has shown that drives use many tape media cartridges per year in archival and backup processes. This historical use suggests that the installed base of tape drives will result in continued demand for tape media cartridges. Our tape media cartridges are manufactured and sold by licensed third party manufacturers and, to a lesser extent, directly by us.

We receive a royalty on tape media cartridges sold by our licensees. We prefer that a substantial portion of our tape media cartridge sales occur through this license model because this minimizes our operational risks, asset investments and expenses and provides an efficient distribution channel. In fiscal year 2004, approximately 85% of our tape media cartridge unit sales occurred through this license model. We believe that the large installed base of tape drives and our licensing of tape media cartridges are of strategic importance to us because they contribute to both our direct sales of tape media cartridges and also provide us with royalty income from our licensing partners. Media royalties have been a significant source of our gross margins, operating income and cash flow, and this trend is expected to continue.

As of the end of fiscal year 2004, substantially all of Quantum's manufacturing has been outsourced. The manufacturing of tape drives was outsourced to Jabil Circuit Inc. ("Jabil") in fiscal year 2003, under an agreement dated August 29, 2002.

In November 2002, we completed the acquisition of Benchmark Storage Innovations, Inc. ("Benchmark"), a privately held company. The acquisition has enabled us to expand our tape business by adding Benchmark's complementary products, including Value Smart (VS) tape drives and media, to better serve the data protection needs of both new and existing customers in the value segment of the tape drive business. The acquisition combined our ability to provide high-performance, high-capacity tape drives with Benchmark's expertise in delivering high-quality tape products at a lower price for more value-oriented customers.

### Storage Systems

In our Storage Systems business, we design, develop, manufacture, market and sell tape automation systems, disk-based backup systems and related service and support. Our tape automation systems, including tape libraries and autoloaders, serve the entire mid-range tape library data storage market from desktop computers to enterprise-class computers. We offer a broad line of tape automation systems, which are used to manage, store and transfer data in enterprise networked computing environments. Our disk-based backup systems include Enhanced Backup Systems.

With the Benchmark acquisition we expanded our tape automation business by adding Benchmark's complementary low cost ValueLoader™ automation product to our product portfolio.

In March 2003, we completed the acquisition of SANlight. The acquisition provided us with software technology and expertise to leverage in our disk-based backup systems.

### **Strategy Update**

We continue to be in transition as we take steps toward returning to profitability and fiscal year 2004 was a year of mixed results. We made good progress in reducing the cost and increasing the effectiveness of our operational platform; in introducing new products; and in growing our Storage Systems revenue. However, our media revenue declined significantly, due primarily to pricing pressure and to a lesser extent unit volume declines.

*Operational Platform.* We made progress toward building a solid, efficient operational platform and reducing operating expenses, particularly general and administrative expenses in fiscal year 2004 compared to fiscal year 2003. We reorganized our company to create both a more effective business and a more streamlined cost structure. We consolidated much of the structures supporting our two business segments, DLT and Storage Systems. Now we operate, in many respects, as a single business with a single sales force, operations and administrative function rather than our previous structure of two separate, distinct business groups with separate support functions. With one sales force we have a single face to the customer, which we believe will enable more effective, value-add relationships with our customers. Our reorganized sales team has a focus toward growing our branded business.

*New Products.* Our progress with new products during the year included the introduction and shipments of three new products: the SDLT600 tape drive, the Mako™ PX720 tape library, and the DX100 Enhanced Backup System. All three products began volume shipments toward the end of fiscal year 2004.

The SDLT600 tape drive has 50 percent more capacity and higher performance than its nearest competing product. Designed specifically for the automation environment, it is backward compatible with both the SDLT320 drive and the VS160 drive, and includes DLTSage™ – a suite of diagnostic tools that enable customers to better manage, predict and prevent backup or archive problems before they occur.

The Mako PX720 enterprise-level library has unmatched capacity and performance in its class, and was the first to include state-of-the-art reliability features at a competitive price to customers. The DX100 is our second-generation Enhanced Backup System, which provides scalable capacity, leading performance and reliability, all optimized for backup.

*Looking Forward.* While we have made good progress, there is still work to do. Specifically, we will continue to focus on improving gross margins through greater operational efficiencies and simplifying our product platforms. We will focus on continuing to improve our cost structure. We will focus on selling our new products into the market, including improving our branded business on a global basis.

### **Products**

Our products include:

DLTtape business:

We offer tape drive products and tape media cartridges based on Super DLTtape™ and DLTtape™ Technology, which are targeted to serve workgroup, mid-range and enterprise business needs.

- **SDLT™ tape drives**

The SDLT Series includes drives that have native capacities of up to 300 gigabytes (GB) (600 GB compressed) and transfer rates of up to 36 megabytes (MB) per second (72 MB compressed). The SDLT 600 drive uses new Super DLTtape™ II media cartridges and can back-read cartridges written on the DLT VS160 drive and the SDLT 320 drive. The SDLT 600 also incorporates DLTsage™, which is a new architecture-based suite of predictive and preventive maintenance diagnostic tools that enable users to more simply manage tape storage environments. The DLTsage architecture is built on standards that interface into current storage environments. The SDLT 320 and SDLT 220 drives use Super DLTtape™ I media cartridges and can back-read cartridges written on most DLTtape and DLTtape VS drives.

- **DLT VS™ tape drives**

The Series of DLT VS drives includes tape drives with up to 80 GB of native capacity (160 GB compressed) and sustained data transfer rates of up to 8 MB per second (16 MB compressed). The DLT VS80 drive is compatible with DLTtape IV media cartridges. The DLT VS160 drive uses DLT VS1 media cartridges.

- **Super DLTtape™ media cartridges**

The Super DLTtape media cartridges are designed and formulated specifically for use with SDLT Series tape drives. The capacity of a Super DLTtape II media cartridge is up to 300 GB native (600 GB compressed). The capacity of a Super DLTtape I media cartridge is up to 160 GB native (320 GB compressed).

- **DLTtape media cartridges**

The DLTtape and DLTtape VS media cartridges are designed and formulated for use with DLT™ and DLT VS tape drives. The capacity of these media cartridges is up to 80 GB (160 GB compressed).

Storage Systems business:

Quantum Tape Libraries, Autoloaders and disk-based backup systems automatically manage and protect business-critical data in network environments. Our modular solutions maximize customer investment with simple-to-manage systems for workgroup, departmental, mid-range, and enterprise-class applications. Our automated systems are fully compatible with major hardware platforms and are supported by nearly 30 popular data management software applications.

Our Storage Systems products are divided into the following two categories to reflect different go-to-market business models.

- **High-Volume Products**

High-volume products are sold mainly through third party distributors, value-added resellers and Original Equipment Manufacturers (“OEMs”), and include the ValueLoader™, the SuperLoader™ and the M-Series family of tape libraries featuring the M1500, M1800 and M2500.

ValueLoader

The ValueLoader is designed for the desktop or standard 19 inch rack and uses a single DLT VS80, DLT VS160, SDLT320, LTO-1 or LTO-2 tape drive with an eight-cartridge capacity and provides up to 1.6TB of data storage and 108 GB/hour throughput.

SuperLoader

The SuperLoader tape library is a scalable tape autoloader that provides up to 3.2 terabytes (TB) of capacity and 108GB/hour throughput in a 2U (U is a standard of measure, 1.75” high) rack-mount form factor and is a modular, high-density tape automation solution designed for the workgroup environment. It contains one or two removable active magazines and is available with up to 16 cartridges and a bar code reader for high performance inventory management. The SuperLoader

supports a single DLT1, SDLT320, LTO-1 or LTO-2 tape drive and comes standard with on-board web-based remote management.

### M-Series Libraries

Completing our high-volume line is the M-Series family of tape libraries. The M1500, M1800 and M2500 are modular automation systems which customers can integrate together as their storage needs grow. The M1500 is a modular library that is rack mountable and available in increments of one or two drives and 21 (DLT and Super DLT) or 25 (LTO) cartridges. The M1800 has double the performance and capacity of the M1500 and can accommodate up to four drives and 50 cartridges. The M2500 supports up to 6 drives and 84 cartridges and can be combined with the M1500 and/or M1800 to provide customers with scalability and investment protection. The M-Series now supports the SDLT600 tape drives for a capacity of 25.2TB and 777GB/hour throughput in a single M2500. The M-Series libraries easily scale up to 20 drives and 250 cartridges.

- **Enterprise Products**

Enterprise products are sold mainly through value-added resellers, OEMs, and to direct accounts. These products require a higher level of customer engagement to complete a more complex storage systems sale and include the P-Series libraries and our DX-Series Enhanced Backup Systems.

### P-Series Libraries

Quantum's newest tape library is the PX720, the fifth generation enterprise tape automation platform developed by Quantum. Accommodating up to 20 SCSI or native Fibre Channel tape drives and up to 726 LTO/642 SDLT cartridges in a single chassis, the PX720 provides more than 2.5TB/hour of native throughput performance and 193TB native capacity. The PX720 includes fully redundant power and cooling, proactive component-level monitoring, remote library management, programmable load ports as standard offerings, on-site installation and a one year on-site warranty. Multiple PX720s can be linked together to provide up to 100 drives and up to 3660 slots, for a total capacity of 146 TBs.

The P4000 and the P7000 feature Prism Library Architecture™ and are storage solutions for the enterprise data center. The 4000 scales to 322 data cartridges and 10 tape drives, providing up to 97TB of native capacity and 1.3TB/hour native throughput performance. The P7000 scales up to 679 data cartridges and 16 tape drives, providing up to 204TB native capacity and 2.1TB/hour native performance. Multiple P-Series libraries can be linked together to form a single library system providing up to 718TB capacity and 10.1TB/hour native performance.

### DX-Series Enhanced Backup Systems

The DX-Series Enhanced Backup Systems (DX30 and DX100) emulate a tape library and seamlessly integrate into existing backup environments without changes to policies or procedures. Supported by every major backup software vendor, the DX-Series provides user definable virtual tape drives and cartridges to meet data center requirements. Designed specifically for extremely fast and reliable backup and restore operations, the DX-Series architecture includes redundant and hot-swappable components that deliver up to 64TB (raw) capacity and up to 2TB/hr performance. A Web-based GUI provides system management along with event monitoring and notification. The DX-Series complements tape libraries by allowing them to focus on archive operations.

- **StorageCare Services**

StorageCare™ services are a group of services that support Quantum products from purchase through product life. StorageCare services include product installation and integration, warranty support, spare part sales, and on-site service agreements.

For more information about our products, please visit our website at [www.quantum.com](http://www.quantum.com). The contents of our website are not incorporated into this Form 10-K.

### **Customers**

Our tape drives have achieved broad market acceptance in the mid-range network server market with leading computer equipment manufacturers such as Hewlett-Packard, Dell, Storage Technology Corporation ("StorageTek"), Overland Storage Inc. and

Advanced Digital Information Corporation (“ADIC”). Customers for our Storage Systems products, including tape automation systems, include Hewlett-Packard, Dell, Sun, EMC Corporation, IBM and Bell Microproducts Inc.

Because the leading computer equipment manufacturers have a dominant market share of the computer systems into which our products are incorporated, our sales are concentrated with several key customers. Sales to the top five customers in fiscal year 2004 represented 51% of revenue, compared to 39% of revenue in fiscal year 2003 and 45% of revenue in fiscal year 2002. Sales to Hewlett-Packard were 26% of revenue in fiscal year 2004, compared to combined sales to Hewlett-Packard and Compaq representing 22% of revenue in fiscal year 2003, and 28% of revenue in fiscal year 2002. Sales to Dell increased to 14% of revenue in fiscal year 2004, compared to less than 10% of revenue in fiscal years 2003 and 2002.

These sales concentrations do not include revenues from sales of our media that were sold directly to our top five customers by our licensees, for which we earn royalty revenue, or revenues from sales of tape libraries sold to our top five customers by our other OEM tape drive customers.

## **Sales and Marketing**

We market our products directly to end customers, manufacturers of computer systems and workstations, distributors, resellers and systems integrators through our worldwide sales force.

We support international sales and operations by maintaining sales offices throughout the world. Our international revenue, including sales to foreign subsidiaries of U.S. companies, was 40% of our total revenue in fiscal year 2004 compared to 39% of our total revenue in fiscal year 2003 and 41% of our total revenue in fiscal year 2002.

## **Strategic Licensing Partners**

Fuji Photo Film Co., Ltd. (“Fuji”), Hitachi Maxell, Ltd. (“Maxell”), Sony Corporation (“Sony”) and Imation Corporation (“Imation”) are qualified manufacturers of DLTape media cartridges for Quantum. Maxell and Fuji are also licensed to manufacture Super DLTape media cartridges. Our license agreements with Fuji, Maxell, Sony and Imation allow those companies to independently sell tape media cartridges for which we receive royalties. These strategic license agreements expand the market for DLTape and Super DLTape products and provide customers with multiple channels for obtaining tape media cartridges.

In fiscal year 1999, we entered into a tape drive manufacturing license and marketing agreement with Tandberg, a European-based data storage company. Following this agreement, Tandberg became an independent manufacturer of our tape drives, and in fiscal year 2002, Tandberg elected to subcontract the manufacturing of tape drives to Quantum. Under this subcontract arrangement we sell drives to Tandberg for revenue and there is no royalty attached to Tandberg’s sale of these drives. Tandberg markets a full spectrum of our tape drives, media cartridges and automation systems.

## **Manufacturing**

In order to continue to reduce our cost structure and to improve our overall cost competitiveness, we have outsourced the manufacturing of substantially all of our products. Jabil and Mitsumi Electric Co Ltd. (“Mitsumi”) manufacture our tape drives. In fiscal year 2004, we transferred the manufacturing of our M2500 automation system from our facility in Yately, United Kingdom to Jabil. Now, Jabil together with Flextronics and BDT manufacture all of our tape automation systems, some of which go through final configuration in our facility in Irvine, California. Third parties also manufacture our Enhanced Backup Systems and all of our tape media cartridges.

Although we have a small number of contract manufacturers, each manufacturer produces different products and we thus have a single source of supply for each product (except for some of our tape media cartridges). In addition, certain components and sub-assemblies included in our products are obtained from single source suppliers or a limited group of suppliers. Most of these suppliers and our contract manufacturers are located outside of the United States. For a discussion of risks associated with these suppliers and our outsourcing strategy, see the following in Risk Factors—

- *“Our reliance on a limited number of third party suppliers could result in significantly increased costs and delays in the event these suppliers experience shortages or quality problems, and, as a result, our business, financial condition and operating results may be materially and adversely affected.”*



- *“We have outsourced most of our manufacturing to Jabil and to other third party contract manufacturers. If we cannot obtain our products and parts from these third parties in a cost effective and timely manner that meets our customers’ expectations, such an inability to meet our customers’ expectations would materially and adversely impact our business, financial condition and results of operations.”*
- *“A significant portion of our manufacturing and sales operations occurs in foreign locations; we are increasingly exposed to risks associated with conducting our business internationally.”*

## **Research and Development**

We invested approximately \$103.5 million, \$111.9 million, and \$111.5 million in research and development in fiscal years 2004, 2003, and 2002, respectively. We are focusing our research and development efforts on the development of new tape drives, tape automation systems, disk-based backup systems, software storage architectures, and other storage systems and services. In particular, we are currently developing future generations of SDLT and DLT VS drives. We are also continuing to focus on a full range of tape automation products, including autoloaders, modular libraries and high-end enterprise libraries for the mid-range market. We maintain research and development facilities in Boulder, Colorado; Colorado Springs, Colorado; Shrewsbury, Massachusetts; and Irvine, California.

## **Competition**

Competition in the mid-range network market for tape drives has intensified. In this market we compete primarily with Hewlett-Packard, IBM, Certance and Sony. Hewlett-Packard, IBM and Certance are part of a consortium, referred to in the industry as the “LTO consortium”, which developed new tape drive products using linear tape open (or LTO) technology. Such products target the high-capacity data storage market and compete with products based on Super DLTape technology. Key competitive factors in the tape storage market include capacity, transfer rate, reliability, durability, scalability, compatibility and cost.

Competition in tape automation systems has also intensified. In this market, ADIC, Overland Storage Inc. and StorageTek offer competing tape automation systems and technologies.

Our tape storage products, both tape drives and tape automation systems, also compete with other storage technologies, such as hard disk drives. The competition from hard disk drives as an alternative backup solution has increased and may continue to increase, especially if the hard disk drive price to performance ratio continues to decline. For a discussion of risks associated with competing technologies, see Risk Factors - *“We derive almost all of our revenue from products incorporating tape technology; if competition from alternative storage technologies continues or increases, our business, financial condition and operating results would be materially and adversely harmed.”*

In both segments of our business, strong competition has resulted in price erosion and we expect this trend to continue.

## **Warranty and Service**

We generally warrant our products against defects for 12 to 39 months from the date of sale and provide warranty service on tape drives on a return-to-factory basis. Our tape automation systems may carry service agreements available to customers to extend or upgrade the warranty service. We perform services from our facility in Dundalk, Ireland, to support warranty and service obligations for tape drives, automation systems and other storage products. We also provide tape library warranty service from our facility in Irvine, California. Jabil Global Service provides drive screening services in Louisville, Kentucky and repair services in Reynosa, Mexico for North America tape drives. In addition, we employ various other third party service providers throughout the world that perform tape drive, tape library and automation services for us.

## **Backlog**

We manufacture our products based on forecasts of customer demand. We also place inventory in strategic locations in order to enable certain key customers to obtain inventories as needed. Orders are generally placed by customers on an as-needed basis. In general, customers may cancel or reschedule orders without penalty. For these reasons, we do not believe that orders are an accurate measure of backlog and, therefore, we believe that customer orders that are not yet shipped (referred to as backlog) are not a meaningful indicator of future revenues or material to an understanding of our business.

## **Employees**

During fiscal year 2004, we reduced headcount by approximately 11%. As of March 31, 2004, we had 1,809 regular employees, including 188 in manufacturing operations and support; 493 in warranty and service; 280 in sales and marketing; 517 in research and development; and 331 in general and administrative positions. As of March 31, 2004, 1,303 employees were located in the United States and 506 outside of the United States.

We believe that our future success will depend in part on our ability to attract and retain highly skilled employees. None of our employees are represented by a union, and we have experienced no work stoppages. We believe that our employee relations are favorable.

## **Technology**

We develop and protect our technology and know-how, principally in the field of data storage. We presently hold 164 United States patents and have 139 United States 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 computer industry technology means that our future success will also depend heavily on the technical competence and creative skills of our employees.

From time to time, third parties have asserted that our manufacture and sale of our products and services has infringed their patents. We conduct ongoing investigations into these assertions and presently believe that any licenses ultimately determined to be required could be obtained on commercially reasonable terms. However, we cannot provide assurance that such licenses are presently obtainable, or if later determined to be required, could be obtained on commercially reasonable terms, if at all.

We currently have a patent dispute with StorageTek (refer to Note 15 “Litigation” to the Consolidated Financial Statements).

We have signed a patent cross-licensing agreement with IBM and have agreed to a time-limited, mutual patent, non-assertion agreement with Maxtor covering certain technologies and patents of each party. 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 us to use certain patents owned by these third parties and to enable these third parties to use certain patents that we own.

## **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 pursuant to Sections 13(a) and 15(d) of the Securities Exchange Act of 1934, as amended, are available on our website at [www.quantum.com](http://www.quantum.com) when such reports are available on the Securities and Exchange Commission website. The contents of our website are not incorporated into this Form 10-K.

## EXECUTIVE OFFICERS OF QUANTUM CORPORATION

Set forth below are the names, ages (as of June 1, 2004), positions and offices held by, and a brief account of the business experience of, each executive officer of Quantum.

<u>Name</u>	<u>Age</u>	<u>Position with Quantum</u>
Barbara Barrett .....	55	Vice President, Human Resources
Richard E. Belluzzo.....	50	Chairman and Chief Executive Officer
Anthony Carrozza.....	49	Senior Vice President, Worldwide Sales
Lew Fraunfelder .....	64	Senior Vice President and General Manager, DLTape business
John B. Gannon .....	57	President and Chief Operating Officer
Shawn D. Hall .....	35	Vice President, General Counsel and Secretary
George Kriegler.....	51	Senior Vice President and General Manager, Storage Systems
Michael J. Lambert.....	42	Executive Vice President and Chief Financial Officer
Philip Ritti .....	53	Vice President and General Manager, Media
Jesse Parker .....	61	Vice President, Operations

*Ms. Barrett* joined Quantum in 1999 and has been Vice President of Human Resources since July 2003. Prior to assuming her current role, Ms. Barrett held other human resources management positions within the company, most recently Vice President, Human Resources of the DLTape business. Before joining Quantum, Ms. Barrett held leadership positions at companies in the telecommunications and utilities industries in a variety of human resource functions, including compensation, training, consulting and organizational development.

*Mr. Belluzzo* has been Chief Executive Officer since joining the company in September 2002 and Chairman of the Board since July 2003. Before joining Quantum, from September 1999 to May 2002, Mr. Belluzzo held senior management positions with Microsoft Corp., most recently President and Chief Operating Officer. Prior to Microsoft, from January 1998 to September 1999, Mr. Belluzzo was Chief Executive Officer of Silicon Graphics Inc. Before his tenure at Silicon Graphics, from 1975 to January 1998, Mr. Belluzzo was with Hewlett-Packard, most recently as Executive Vice President of the printer business. Currently Mr. Belluzzo is seated on the board of directors of PMC-Sierra in Vancouver, Canada and Specialty Labs in Santa Monica, California, and is a member of the board of trustees for Golden Gate University in San Francisco, California and John Cabot University in Rome, Italy.

*Mr. Carrozza* has been Senior Vice President of Worldwide Sales for Quantum since February 2004. He has been with Quantum for 17 years in a variety of sales and management positions. From November of 2000 to February 2004, Mr. Carrozza was Vice President, Worldwide Sales for the DLTape business. Other roles held by Mr. Carrozza at Quantum include Vice President of Worldwide Sales Strategy and Business Planning, Director of Central Region Sales and Director, Worldwide Compaq Account Team. Mr. Carrozza has over 28 years of sales and sales management experience and, prior to joining Quantum in 1987, spent 4 years at Iomega Corp.

*Mr. Frauenfelder* joined Quantum as Senior Vice President and General Manager, DLTape business in January 2004. Prior to joining Quantum he was president and CEO of Benchmark Storage Innovations, a tape drive company he co-founded, from March 1998 until its acquisition by Quantum in November 2002. Prior to Benchmark, Mr. Frauenfelder was president and CEO of Fujitsu Computer Products of America. He also founded and served as president and CEO of Intellistor Inc.

*Mr. Gannon* has been President and Chief Operating Officer of Quantum since November 2003. Mr. Gannon's previous positions at the company were President of the DLT group from November 2001 to November 2003, President of the HDD group from February 1999 to August 2001 and Executive Vice President of Worldwide Sales from May 1998 to February 1999. Prior to joining Quantum, Mr. Gannon spent seventeen years with Hewlett-Packard, from 1981 to 1998, last serving as General Manager of Commercial Personal Computer Business from 1996 to 1998 and its Digital Audio Tape business from 1993 to 1996.

*Mr. Hall* joined Quantum in 1999 as Corporate Counsel and assumed the role of Vice President, General Counsel and Secretary in 2001. Prior to Quantum, Mr. Hall worked at the law firms of Skadden, Arps and Willkie Farr & Gallagher, where he practiced in the areas of mergers and acquisitions and corporate finance, representing numerous public and private technology companies.

*Mr. Kriegler* joined Quantum in April 1998, and was appointed Senior Vice President and General Manager, Storage Systems in November 2003. Mr. Kriegler's previous position with the company was Senior Vice President and General Manager, DLTape business. Prior to joining Quantum in 1998, Mr. Kriegler spent 12 years with Maxtor, where he held numerous executive level positions.

*Mr. Lambert* has been Executive Vice President and Chief Financial Officer since June 2001. Prior to joining Quantum, from July 2000 to May 2001, Mr. Lambert was Senior Vice President and Chief Financial Officer of NerveWire, a systems integration consulting firm. From March 1996 to July 2000, Mr. Lambert worked for Lucent Technologies, most recently as Vice President and Chief Financial Officer of the InterNetworking Systems Division. From July 1993 to March 1996, Mr. Lambert was at IBM Storage Systems Division, where he held several financial management positions, including Manager, Worldwide Pricing, and Worldwide Financial Operations. Mr. Lambert also spent three years in strategy consulting with Marakon Associates, as well as four years with Data General Corporation in finance and internal auditing.

*Mr. Parker* joined Quantum in November 2002 as Vice President of Operations for Quantum's DLTtape business, and assumed the role of Vice President of Manufacturing Operations in November 2003. Before joining Quantum, from November 2000 to November 2002, Mr. Parker was Executive Vice President of Operations and a Director of Benchmark Storage. Prior to Benchmark Storage, over a span of 17 years, Mr. Parker held executive level positions at several companies in the storage industry, including Senior Vice President of Operations for Conner Technology, Senior Vice President of U.S. and European Operations for Seagate Technology, Senior Vice President of Manufacturing Operations at Conner Peripherals, Senior Vice President of Worldwide Operations at Archive Corporation and Vice President of Materials, Vice President of Manufacturing and Executive Vice President of Far East Operations for MiniScribe Corporation. Mr. Parker was also Senior Vice President of Worldwide Operations and Vice President of Far East Operations for Mattel and spent the first 16 years of his career with Texas Instruments, holding various senior manufacturing and quality management positions.

*Mr. Ritti* has been Vice President and General Manager for media products within the DLTtape business since July 2000. Mr. Ritti joined Quantum in 1997 as Director of Media Marketing where he was responsible for promoting the Quantum brand and managing the licensing aspects of the media business. Before joining Quantum, Mr. Ritti worked 15 years for Ampex Corporation in marketing, engineering and general management positions. Prior to Ampex, Mr. Ritti worked for FMC Corporation in finance and marketing positions.

**ITEM 2. Properties**

Our headquarters are located in San Jose, California. We own or lease facilities in North America, Europe and Asia. The following is a summary of the locations, functions and approximate square footage of those facilities as of March 31, 2004:

<u>Location</u>	<u>Function</u>	<u>Square Footage</u>
<b>North America</b>		
San Jose, CA	Corporate headquarters	50,000
San Jose, CA	Sublet to Snap Appliances – see Note 20 to the Consolidated Financial Statements	72,000 A
Irvine, CA	Tape automation administration, configuration, research and development and service	255,000 A
Shrewsbury, MA	Tape research and development	40,000
Colorado Springs, CO	Operations and administration	414,000 A
Boulder, CO	Tape research and development	169,000 A
Other North America	Sales offices	19,000
<b>Europe</b>		
Dundalk, Ireland	Tape configuration, distribution and service	112,000
Neuchatel, Switzerland	European administration	5,000
Yately, U.K.	Formerly tape automation manufacturing	25,000
Other Europe	Sales, service and administrative offices	22,000 A
<b>Asia</b>		
Tokyo, Japan	Sales office and media procurement center	10,000
Singapore City, Singapore	Sales office and distribution	5,000
Penang, Malaysia	Sale pending	160,000 A
Other Asia	Sales offices	15,000

A indicates that a facility is vacant, partially vacant, or sublet.

We believe that our existing facilities are adequate to meet our business needs through the next 12 months. However, there can be no assurance that we will be able to obtain additional space to accommodate future needs or dispose of excess space as required on reasonable terms.

**ITEM 3. Legal Proceedings**

For information regarding legal proceedings, refer to Note 15 “Litigation” to the Consolidated Financial Statements.

**ITEM 4. Submission of Matters to a Vote of Security Holders**

An annual meeting of the stockholders of Quantum was held on September 3, 2003. Following are the matters voted upon at the meeting, and the number of votes cast for, against or withheld, as well as the number of abstentions for each such matter:

Matter 1. Proposal to elect nine directors to serve until the next Annual Meeting of Stockholders or until their successors are elected and qualified.

	<b>For</b>	<b>Withheld</b>
Richard E. Belluzzo	155,540,019	2,375,195
Stephen M. Berkley	155,178,254	2,736,960
David A. Brown	155,138,805	2,776,409
Michael A. Brown	155,361,654	2,553,560
Alan L. Earhart	151,851,346	6,063,868
Edward M. Esber, Jr.	152,077,034	5,838,181
Kevin J. Kennedy	151,830,118	6,085,096
Edward J. Sanderson, Jr.	152,884,646	5,030,569
Gregory W. Slayton	152,027,555	5,887,659

Matter 2. Proposal to ratify the appointment of Ernst & Young LLP as independent auditors of Quantum for the fiscal year ending March 31, 2004.

For: 149,797,291

Against: 8,037,295

Abstained: 80,629

Matter 3. Proposal to approve the Quantum Nonemployee Director Equity Incentive Plan.

For: 89,511,194

Against: 68,104,673

Abstained: 299,347

## PART II

### ITEM 5. Market for the Registrant's Common Equity and Related Stockholder Matters

Our common stock is traded on the New York Stock Exchange under the symbol "DSS". As of June 3, 2004, the price of our common stock was \$2.67 per share. The prices per share reflected in the following table represent the range of high and low closing prices for the quarters indicated.

<u>Fiscal Year 2004</u>	<u>High</u>	<u>Low</u>
First quarter ended June 29, 2003	\$ 4.85	\$ 3.41
Second quarter ended September 28, 2003	\$ 4.86	\$ 2.80
Third quarter ended December 28, 2003	\$ 3.48	\$ 2.85
Fourth quarter ended March 31, 2004	\$ 4.19	\$ 3.12

  

<u>Fiscal Year 2003</u>	<u>High</u>	
First quarter ended June 30, 2002	\$ 8.10	\$ 4.09
Second quarter ended September 29, 2002	\$ 4.25	\$ 2.06
Third quarter ended December 29, 2002	\$ 3.76	\$ 1.42
Fourth quarter ended March 31, 2003	\$ 3.81	\$ 2.63

Historically, we have not paid cash dividends on our common stock and do not intend to pay dividends in the future.

As of June 3, 2004, there were 1,909 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.

The information required by this item regarding equity compensation plans is incorporated by reference to the information set forth in Item 12 of this Annual Report on Form 10-K.

On July 30, 2003, Quantum issued an aggregate of \$160 million in aggregate principal amount of 4.375% convertible subordinated notes due 2010 in a private placement transaction pursuant to Rule 144A under the Securities Act of 1933, as amended. Lehman Brothers, Morgan Stanley and McDonald Investments, Inc. were the initial purchasers of the notes. In connection with the transaction, Quantum paid the initial purchasers an aggregate fee of \$4 million. The notes are convertible into common stock of Quantum at any time prior to maturity of the notes at the conversion rate of 229.8851 shares per \$1,000 principal amount of the notes. For further discussion of the issuance, see Note 11 "Credit Agreements, Short-Term Debt and Convertible Subordinated Debt" to the Consolidated Financial Statements of Quantum under Item 8 of this Annual Report on Form 10-K.

### ITEM 6. Selected Financial Data

This summary of consolidated financial information of Quantum for fiscal years 2000 to 2004 should be read along with our Consolidated Financial Statements contained in this Annual Report on Form 10-K. As a result of the disposition of the HDD on April 2, 2001 and the NAS business on October 28, 2002, the selected financial information below has been restated to present the results of the HDD business and NAS business as discontinued operations (refer to Note 20 "Discontinued Operations" to the Consolidated Financial Statements).

A number of items affect the comparability of selected financial information as discussed below:

- The results of continuing operations for fiscal year 2004 included \$15.2 million of special charges associated mainly with outsourcing manufacturing and cost reduction activities.
- The results of continuing operations for fiscal year 2003 included a cumulative effect of an accounting change of \$94.3 million related to the adoption of Statements of Financial Accounting Standards ("SFAS") No. 142 *Goodwill and Other Intangible Assets* and \$58.7 million for a write-off of goodwill in Storage Systems. The results of operations for fiscal year 2003 also included \$24.2 million of special charges associated mainly with outsourcing manufacturing and cost reduction activities and a \$7.8 million charge for purchased in-process research and development in connection with the acquisition of SANlight.
- The results of continuing operations for fiscal year 2002 included the effect of \$72.9 million of special charges associated with the disposition of the HDD group and other cost reduction activities. The results of operations for fiscal

year 2002 also included a \$13.2 million charge for purchased in-process research and development in connection with the acquisition of certain assets of M4 Data.

- The results of discontinued operations for fiscal year 2002 included the gain on disposition of the HDD group and a loss from the operations of the NAS business.
- The results of continuing operations for fiscal year 2000 included the effect of a \$40.1 million special charge associated with cost reduction activities to reduce overhead expenses and product cost.

(in thousands except per share data)

	For the year ended March 31,				
	2004	2003	2002	2001	2000
<b>Statement of Operations Data:</b>					
Product revenue	\$ 677,259	\$ 684,156	\$ 820,365	\$ 1,124,142	\$ 1,219,048
Royalty revenue	131,125	186,653	209,310	221,973	186,429
Total revenue	808,384	870,809	1,029,675	1,346,115	1,405,477
Cost of revenue	556,725	603,646	652,070	733,575	757,550
Gross margin	251,659	267,163	377,605	612,540	647,927
Research and development expenses	103,471	111,926	111,451	116,836	119,029
Sales and marketing, general and administrative expenses	152,668	171,720	224,274	186,333	167,129
Goodwill impairment	-	58,689	-	-	-
Special charges	15,212	24,200	72,856	-	40,083
Purchased in-process research and development expenses	-	7,802	13,200	-	-
Income (loss) from operations	(19,692)	(107,174)	(44,176)	309,371	321,686
Income (loss) from continuing operations	(63,715)	(132,088)	(49,000)	197,828	180,200
Income (loss) from discontinued operations	1,693	(37,909)	91,502	(37,142)	(139,356)
Cumulative effect of an accounting change	-	(94,298)	-	-	-
Net income (loss)	\$ (62,022)	\$ (264,295)	\$ 42,502	\$ 160,686	\$ 40,844
Income (loss) per share from continuing operations(1):					
Basic	\$ (0.36)	\$ (0.81)	\$ (0.32)	\$ 1.34	\$ 0.72
Diluted	\$ (0.36)	\$ (0.81)	\$ (0.32)	\$ 1.27	\$ 0.70
Net income (loss) per share(2):					
Basic	\$ (0.35)	\$ (1.63)	\$ 0.27	\$ -	\$ (0.10)
Diluted	\$ (0.35)	\$ (1.63)	\$ 0.27	\$ -	\$ (0.10)

	As of March 31,				
	2004	2003	2002	2001	2000
<b>Balance Sheet Data:</b>					
Property, plant and equipment, net	\$ 40,377	\$ 59,092	\$ 76,405	\$ 91,821	\$ 76,285
Total assets	\$ 705,558	\$ 921,729	\$ 1,193,772	\$ 1,814,697	\$ 1,776,396
Total long-term convertible debt	\$ 160,000	\$ 287,500	\$ 287,500	\$ 287,500	\$ 287,500
Net current assets of discontinued operations	\$ -	\$ -	\$ 49,605	\$ 519,978	\$ 672,657
Net non-current assets of discontinued operations	\$ -	\$ -	\$ -	\$ 241,232	\$ 179,756

- (1) Income (loss) per share from continuing operations for fiscal year 2000 presented in the table is for the period from August 4, 1999 through March 31, 2000, after the tracking stock recapitalization that occurred on August 3, 1999. The income per share from continuing operations for the period from April 1, 1999 through August 3, 1999 was \$0.36 (basic) and \$0.35 (diluted).
- (2) Net income (loss) per share for fiscal year 2000 is presented for the period from April 1, 1999 through August 3, 1999, the date of the tracking stock recapitalization. Net income (loss) per share for fiscal year 2001 is not presented, as there was no single class of stock that represented Quantum in this year.



## **ITEM 7. Management's Discussion and Analysis of Financial Condition and Results of Operations**

The results of Quantum's continuing operations are presented as "Results of Continuing Operations" and the results of the HDD and NAS businesses are presented as "Results of Discontinued Operations". The disposition of the HDD group to Maxtor occurred on April 2, 2001 and the NAS business was sold on October 28, 2002.

### **OVERVIEW**

We are a leading provider of data storage offerings, delivering highly reliable backup, archive and recovery solutions that meet demanding requirements for data integrity and availability. We earn our revenue and profits from the sale of products, systems and services mostly to OEM and channel customers. We face a variety of challenges and opportunities in responding to the dynamics of the technology arena which is characterized by rapid change, evolving customer demands and intense competition, including competition with several companies who are also significant customers of the Company.

Quantum has two data storage business segments: the DLTape business and the Storage Systems business. Our DLTape business consists of tape drive and tape media cartridge product lines. Our Storage Systems consists of tape automation systems, disk-based backup systems and services.

Over the last several years our performance, and that of our industry as a whole, was negatively impacted by the global economic downturn and cautious IT spending. While the economic environment certainly remains challenging, some industry sectors have shown signs of improved IT spending levels. There are also some signs of an improving broad economic outlook over the last several quarters.

We continue to be in transition as we take steps toward returning to consistent profitability and cash flow generation. Fiscal year 2004 was a year of mixed results along this path. We made progress in reducing our costs and expenses and increasing the effectiveness of our operational platform; in introducing new products across both our segments; and in growing our Storage Systems revenue. However, our media revenue, specifically our royalty component of media, declined significantly due primarily to pricing pressure and to a lesser extent due to unit volume declines.

Numerically, these trends resulted in fiscal 2004 revenues of \$808 million, down \$63 million from the prior year. Gross margins improved slightly to 31.1%, driven by margin improvements in tape drives which were almost fully offset by margin declines from lower media royalty revenue. Operating expenses, at \$271 million, were down just over \$100 million from prior year due in large part to lower special charges, goodwill impairment and purchased in-process research and development (IPR&D) activity. In addition to these reductions, Quantum's past restructurings of headcount and facilities as well as its active management of discretionary spending have also contributed significantly to operating expense reductions from prior year. We ended fiscal 2004 with a net loss of \$62 million. We consumed approximately \$2 million in cash flow from operating activities of continuing operations in fiscal 2004, down from fiscal 2003's cash generation of nearly \$34 million. The most significant contributor to this change was a use of cash associated with paying down accounts payable. Our cash and short-term investments ended the year at approximately \$265 million, down from the prior year's \$319 million ending balance. The biggest driver of this \$54 million decrease was approximately \$37 million associated with the redemption of our 7% convertible subordinated notes where the amount of our redemption was greater than the amount received from our new debt issuance.

We intend the discussion of our financial condition and results of operations that follows to provide information that will assist in understanding our financial statements, the changes in certain key items in those financial statements from year to year, and the primary factors that accounted for those changes, as well as how certain accounting principles, policies and estimates affect our financial statements.

### **CRITICAL ACCOUNTING POLICIES AND ESTIMATES**

Our discussion and analysis of the financial condition and results of operations is based on the accompanying Consolidated Financial Statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these statements requires us to make significant estimates and judgments about future uncertainties that affect reported assets, liabilities, revenues and expenses and related disclosures. We base our estimates on historical experience and on various other assumptions believed to be reasonable under the circumstances. Our reported financial position or results of operations may be materially different under different conditions or when using different estimates and assumptions. In the event that estimates or assumptions prove to be different from actual results, adjustments are made in subsequent periods to reflect more current information. We believe that the following accounting policies require our most difficult, subjective or complex

judgments because of the need to make estimates about the effect of matters that are inherently uncertain. The judgments and uncertainties that affect the application of those policies in particular could result in materially different amounts being reported under different conditions or using different assumptions.

## **Revenue Recognition**

Revenue from sales of products to OEMs and distributors is recognized: when passage of title and risk of ownership are transferred to customers; when persuasive evidence of an arrangement exists; when the price to the buyer is fixed or determinable; and when collection is reasonably assured. In the period when the revenue is recognized for either OEMs or distributors, allowances are provided for estimated future price adjustments, such as volume rebates, price protection, and future product returns. Since we have historically been able to reliably estimate the amount of allowances required for future price adjustments and product returns, we recognize revenue, net of projected allowances, upon shipment to our customers.

These allowances are based on the OEMs' and distributors' master agreements, programs in existence at the time the revenue is recognized, historical information, contractual limits and plans regarding price adjustments and product returns. Revenue from distributor arrangements is a significant portion of our total revenue. If we were unable to reliably estimate the amount of future price adjustments and product returns in any specific reporting period, then we would be required to defer recognition of the revenue until the right to future price adjustments and product returns lapsed and we were no longer under any obligation to reduce the price or accept the return of the product.

Royalty revenue is recognized based on actual licensee sales when such sales incorporate technology licensed from Quantum. Revenue from separately priced extended warranty and product service contracts is initially deferred and recognized as revenue ratably over the contract period.

## **Warranty expense and liability**

We generally warrant our products against defects for 12 to 39 months. A provision for estimated future costs and estimated returns for credit relating to warranty claims is recorded when products are shipped and revenue recognized. Our estimate of future costs to satisfy warranty obligations is primarily based on our estimates of future failure rates and our estimates of future costs of repair including materials consumed in the repair, and labor and overhead amounts necessary to perform the repair.

The estimates of future product failure rates are based on both historical product failure data and anticipated future failure rates. If future actual failure rates differ from our estimates, we will record the impact in subsequent periods. Similarly, the estimates of future costs of repair are based on both historical data and anticipated future costs. If future actual costs to repair were to differ significantly from our estimates, we would record the impact of these unforeseen costs or cost reductions in subsequent periods.

## **Inventory Valuation**

We value our inventories that are held for resale to customers at the lower of cost or market. Cost is determined by the first-in, first-out ("FIFO") method and includes direct material, direct labor, factory overhead and other direct costs. Market is "net realizable value", which, for finished goods and goods in process, is the estimated selling price, less costs to complete and dispose of the inventory. For raw materials, it is replacement cost or the cost of acquiring similar products from our vendors. While cost is readily determinable, estimates of market value involve significant estimates and judgments about the future.

We initially record our inventory at cost and each quarter evaluate the difference, if any, between cost and market. The determination of the market value of inventories is primarily dependent on estimates of future demand for our products, which in turn is based on other market estimates such as technological change, competitor actions and estimates of future selling prices.

We record write-downs for the amount that cost of inventory exceeds our estimated market value. No adjustment is required when market value exceeds cost.

## **Service Inventories**

We value our service inventories at the lower of cost or market. Service 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. Cost is determined by the FIFO method and includes direct material, direct labor, overhead and other direct costs. Market is "net realizable value", which, for components, is replacement cost or the cost of acquiring similar products from our vendors. For finished goods, market value is the estimated selling price less costs to complete and dispose of the inventories. While cost is readily determinable, the estimates of market involve significant estimates and judgments about the future.

We carry service inventories because we generally provide product warranty for 12 to 39 months and earn revenue by providing enhanced warranty and repair service outside this warranty period. We initially record our service inventories at cost and each quarter evaluate the difference, if any, between cost and market. The determination of the market value of service inventories is dependent on estimates, including the estimated amount of component parts expected to be consumed in the future warranty and out of warranty service, the estimated number of units required to meet future customer needs, the estimated selling prices of the finished units, and the estimated useful lives of finished units.

We record write-downs for the amount that cost of service inventories exceeds our estimated market value. No adjustment is required when market value exceeds cost.

### **Goodwill and Intangible Assets**

We have a significant amount of goodwill and intangible assets on our balance sheet related to acquisitions. At March 31, 2004, the net amount of \$106.6 million of goodwill and intangible assets represented 15% of total assets.

As a result of adopting SFAS No. 142 *Goodwill and Other Intangible Assets* on April 1, 2002, we discontinued the amortization of goodwill. Instead, goodwill was reviewed for impairment upon adoption of SFAS No. 142 and is reviewed annually thereafter, or more frequently when indicators of impairment are present. Refer to Note 3 “Cumulative Effect of an Accounting Change” and Note 4 “Goodwill and Intangible Assets” to the Consolidated Financial Statements for a discussion of the impact of adopting and applying SFAS No. 142.

Intangible assets are carried and reported at acquisition cost, net of accumulated amortization subsequent to acquisition. The acquisition cost is amortized over the estimated useful lives, which range from 2 to 10 years. Intangible assets are reviewed for impairment whenever events or circumstances indicate impairment might exist, or at least annually, in accordance with SFAS No. 144 *Accounting for the Impairment or Disposal of Long-lived Assets*. Projected undiscounted net cash flows expected to be derived from the use of those assets are compared to the respective net carrying amounts to determine whether any impairment exists. Impairment, if any, is based on the excess of the carrying amount over the fair value of those assets.

The determination of the net carrying value of goodwill and intangible assets and the extent to which, if any, there is impairment are dependent on material estimates and judgments on our part, including the useful life over which the intangible assets are to be amortized, and the estimates of the value of future net cash flows, which are based upon further estimates of future revenues, expenses and operating margins.

### **Special Charges**

In recent periods and over the past several years, we recorded significant special charges related to the realignment and restructuring of our business operations. These charges represent expenses incurred in connection with certain cost reduction programs that we have undertaken and consist of the cost of involuntary termination benefits, separation benefits, stock compensation charges, facilities charges and other costs of exiting activities or geographies.

The charges for severance and exit costs require the use of estimates, primarily related to the number of employees paid severance, the amount of severance and related benefits to be paid, and the cost of exiting facilities, including estimates and assumptions related to future maintenance costs, our ability to secure a sub-tenant, if applicable, and any sublease income to be received in the future.

In the fourth quarter of fiscal year 2003, we became subject to SFAS No. 146 *Accounting for Costs Associated with Exit or Disposal Activities*, which superseded the Emerging Issues Task Force (“EITF”) Issue No. 94-3 *Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (including Certain Costs Incurred in a Restructuring)*. SFAS No. 146 requires that a liability for a cost associated with an exit or disposal activity be recognized when the liability is incurred rather than at the date of an entity’s commitment to an exit plan. The statement further establishes fair value as the objective for initial measurement of the liability and that employee benefit arrangements requiring future service beyond a “minimum retention period” be recognized over the future service period. Under SFAS No. 146, if we fail to make accurate estimates regarding these costs or to accurately estimate the timing of the completion of planned activities, we may be required to record additional expenses or expense reductions in the future.

Prior to the fourth quarter of fiscal year 2003, we accounted for special charges under the provisions of EITF Issue No. 94-3. Under that pronouncement, we recorded a liability in the period in which management approved a restructuring plan if:

- Management having the appropriate level of authority approved and committed Quantum to the specific exit plan;
- The period of time to complete the plan indicated that significant changes to the plan of termination were not likely; and

- The plan, if it involved terminations, identified the number of employees and positions to be terminated, and the benefit arrangements were communicated to affected employees.

## **Income Taxes**

We account for income taxes in accordance with SFAS No. 109 *Accounting for Income Taxes*, which requires that deferred tax assets and liabilities be recognized for the effect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. SFAS No. 109 also requires that deferred tax assets be reduced by a valuation allowance if it is more likely than not that some or all of the deferred tax asset will not be realized.

The Company has provided a full valuation allowance against its U.S. net deferred tax assets due to our history of net losses, difficulty in predicting future results and belief that we cannot rely on projections of future taxable income to realize the deferred tax assets.

Significant management judgment is required in determining our deferred tax assets and liabilities and valuation allowances for purposes of 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 the reversal of the valuation allowance. Future income tax expense will be reduced to the extent that we have sufficient positive evidence to support a reversal of, or decrease in, our valuation allowance.

## **RESULTS OF OPERATIONS FOR FISCAL YEARS 2004, 2003 AND 2002**

### **RESULTS OF CONTINUING OPERATIONS**

#### **Revenue**

(in thousands)

	For the year ended March 31,						Increase/ (decrease)		Increase/ (decrease)	
	2004	% of revenue	2003	% of revenue	2002	% of revenue	2004 vs 2003	%	2003 vs 2002	%
Tape drives	\$ 350,298	43.3%	\$ 336,005	38.6%	\$ 445,381	43.3%	\$ 14,293	4.3%	\$ (109,376)	-24.6%
Tape media	76,966	9.5%	157,374	18.1%	182,851	17.8%	(80,408)	-51.1%	(25,477)	-13.9%
Tape royalties	131,125	16.2%	186,653	21.4%	209,316	20.3%	(55,528)	-29.7%	(22,663)	-10.8%
DLT group	\$ 558,389	69.1%	\$ 680,032	78.1%	\$ 837,548	81.3%	\$ (121,643)	-17.9%	\$ (157,516)	-18.8%
Storage Systems Group	275,634	34.1%	227,112	26.1%	233,298	22.7%	48,522	21.4%	(6,186)	-2.7%
Inter-group elimination*	(25,639)	-3.2%	(36,335)	-4.2%	(41,171)	-4.0%	10,696	29.4%	4,836	11.7%
	<u>\$ 808,384</u>	<u>100.0%</u>	<u>\$ 870,809</u>	<u>100.0%</u>	<u>\$ 1,029,675</u>	<u>100.0%</u>	<u>\$ (62,425)</u>	<u>-7.2%</u>	<u>\$ (158,866)</u>	<u>-15.4%</u>

\* Represents inter-group sales of tape drives for incorporation into tape automation systems, for which the sales are included in Storage Systems revenue.

#### **DLT Revenue**

The main causes for the decrease in DLT revenue in fiscal year 2004 compared to fiscal year 2003 were a decrease in tape media revenue, and to a lesser extent, tape media royalty revenue, partially offset by a slight increase in tape drive revenue.

The increase in tape drive revenue in fiscal year 2004 compared to fiscal year 2003 mainly reflected sales of tape drive products added to our product family with the acquisition of Benchmark in the third quarter of fiscal year 2003, and increased unit sales of our newer generation SuperDLT drives. The increase in unit sales volume was slightly offset by lower average unit prices due to competitive pricing in the markets in which we compete and a mix shift towards the lower priced DLTape VS drives that we acquired from Benchmark.

The majority of the decline in tape drive revenue in fiscal year 2003 compared to fiscal year 2002 was due to lower average unit prices, and to a lesser extent, due to lower tape drive unit sales volume. The decrease in tape drive revenue in fiscal year 2003 was affected by several major trends, including:

- Limited growth in the IT spending environment particularly in the mid-range server market, which includes servers priced from approximately \$5,000 to \$100,000. Our tape drives are commonly included as a backup component to servers and, accordingly, changes in server demand directly impact the demand for our tape products;
- A long-term trend toward networked storage, which enables centralization of storage resources and results in fewer tape drives consumed per server sold; and
- Increased competition from competing tape drive vendors and platforms that require us to lower our selling prices to remain competitive.

The decrease in tape media revenue in fiscal year 2004 primarily reflected a decrease in average unit prices caused by pricing pressure, and to a lesser extent, due to lower unit sales. The decrease in tape media revenue in fiscal year 2003 primarily reflected a decrease in unit sales due to a sales mix shift from Quantum branded media to media sold by our licensed manufacturers. On these sales, Quantum records only the royalty revenue, not the full media cartridge revenue. Super DLTape media units were primarily sold directly by Quantum in fiscal year 2002, while in fiscal year 2003, Fuji and Maxell both began to sell Super DLTape media following their completion of the qualification process.

In fiscal year 2004 compared to fiscal year 2003, the decrease in tape media royalty revenue was mainly due to lower average unit prices of the media sold by our licensed manufacturers for which we earn a price-based royalty and to a lesser extent, due to lower overall media market unit sales. In fiscal year 2003 compared to fiscal year 2002, the vast majority of the decline in tape

media royalty revenue was due to lower average unit prices, slightly offset by higher media licensees' unit sales volume following the qualification of Fuji and Maxell as licensed media manufacturers for Super DLTtape media units.

The decline in media royalties and Quantum-branded media revenue reflects the impact of increased competition, resulting in lower tape drive unit sales in recent years. This weaker demand trend has also resulted in lower-than-expected media prices, further reducing royalties, which are based on our licensees' media pricing.

### Storage Systems Revenue

The increase in revenue in fiscal year 2004 compared to fiscal year 2003 reflected an increase in autoloader sales and improved OEM sales. Revenue from sales of ValueLoader, which we added to our product family and began selling with the acquisition of Benchmark, contributed the majority of this increase, followed by increased unit sales of our SuperLoader and M-series products. In addition, although it is small in proportion to the other sources of revenue, our service and product support revenues also experienced a year over year increase. In fiscal year 2003 compared to fiscal year 2002, the decrease in revenue was slightly offset by revenue from ValueLoader sales, which we began selling following our acquisition of Benchmark on November 13, 2002. The decline in revenue was caused primarily by a decrease in unit sales, particularly unit shipments of enterprise tape automation systems, which declined as a result of weak IT spending and increasingly competitive market conditions.

### Customers

Sales to the top five customers in fiscal year 2004 represented 51% of revenue, compared to 39% of revenue in fiscal year 2003 and 45% of revenue in fiscal year 2002. Sales to Hewlett-Packard were 26% of revenue in fiscal year 2004, compared to combined sales to Hewlett-Packard and Compaq representing 22% of revenue in fiscal year 2003, and 28% of revenue in fiscal year 2002. Sales to Dell increased to 14% of revenue in fiscal year 2004, compared to less than 10% of revenue in fiscal years 2003 and 2002.

These sales concentrations do not include revenues from sales of our media that were sold directly to our top five customers by our licensees, for which we earn royalty revenue, or revenues from sales of tape libraries sold to our top five customers by our other OEM tape drive customers.

Sales to computer equipment manufacturers and distribution channel customers were 50% and 17% of revenue, respectively, in fiscal year 2004, 45% and 21% of revenue, respectively, in fiscal year 2003, and 48% and 18% of revenue, respectively, in fiscal year 2002. The remaining revenue in fiscal years 2004, 2003, and 2002 represented media royalty revenue, sales to value-added resellers, and sales to other direct customers.

### **Gross Margin Rates**

(in thousands)

	For the year ended March 31,			Increase (Decrease)	
	2004	2003	2002	2004 vs 2003	2003 vs 2002
DLT gross margin	\$ 188,103	\$ 206,216	\$ 298,951	\$ (18,113)	\$ (92,735)
Storage Systems gross margin	63,556	60,947	78,654	2,609	(17,707)
Quantum gross margin	\$ 251,659	\$ 267,163	\$ 377,605	\$ (15,504)	\$ (110,442)
DLT gross margin rate	33.7%	30.3%	35.7%	3.4%	-5.4%
Storage Systems gross margin rate	23.1%	26.8%	33.7%	-3.7%	-6.9%
Quantum gross margin rate *	31.1%	30.7%	36.7%	0.4%	-6.0%

\* On a consolidated basis, gross margin is calculated by eliminating the inter-group revenue.

### DLT Segment Gross Margin Rate

The improvement of 3.4 percentage points from fiscal year 2003 to fiscal year 2004 mainly reflects the impact of lower costs from outsourced manufacturing and favorable sales mix shift, which resulted from increased shipments of higher margin SDLT products and VS value segment drives following the acquisition of Benchmark. The decline of 5.4 percentage points in fiscal year 2003 compared to fiscal year 2002 mainly reflected unit prices for tape drives declining faster than unit costs due to competitive pricing pressure. In addition, the sequential decline in media revenues and royalties in the fiscal year 2004 when compared to fiscal year 2003, and fiscal year 2003 when compared to fiscal year 2002 lowered the gross margin dollar contribution we received from our media revenue, thereby negatively affecting the gross margin percent.

### Storage Systems Segment Gross Margin Rate

The decline of 3.7 percentage points in fiscal year 2004 from fiscal year 2003 and the decline of 6.9 percentage points in fiscal year 2003 from fiscal year 2002 mainly reflected lower average unit prices and an increase in the percentage of business from OEM customers – which tends to have lower gross margins than branded business. This was slightly offset by higher unit sales volumes primarily contributed by the sales of the ValueLoader subsequent to the acquisition of Benchmark in the third quarter of the fiscal year 2003.

#### Gross Margin Rate Outlook

In fiscal year 2005, we will actively work to offset any media weakness with improved gross margin dollar contribution from tape drives and automation as we aim to improve our tape drive and automation gross margin rates from fiscal year 2004 levels. Because our media business provides relatively high gross margins, total company gross margin rates are affected significantly by changes in media market sales. There are many complicated variables that, individually and in combination, impact short-term and long-term performance in media and result in a media revenue and gross margin dollar contribution trend for the company. These include, but are not limited to, media pricing decisions among our partners/licensees, end-user media consumption habits and rates, the size of the installed base of tape drives, tape drive retirement patterns, the mix of DLTtape media versus Super DLTtape media, channel inventory levels and other factors. In any given future quarter, the combination of these factors can cause a significant negative, neutral, or positive financial impact.

Over the course of fiscal year 2004 and fiscal year 2003, we have experienced a downward trend in media revenues, both in tape media and tape royalty revenues, which has lowered the gross margin dollar contribution we receive from our media business and lowered the DLT gross margin dollar contribution in aggregate. The majority of this downward trend has been caused by reduced media prices and, to a lesser extent, by reduced media unit sales. We expect these factors to continue to impact our business despite our efforts to offset some of the weakness in media such as our continued effort to improve drive gross margin. During 2004 we continued to improve drive gross margins, which helped to offset some of the weakness in media.

#### **Operating Expenses**

(in thousands)

	For the year ended March 31,						Increase (Decrease)	
	2004	% of Segment Revenue	2003	% of Segment Revenue	2002	% of Segment Revenue	2004 vs 2003	2003 vs 2002
DLT	\$ 142,152	26.7%	\$ 165,360	25.7%	\$ 211,467	26.6%	\$ (23,208)	\$ (46,107)
Storage Systems	113,987	41.4%	118,286	52.1%	124,258	53.3%	(4,299)	(5,972)
Subtotal	\$ 256,139	31.7%	\$ 283,646	32.6%	\$ 335,725	32.6%	\$ (27,507)	\$ (52,079)
Goodwill impairment	-		58,689		-		(58,689)	58,689
Special charges	15,212		24,200		72,856		(8,988)	(48,656)
Purchased in-process research and development	-		7,802		13,200		(7,802)	(5,398)
Total Quantum	<u>\$ 271,351</u>		<u>\$ 374,337</u>		<u>\$ 421,781</u>		<u>\$ (102,986)</u>	<u>\$ (47,444)</u>

Research and development, sales and marketing, and general and administrative expenses have declined by \$27.5 million and \$52.1 million in fiscal years 2004 and 2003, respectively, as a result of cost reduction activities. Transition expenses of \$25.3 million in fiscal year 2002 related to the disposition of the HDD group were included in DLT operating expenses and were classified as follows: \$6.5 million in research and development expenses, \$4.1 million in sales and marketing expenses, and \$14.7 million in general and administrative expenses. These transition expenses included stock compensation expenses, information systems related expenses, facilities related expenses and other expenses incurred related to the transition and disposition of HDD.

#### *Research and Development Expenses*

(in thousands)	For the year ended March 31,			Increase (decrease)	
	2004	2003	2002	2004 vs 2003	2003 vs 2002
DLT	\$ 69,228	\$ 75,309	\$ 83,080	\$ (6,081)	\$ (7,771)
Storage Systems	34,243	36,617	28,371	(2,374)	8,246
Total Quantum	<u>\$ 103,471</u>	<u>\$ 111,926</u>	<u>\$ 111,451</u>	<u>\$ (8,455)</u>	<u>\$ 475</u>

% of segment revenue

DLT	13.0%	11.7%	10.4%
Storage Systems	12.4%	16.1%	12.2%
Total Quantum	12.8%	12.9%	10.8%

DLT Research and Development Expenses

The decrease in research and development expenses in fiscal year 2004 compared to fiscal year 2003 reflected reduced product development costs and the impact of cost reduction actions.

The decrease in research and development expenses in fiscal year 2003 compared to fiscal year 2002 reflected \$6.5 million of one-time HDD related transition expenses included in fiscal year 2002. Excluding the HDD transition expenses in fiscal year 2002, research and development spending decreased \$1.3 million in fiscal year 2003 compared to fiscal year 2002.

Storage Systems Research and Development Expenses

The decrease in research and development expenses for fiscal year 2004 was mainly due to the closure of M4 engineering facilities and reduction in employee headcount in the UK. The decrease in research and development expenses as a percentage of revenue in fiscal year 2004 as compared to fiscal year 2003 reflected higher fiscal year 2004 revenue.

The increase in research and development expenses in fiscal year 2003 compared to fiscal year 2002 was mainly due to product development costs associated with autoloader products and the development of disk-based backup systems preceding the introduction of our first Enhanced Backup System, the DX30.

*Sales and Marketing Expenses*

(in thousands)	For the year ended March 31,			Increase (Decrease)	
	2004	2003	2002	2004 vs 2003	2003 vs 2002
DLT	\$ 37,916	\$ 45,295	\$ 61,966	\$ (7,379)	\$ (16,671)
Storage Systems	59,928	55,159	48,767	4,769	6,392
Total Quantum	<u>\$ 97,844</u>	<u>\$ 100,454</u>	<u>\$ 110,733</u>	<u>\$ (2,610)</u>	<u>\$ (10,279)</u>

% of segment revenue

DLT	7.1%	7.0%	7.8%
Storage Systems	21.7%	24.3%	20.9%
Total Quantum	12.1%	11.5%	10.8%

Although total sales and marketing expenses have trended down, the increases in sales and marketing expenses as a percentage of revenue reflected lower revenue, without a proportional reduction in sales and marketing expenses.

DLT Sales and Marketing Expenses

The decrease in sales and marketing expenses in fiscal year 2004 mainly reflected lower spending on channel development programs, lower marketing expenses, and the impact of cost reduction actions.

In fiscal year 2002, \$4.1 million of HDD related transition expenses were included in DLT sales and marketing expenses. Excluding the HDD transition expenses in fiscal year 2002, the level of sales and marketing spending decreased in fiscal year 2003 compared to fiscal year 2002 by approximately \$12.6 million mainly due to reduced overall discretionary spending and cost reduction actions.

Storage Systems Sales and Marketing Expenses



Reflecting our emphasis on growing Storage Systems revenue, sales and marketing expenses increased in both fiscal years 2004 and 2003 from prior fiscal year, which was mainly due to increased headcount, higher commission related expenses, and increased marketing expenses related to new product advertising.

### *General and Administrative Expenses*

(in thousands)	For the year ended March 31,			Increase (Decrease)	
	2004	2003	2002	2004 vs 2003	2003 vs 2002
DLT	\$ 35,008	\$ 44,756	\$ 66,421	\$ (9,748)	\$ (21,665)
Storage Systems	19,816	26,510	47,120	(6,694)	(20,610)
Total Quantum	<u>\$ 54,824</u>	<u>\$ 71,266</u>	<u>\$ 113,541</u>	<u>\$ (16,442)</u>	<u>\$ (42,275)</u>
 <u>% of segment revenue</u>					
DLT	6.6%	7.0%	8.3%		
Storage Systems	7.2%	11.7%	20.2%		
Total Quantum	6.8%	8.2%	11.0%		

As described below, the downward trend in general and administrative expenses reflects reduced legal costs, goodwill no longer being amortized, prior year transition expenses and the impact of cost reduction activities. In fiscal year 2002, \$14.7 million of HDD disposition related transition expenses and \$15.2 million in amortization of goodwill were included in general and administrative expenses. Goodwill is no longer being amortized in accordance with our adoption of SFAS No. 142 *Goodwill and Other Intangible Assets* on April 1, 2002, the beginning of our fiscal year 2003.

### DLT General and Administrative Expenses

The \$9.7 million decrease in general and administrative expenses in fiscal year 2004 compared to fiscal year 2003 mainly reflected lower legal costs as fiscal year 2003 included costs related to legal disputes with Imation and Maxtor. The Imation lawsuit was settled in the first quarter of fiscal year 2003. In addition, the lower general and administrative expense trend reflected reduced headcount and the impact of cost reduction actions in fiscal years 2003 and 2004. The impact of these declines was slightly offset by legal costs incurred in fiscal year 2004 related to the ongoing lawsuits with Storage Tek. The \$21.7 million decrease in the level of general and administrative expenses in fiscal year 2003 compared to fiscal year 2002 mainly reflected the impact of the following costs that we incurred in fiscal year 2002: HDD related transition expenses of \$14.7 million, Imation legal settlement costs of \$5.0 million, and Imation legal costs, slightly offset by the legal costs incurred in fiscal year 2003 related to a dispute with Maxtor.

### Storage Systems General and Administrative Expenses

The majority of the \$6.7 million decrease in general and administrative expenses in fiscal year 2004 compared to fiscal year 2003 resulted from the impact of cost reduction actions, including reduced headcount, and a general decline in discretionary spending. The \$20.6 million decrease in general and administrative expenses in fiscal year 2003 compared to fiscal year 2002 mainly reflected fiscal year 2002 being the last year of regular goodwill amortization with \$15.2 million of goodwill amortization recorded in that year and none recorded in fiscal year 2003. In accordance with the adoption of SFAS No. 142 on April 1, 2002, goodwill was no longer amortized but was subject to annual impairment tests. The remaining \$5.4 million decrease in general and administrative expenses in fiscal year 2003 compared to fiscal year 2002 was due to an approximately \$3.0 million of bad debt expense incurred in fiscal year 2002 related to a financially troubled European distributor, and lower spending in fiscal year 2003 as a result of cost reduction actions.

### **Special Charges**

The steps we have taken over the past three years to return to profitability and right-size our company following the sale of the HDD business have resulted in numerous special charges. Special charges included the cost of major restructuring projects such as the outsourcing of certain functions and consolidation of many functions within the company. Although these projects have largely been completed as of March 31, 2004 and most of the associated costs recorded, additional charges may be incurred in the future related to these restructurings, particularly if estimated costs associated with facilities and other restructured activities are higher than estimated. We expect to incur additional charges associated with future cost reduction activities although the amounts are not estimable at this time.

The following table shows the special charges for the fiscal years 2004, 2003, and 2002.

(in thousands)

For the year ended March 31,

By expense type

	2004	2003	2002
Severance and Benefits (1)	\$ 8,967	\$ 21,642	\$ 36,198
Facilities	4,979	1,628	23,829
Demo Equipment	-	-	6,764
Fixed Assets	1,266	930	3,905
Other (1)	-	-	2,160
Total	<u>\$ 15,212</u>	<u>\$ 24,200</u>	<u>\$ 72,856</u>

By cost reduction actions

Outsource certain manufacturing and service functions	\$ 6,800	\$ 11,000	\$ 28,000
Consolidate the operations supporting our two business segments	5,300	13,200	-
Strategic realignment and charges related to the disposition of the HDD Group	-	-	27,677
Other general expense reduction	3,112	-	17,179
Total	<u>\$ 15,212</u>	<u>\$ 24,200</u>	<u>\$ 72,856</u>

(1) For fiscal year 2002, excludes \$4.5 million related to the NAS business, which has been classified as discontinued operations.

The following two tables show the activity and the estimated timing of future payouts for cost reduction plans:

(in thousands)	Severance and Benefits	Facilities	Demo equipment	Fixed assets	Other	Total
Balance at March 31, 2001	\$ 6,852	\$ 533	\$ -	\$ -	\$ 696	\$ 8,081
Provision	37,298	23,829	6,764	3,905	2,160	\$ 73,956
Cash payments	(21,929)	(4,712)	-	-	(696)	\$ (27,337)
Non-cash charges	(16,784)	(1,015)	(6,764)	(3,905)	(905)	\$ (29,373)
Special charge reversal	(1,100)	-	-	-	-	\$ (1,100)
Balance at March 31, 2002	4,337	18,635	-	-	1,255	\$ 24,227
Provision	21,727	2,752	-	930	-	\$ 25,409
Cash payments	(25,000)	(15,638)	-	-	(495)	\$ (41,133)
Non-cash charges	(109)	-	-	(930)	-	\$ (1,039)
Special charge reversal	(85)	(1,124)	-	-	-	\$ (1,209)
Balance March 31, 2003	870	4,625	-	-	760	\$ 6,255
Provision	9,306	5,164	-	1,266	-	\$ 15,736
Cash payments	(6,431)	(2,909)	-	-	(760)	\$ (10,100)
Non-cash charges	(789)	(2,048)	-	(1,266)	-	\$ (4,103)
Special charge reversal	(339)	(185)	-	-	-	\$ (524)
Balance March 31, 2004	<u>\$ 2,617</u>	<u>\$ 4,647</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 7,264</u>

Estimated timing of future payouts:

Fiscal Year 2005	\$ 2,330	\$ 2,938	\$ -	\$ -	\$ -	\$ 5,268
Fiscal Year 2006 to 2008	287	1,709	-	-	-	\$ 1,996
	<u>\$ 2,617</u>	<u>\$ 4,647</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 7,264</u>

In fiscal year 2005, we expect to realize annual cost savings of approximately \$17 million from various restructuring programs in fiscal year 2004. Of this \$17 million, approximately \$6 million of the savings is expected to consist of reduced cost of revenue, with the remaining savings to come from reduced operating expenses. The anticipated or estimated savings result primarily from employee headcount reductions and reduced facility costs. However, many factors, including reduced sales volume and price reductions, which have impacted gross margins in the past, and the addition of, or increase in, other operating costs, may offset some or all of these anticipated or estimated savings.

For more information regarding Special Charges, refer to Note 6 “Special Charges” to the Consolidated Financial Statements.

**Purchased In-process Research and Development Expense**

We expensed purchased in-process research and development of \$7.8 million in fiscal year 2003 as a result of the acquisition of SANlight in February 2003 and \$13.2 million in fiscal year 2002 as a result of the acquisition of M4 Data in April 2001. The following table summarizes the relevant factors used to determine the amount of purchased in-process research and development.

(in thousands)	Amount of purchased <u>IPR&amp;D</u>	Estimated cost to complete technology at <u>time of acquisition</u>	Percentage completion at <u>time of acquisition</u>	Overall compound growth <u>rate</u>	Discount <u>rate</u>
SANlight Inc	\$ 7,802	\$ 2,638	30% to 40%	(1)	45%
M4 Data	\$ 13,200	\$ 1,515	58% to 67%	27%	34%

(1) Not applicable as SANlight had no revenues at time of acquisition.

In these acquisitions, the amount of the purchase price allocated to in-process research and development was determined by estimating the stage of development of each in-process research and development project that had not achieved technological feasibility and had no alternative future use at the date of acquisition, estimating cash flows resulting from the expected revenue generated from such projects, and discounting the net cash flows back to their present value using an appropriate discount rate. The discount rates used represent a premium to our cost of capital. All of the projections used were based on management's estimates of market size and growth, expected trends in technology and the expected timing of new product introductions.

We did not expense any purchased in-process research and development in the acquisition of Benchmark, because each of the in-process research and development projects at the date of acquisition had achieved technological feasibility.

For additional information regarding the M4 Data and SANlight acquisitions, refer to Note 5 "Acquisitions" to the Consolidated Financial Statements.

#### **Amortization of Goodwill and Intangible Assets**

SFAS No. 141 *Business Combinations* and SFAS No. 142 *Goodwill and Other Intangible Assets* became effective for us on April 1, 2002. Under SFAS No. 142, goodwill and intangible assets deemed to have indefinite lives are no longer amortized but will be subject to annual impairment tests. With the adoption of SFAS No. 142, we ceased amortization of goodwill as of April 1, 2002. Our initial impairment test of goodwill was conducted in the first quarter of fiscal year 2003 and resulted in a non-cash accounting change adjustment of \$94.3 million, reflecting a reduction in the carrying amount of our goodwill. This charge is reflected as a cumulative effect of an accounting change in our consolidated statements of operations. In the second quarter of fiscal year 2003, we recorded an additional goodwill impairment charge related to Storage Systems of \$58.7 million due to a re-evaluation of Storage Systems in light of deterioration in the market values of comparable companies, and to a lesser extent, a reduction in anticipated future cash flows. The continued slump in spending in the IT industry contributed to this decrease in estimated future cash flows. The fair value of the Storage Systems reporting entity was calculated using a combination of a discounted cash flow analysis involving projected data, and a comparable market approach, which was a comparison with companies also in the tape automation sector.

The amortization expense associated with intangible assets increased by \$4.5 million to \$18.5 million in fiscal year 2004 compared to \$14.0 million in fiscal year 2003, and decreased by \$12.9 million in fiscal year 2003 from \$26.9 million in fiscal year 2002. The increase in fiscal year 2004 when compared to fiscal year 2003 was a result of fiscal year 2004 having a full year of intangibles amortization resulting from the previous year acquisitions of Benchmark and SANlight, whereas fiscal year 2003 had approximately one quarter of amortization expense associated with the third quarter acquisition of Benchmark, and two months of amortization expense associated with the fourth quarter acquisition of SANlight. The decrease in fiscal year 2003 goodwill and intangibles asset amortization was primarily due to goodwill not being amortized in fiscal year 2003 with the adoption of SFAS No. 142 on April 1, 2002, whereas goodwill was amortized in fiscal year 2002.

The following table details goodwill and intangibles asset amortization expense by classification within our statements of operations:

(in thousands)	For the year ended March 31,			Increase (Decrease)	
	2004	2003	2002	2004 vs 2003	2003 vs 2002
Cost of revenue	\$ 11,900	\$ 8,350	\$ 7,089	\$ 3,550	\$ 1,261
Research and development	1,702	649	338	1,053	311
Sales and marketing	4,377	4,539	3,756	(162)	783
General and administrative	500	504	15,769	(4)	(15,265)
	<u>\$ 18,479</u>	<u>\$ 14,042</u>	<u>\$ 26,952</u>	<u>\$ 4,437</u>	<u>\$ (12,910)</u>

We assessed the recoverability of our long-lived assets, including intangible assets with finite lives, in accordance with SFAS No. 144 by comparing projected undiscounted net cash flows associated with those assets against their respective carrying amounts to determine whether impairment exists. Impairment, if any, would be based on the excess of the carrying amount over the fair value of those assets. As of March 31, 2004, no such impairment was identified with respect to our acquired intangible assets.

Refer to Note 3 “Cumulative Effect of an Accounting Change” and Note 4 “Goodwill and Intangible Assets” to the Consolidated Financial Statements for further information on the effect on goodwill and intangible assets of adopting and applying SFAS No. 142.

### Stock Compensation Expense

The following table details stock compensation charges and the classifications within the consolidated statements of operations:

(in thousands)	For the year ended March 31,			Increase (Decrease)	
	2004	2003	2002	2004 vs 2003	2003 vs 2002
Stock compensation related to the disposition of the HDD group:					
Cost of revenue or Operating expenses	\$ -	\$ 306	\$ 15,288	\$ (306)	\$ (14,982)
Special charges	-	-	17,108	-	(17,108)
	-	306	32,396	(306)	(32,090)
Stock compensation not related to the disposition of the HDD group:					
Cost of revenue or Operating expenses	507	1,238	2,995	(731)	(1,757)
	<u>\$ 507</u>	<u>\$ 1,544</u>	<u>\$ 35,391</u>	<u>\$ (1,037)</u>	<u>\$ (33,847)</u>

Stock compensation expense decreased by \$1.0 million to \$0.5 million in fiscal year 2004, compared to \$1.5 million in fiscal year 2003. This decrease mainly reflected the reduced number of DSS restricted stock grants that were outstanding. Stock compensation expense decreased by \$33.8 million from \$35.4 million in fiscal year 2002 compared to \$1.5 million in fiscal year 2003. This decrease was mainly due to HDD disposition-related stock compensation expense of \$32.4 million recorded in fiscal year 2002 for the conversion and/or acceleration of stock equity awards for employees remaining with Quantum after the disposition of HDD. The classification of the \$32.4 million of stock compensation expense between “Cost of revenue or Operating expenses” and “Special charges” was dependent on two factors: the unusual and non-recurring nature of the event (i.e., the disposition of the HDD business) that gave rise to stock awards and stock award modifications; and whether the vesting had already occurred or was accelerated to full vesting at the time of the award or modification. If vesting had already occurred or was accelerated to full vesting then there was no future benefit to Quantum and the related stock compensation expense for the vested portion of the award was treated as “Special charges”. When the unvested portion of an award was to be earned and vest over a future service period providing future value to Quantum, the related stock charge was recognized ratably as compensation expense over the vesting period in the appropriate category of “Cost of revenue or Operating expense”.

Stock compensation expense recorded in fiscal year 2003 that related to the disposition of HDD reflected the vesting of DSS options and DSS restricted stock grants that were converted from HDD options and HDD restricted stock grants, respectively, on April 2, 2001, the date of disposition of HDD to Maxtor.

Stock compensation expense not related to the disposition of HDD consists mainly of the vesting of DSS restricted stock grants. The decreases in the stock compensation expense related to the vesting of DSS restricted stock grants in fiscal years 2004 and 2003 reflected the lower number and value of restricted stock grants that are outstanding.

Refer to Note 13 “Stock Incentive Plans” to the Consolidated Financial Statements for further information.

### Interest Income and Other and Interest Expense

(in thousands)	For the year ended March 31,			Increase (Decrease)	
	2004	2003	2002	2004 vs 2003	2003 vs 2002
Interest income and other, net	\$ 8,917	\$ 11,481	\$ 15,904	\$ (2,564)	\$ (4,423)
Interest expense	(17,617)	(24,419)	(22,976)	6,802	(1,443)
	<u>\$ (8,700)</u>	<u>\$ (12,938)</u>	<u>\$ (7,072)</u>	<u>\$ 4,238</u>	<u>\$ (5,866)</u>
Equity investment write-downs	<u>\$ -</u>	<u>\$ (17,061)</u>	<u>\$ (7,364)</u>	<u>\$ 17,061</u>	<u>\$ (9,697)</u>
Loss on debt extinguishment	<u>\$ (2,565)</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ (2,565)</u>	<u>\$ -</u>

The decrease in interest expense in fiscal year 2004 when compared to fiscal year 2003 mainly reflected reduced interest expense following the redemption of the \$287.5 million 7% convertible subordinated notes (“7% Notes”) and issuance of \$160.0 million of convertible notes at a lower rate of 4.375% in the second quarter of fiscal year 2004. As a result of this redemption, interest income and other also decreased in fiscal year 2004 when compared to fiscal year 2003 and this was because Maxtor had been paying us interest for its one-third portion of the 7% Notes prior to their redemption. Maxtor has no obligation associated with our 4.375% convertible notes issued following the redemption of the 7% Notes.

The decrease in interest income and other, net, was mainly a result of lower cash balances, lower interest rates and reduced interest payments from Maxtor, as well as a \$1.8 million net currency loss, attributable to the effect that the weakening U.S. dollar had on dollar-denominated bank accounts held by our European subsidiaries with foreign functional currencies.

During fiscal year 2004, we recorded a loss on debt extinguishment of \$2.6 million, which was the redemption premium and the write-off of unamortized debt issuance fees associated with the \$287.5 million convertible debt that was redeemed. During fiscal year 2003, we recorded equity investment write-downs of \$17.1 million, compared to write-downs of \$7.4 million in the fiscal year 2002, to write down our equity investments to net realizable value based on other-than-temporary declines in the estimated value of equity investments. In the second quarter of fiscal year 2003, we sold our entire portfolio of venture capital equity investments for \$11.0 million (refer to Note 21 “Investments in Other Entities” to the Consolidated Financial Statements).

### Income Taxes

The tax expense on continuing operations recorded for fiscal year 2004 was \$32.8 million compared to tax benefits of \$5.1 million and \$9.6 million for fiscal years 2003 and 2002, respectively. The tax expense for 2004 included: foreign withholding and local taxes incurred; no tax benefit for current period net operating losses and special charges; and a \$21.3 million charge to provide a valuation allowance against Quantum’s net deferred tax assets. The tax benefit recorded in fiscal 2003 and 2002 reflected tax benefits related to operating losses and special charges, offset by two charges in 2003: a \$10.2 million tax charge related to the repatriation of offshore earnings connected with the outsourcing of our tape drive manufacturing in Malaysia and a \$1.8 million tax charge related to a foreign subsidiary’s purchase of international technology and marketing rights as a part of the acquisition of Benchmark in fiscal year 2003. Excluding these charges, our effective tax rates on continuing operations were 13% and 16% in fiscal years 2003 and 2002, respectively. These rates reflect the non-deductibility of goodwill amortization and write-downs, purchased in-process research and development, equity investment write-downs and certain restructuring charges.

The Company has provided a full valuation allowance against its U.S. net deferred tax assets due to our history of net losses, difficulty in predicting future results and belief that we cannot rely on projections of future taxable income to realize the deferred tax assets.

Significant management judgment was required in determining our deferred tax assets, liabilities and valuation allowances for purposes of 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 the reversal of the valuation allowance. Future income tax expense will be reduced to the extent that we have sufficient positive evidence to support a reversal of, or decrease in, our valuation allowance.

Until the beginning of fiscal year 2002, we operated our business through two separate business groups: the DLT & Storage Systems group and the Hard Disk Drive group, with separate tracking stocks associated with each. On April 2, 2001, Maxtor acquired the Hard Disk Drive group from Quantum and each authorized share of Hard Disk Drive common stock was exchanged for 1.52 shares of Maxtor common stock.

Under a tax sharing and indemnity agreement between us and Maxtor entered into in connection with the disposition of the Hard Disk Drive group, Maxtor has agreed to assume responsibility for payments related to certain taxes, penalties, and interest resulting from the conduct of business by the Quantum DLT and Storage Systems group for all periods before our issuance of tracking stock and the conduct of business by the Quantum Hard Disk Drive group for all periods before the disposition of the group to Maxtor. If audit adjustments are successfully asserted with respect to such conduct, and if Maxtor fails to indemnify us under this obligation, we could experience a material adverse effect on our business, financial condition, liquidity, and operating results.

The tax sharing and indemnity agreement between Maxtor and us, entered into in connection with the disposition of the Hard Disk Drive group, provided for the allocation of certain liabilities related to taxes. Maxtor and Quantum presently disagree about the amounts owed by each party under this Agreement. The parties are in negotiations to resolve this matter, and no litigation has been initiated to date. However, there can be no assurance that we will be successful in asserting our position. If disputes regarding contested amounts cannot be resolved favorably, we may incur costs, including litigation as well as the payment of the disputed amounts, which could have a material adverse effect on our business, financial condition, liquidity, and operating results.

### **Related-Party Transactions**

Quantum holds loan receivables from officers of \$0.2 million and \$0.6 million as of March 31, 2004 and March 31, 2003, respectively. The loans are classified in other current assets or other long-term assets, depending on repayment terms, and bear interest at rates ranging from 6% to 8% per annum.

The loans have provisions for forgiveness based on continued employment and are generally forgiven on a straight-line basis over two years. The loan forgiveness is being recorded as compensation expense over the forgiveness period. In fiscal years 2004, 2003 and 2002, \$0.5 million, \$0.5 million and \$0.8 million was forgiven, respectively.

We leased one of our facilities from one of our stockholders as a result of our acquisition of Benchmark. The lease requires minimum annual rent of \$0.8 million through August 2006.

## RESULTS OF DISCONTINUED OPERATIONS

### Loss from NAS discontinued operations, net of income taxes

We were previously engaged in the business of developing, manufacturing, and selling network attached storage solutions for the desktop, workgroups and enterprises. These NAS products consisted primarily of server appliances that incorporated hard disk drives and an operating system designed to meet the requirements of entry, workgroup, and enterprise computing environments, where multiple computer users access shared data files over a local area network.

On October 7, 2002, we entered into an agreement with a privately held third party to sell certain assets and assign certain contract rights related to our NAS business. The NAS assets that were sold included inventories for resale to customers, service inventories, fixed assets and intellectual property. The proceeds from the sale included approximately \$4.7 million in cash, \$3.9 million in restricted equity securities of the buyer with an option to acquire additional equity securities, a secured promissory note for \$2.4 million issued by the buyer and the assumption by the buyer of \$1.6 million of warranty liability in connection with the prior installed base of NAS products. The sale was completed on October 28, 2002. The secured promissory note was settled in the first quarter of fiscal year 2004 in exchange for the third party acquirer assuming additional obligations.

The following table summarizes the results of the NAS business:

(in thousands)	For the year ended March 31,		
	2004	2003	2002
Revenue	\$ -	\$ 19,899	\$ 58,117
Gross Profit	\$ 1,064	\$ (3,075)	\$ 8,285
Operating Expenses	\$ (629)	\$ 45,707	\$ 59,415
Income (Loss) from operations	\$ 1,693	\$ (48,782)	\$ (51,130)
Income (Loss) before income taxes	\$ 1,693	\$ (48,633)	\$ (51,189)
Income tax benefit	\$ -	\$ (10,724)	\$ (17,719)
Income (Loss) from discontinued operations	\$ 1,693	\$ (37,909)	\$ (33,470)

The income from operations in fiscal year 2004 consisted of a reversal of an accrual for warranty expense on NAS products sold by Quantum with the lapse of the warranty period and a reversal of remaining severance benefits accruals associated with certain employees impacted by the disposition of the NAS business, which would have been payable by Quantum had the employees been terminated by the acquirer of the NAS business within a set time from the acquisition date.

The losses from operations in fiscal year 2003 included an impairment charge of \$16.4 million and special charges of \$11.7 million. In the second quarter of fiscal year 2003, we determined that the sale of the NAS business was probable and wrote down the assets held for sale to fair value less cost to sell. The fair value of the assets held for sale was determined to be the proceeds from the sale. The resulting impairment charge related mainly to completed technology arising from previous NAS related acquisitions.

In fiscal year 2002, the loss from operations included \$3.3 million of purchased in-process research and development related to the acquisition of certain assets of Connex in August 2001. The loss also included \$4.5 million of special charges associated mainly with writing off deferred costs related to the abandonment of the planned initial public offering for the subsidiary that operated our NAS business, as well as severance charges related to restructurings.

### Gain on disposition of HDD, net of income taxes and Loss from HDD discontinued operations, net of income taxes

On April 2, 2001, Maxtor acquired the Hard Disk Drive group from Quantum and each authorized and outstanding share of Hard Disk Drive common stock was exchanged for 1.52 shares of Maxtor common stock.

The HDD group produced two primary product lines: desktop hard disk drives and high-end hard disk drives. HDD had two separate business units that supported these two product lines. The desktop business unit designed, developed and marketed desktop hard disk drives designed to meet the storage requirements of entry-level to high-end desktop personal computers in home and business environments. The high-end business unit designed, developed and marketed high-end hard disk drives designed to meet the storage requirements of network servers, workstations and storage subsystems.

In fiscal year 2002, we recorded a non-cash gain of \$125.0 million on the disposition of the HDD group to Maxtor. This gain, net of tax, is comprised of the proceeds recorded for the exchange of HDD shares for Maxtor shares, less the disposal of the assets

and liabilities in conjunction with the disposition of the HDD group to Maxtor, and stock compensation charges for the conversion of unvested DSS options to DSS restricted stock for employees who transferred to Maxtor. See risk factor entitled—*If we incur an uninsured tax liability as a result of the disposition of HDD, our financial condition and operating results could be negatively affected.*

The following table sets forth the components of the gain on disposition of the HDD group recorded in fiscal year 2002 (in thousands, except exchange ratio and closing price):

Outstanding HDD shares at March 30, 2001 .....	80,085
Exchange ratio of Maxtor shares for HDD shares .....	<u>1.52</u>
Maxtor shares received .....	121,729
Maxtor closing price on March 30, 2001 .....	<u>\$ 7.00</u>
Proceeds from the disposition of the HDD group .....	852,100
Net assets disposed.....	(619,757)
Stock compensation .....	(47,371)
Deferred income taxes .....	<u>(60,000)</u>
Gain on disposition of HDD group, net of income taxes .....	<u>\$124,972</u>



## RECENT ACCOUNTING PRONOUNCEMENTS

See Note 23 “Recent Accounting Pronouncements” to the Consolidated Financial Statements for a full description of recent accounting pronouncements including the respective expected dates of adoption and effects on results of operations and financial condition.

## LIQUIDITY AND CAPITAL RESOURCES

(in thousands)	As of or for the year ended March 31,		
	2004	2003	2002
Cash and cash equivalents	\$ 214,607	\$ 221,734	\$ 343,878
Days sales outstanding (DSO)	53.0	56.1	53.0
Inventory turns	11.5	9.1	6.6
Net cash provided by (used in) operating activities of continuing operations	\$ (2,063)	\$ 33,983	\$ 56,629
Net cash provided by (used in) investing activities of continuing operations	\$ 23,936	\$ (108,689)	\$ (81,393)
Net cash provided by (used in) financing activities of continuing operations	\$ (29,000)	\$ (35,886)	\$ (1,165)

### Net cash provided by or used in operating activities:

Net cash provided by or used in operating activities has two primary sources:

- Income (loss) from continuing operations adjusted for non cash items
- Changes in the assets and the liabilities that constitute working capital, including accounts receivable, inventory, accounts payable, other assets, and other liabilities

(in thousands)	For the year ended		
	March 31, 2004	March 31, 2003	March 31, 2002
	cash (used), provided	cash (used), provided	cash (used), provided
Income (loss) from continuing operations including cumulative effect of an accounting change	\$ (63,715)	\$ (226,386)	\$ (49,000)
Non-cash income statement items	73,579	212,591	83,154
Adjusted income (loss) from continuing operations	9,864	(13,795)	34,154
Changes in working capital	(11,927)	47,778	22,475
Net cash provided by (used in) operating activities of continuing operations	\$ (2,063)	\$ 33,983	\$ 56,629

### *Fiscal Year 2004*

Cash was used by operating activities during fiscal year 2004 because changes in working capital used slightly more cash than was provided by the adjusted income from continuing operations. The use of cash in working capital that resulted from our paying down of accounts payable and other liabilities totaled \$45.1 million, and was partially offset by cash provided by our reductions in accounts receivable, inventories, and other assets by \$33.2 million.

Cash used in paying down accounts payable reflected the impact of lower levels of inventory and operating expenses, which in turn result in lower accounts payable associated with these balances. Cash provided by accounts receivable was primarily due to lower revenue levels causing lower replenishment of collected accounts receivable and improved DSO with three fewer days of sales outstanding. The improvement to DSO resulted from a combination of the negotiation of shorter payment terms from certain business partners and our focus on accounts receivable cash collections. Part of our DSO progress was offset by certain key customers negotiating longer payment terms on their purchases of our products.

### *Fiscal Year 2003*

Cash was provided by operating activities during fiscal year 2003 because changes in working capital provided more cash than was used in the adjusted loss from continuing operations. The decline in revenue and gross margins that we experienced in fiscal year 2003 without a proportional decrease in operating expenses resulted in the adjusted loss from continuing operations. The

cash provided by our reductions in accounts receivable and inventories, and increase in accounts payable totaled \$93.6 million, and was partially offset by cash used for income taxes payable and other assets and liabilities totaling \$45.8 million. Significant amounts of cash were provided by reducing inventories resulting from the positive impact of outsourcing tape manufacturing and increasing accounts payable reflecting the impact of prepaying suppliers at the end of fiscal year 2002 as part of an upgrade to our computer system. Similar prepayments did not occur in fiscal year 2003.

#### *Fiscal Year 2002*

Cash was provided by operating activities during fiscal year 2002 by both adjusted income from continuing operations and changes in working capital. The cash provided by our reductions in accounts receivable and inventories, and increase in income taxes payable totaled \$85 million, and was partially offset by cash used by accounts payable, accrued warranty, and other assets and liabilities totaling \$62.5 million. Cash used by accounts payable related to prepayments to certain key suppliers that ensured uninterrupted vendor shipments during an upgrade to our computer system at the end of fiscal year 2002.

#### Net cash provided by or used in investing activities:

#### *Fiscal Year 2004*

Cash provided by investing activities during fiscal year 2004 was primarily from net sales of short-term investments, partially offset by our purchases of property and equipment. We had net sales of short-term investments because we had more cash proceeds from the maturity of short-term investments than cash used to purchase short-term investments.

To maximize the return on our cash balances while limiting the risk of loss, we purchase high quality interest bearing instruments with maturity dates greater than 90 days and paying a slightly higher yield than shorter-term investments. When our investments mature, we either purchase more short-term investments or return the proceeds to our cash or cash equivalent accounts for operating purposes.

We regularly evaluate whether our anticipated purchases of property and equipment are appropriate for our business outlook and expect these purchases to continue at about the same level in fiscal year 2005 as purchase levels in fiscal year 2004. We evaluate the strategic fit and potential return from acquisitions and may in the future make acquisitions.

#### *Fiscal Year 2003*

Cash used in investing activities during fiscal year 2003 was due to the following:

- Cash used to purchase short-term investments of \$724.9 million, net of proceeds from sales of short-term investments of \$627.9 million
- Cash used to purchase property and equipment of \$18.5 million
- Cash used in acquisitions of \$5 million

partially offset by:

- Proceeds from the sale of equity securities of \$11.0 million

Proceeds from the sale of equity securities resulted from our decision to cease operation of Quantum Technology Ventures and to sell the portfolio during fiscal year 2003.

#### *Fiscal Year 2002*

Cash used in investing activities during fiscal year 2002 was due to the following:

- Cash used to purchases of property and equipment of \$41.3 million
- Cash used in acquisitions of \$15.2 million
- Purchases of equity securities of \$27.6 million

partially offset by:

- Proceeds from the disposition of property and equipment of \$2.7 million

#### Net cash used in financing activities:

#### *Fiscal Year 2004*

The cash used in the financing activities of continuing operations in fiscal year 2004 was related to the redemption of our 7% convertible subordinated notes and issuance of our 4.375% convertible subordinated notes because the amount of the redemption was greater than the amount of the issuance. The impact of this net redemption was partially offset by the receipt from Maxtor of its \$95.8 million portion of the redeemed 7% convertible subordinated notes.

Common stock is routinely issued as part of our employee stock purchase and option plans and we currently have no plans for any significant issuance or repurchase of our common stock.

#### *Fiscal Year 2003*

The cash used in the financing activities of continuing operations in fiscal year 2003 was related to principal payments on short-term debt, partially offset by the issuance of our common stock under our employee stock purchase and option plans.

Cash was used to repay the debentures from the M4 Data acquisition. The proceeds from the issuance of our common stock were lower compared to prior fiscal year primarily as the result of fewer stock option exercises by our employees.

#### *Fiscal Year 2002*

The cash used in the financing activities of continuing operations in fiscal year 2002 was related to repurchases of common stock, partially offset by the issuance of our common stock under our employee stock purchase and option plans.

#### Credit line

In December 2002, we entered into a secured senior credit facility with a group of five banks, providing us with a \$100.0 million revolving credit line and a \$50.0 million synthetic lease that contains the same financial covenants as the revolving credit line. In March 2004, we amended the secured senior credit facility to extend the maturity through March 2006 and adjusted several covenant requirements. As of March 31, 2004, \$90.3 million of this revolving credit line was committed to standby letters of credit, of which \$50.0 million secured our obligation to the lessor under our synthetic lease (see below and Note 16 “Commitments and Contingencies” to the Consolidated Financial Statements). Borrowings under the revolving credit line bear interest at either the London interbank offering rate (LIBOR) or a base rate, plus a margin determined by a leverage ratio with option periods of one to nine months. The credit facility is secured by a blanket lien on all of the assets of Quantum and contains certain financial and reporting covenants, which we were required to satisfy as a condition of the credit line. In a number of quarters of fiscal years 2004 and 2003, we violated certain financial covenants under this credit agreement and received waivers or amendments for such violations. There is also a cross default provision between this facility and the synthetic lease facility such that a default on one facility constitutes a default on the other facility. As of March 31, 2004, we were in compliance with all of the credit line covenants.

#### Synthetic Lease Commitment

As described in Note 16 “Commitments and Contingencies,” we have a synthetic lease commitment accounted for as an operating lease in accordance with SFAS No. 13 *Accounting for Leases*, which required us to maintain specified financial and reporting covenants. We originally entered into this agreement in August 1997 and renegotiated its terms in December 2002, January 2003, and March 2004. There is a cross default provision between this facility and the credit line facility (refer to Note 11 “Credit Agreements, Short-Term Debt and Convertible Subordinated Debt”) such that a default on one facility constitutes a default on the other facility. In a number of quarters of fiscal years 2004 and 2003 we violated certain financial covenants under this agreement and received waivers or amendments for such violations. As described in greater detail in Note 16 “Commitments and Contingencies,” at the end of the term of the lease we must either renew the lease, purchase the facility for the stipulated sales price of approximately \$50.0 million, or find a third party to purchase the facility (in a third party sale we would guarantee any shortfall below the stipulated sales price up to a maximum amount of \$43.9 million payable by us).

The “General Outlook” section below discusses the potential impact if we violate any financial or reporting covenant in future quarters either on the unsecured senior credit facility or the synthetic lease, and the bank group refuses to waive or amend for the violation such that non-compliance resulted in a default or termination of either the credit facility or the synthetic lease or both.

#### General Outlook

We continue to focus on increasing revenue, reducing costs and improving margins in an effort to return to consistent profitability and the generation of positive cash flows from operating activities.

We believe that our existing cash and capital resources, including cash we expect to generate from operations, will be sufficient to meet all currently planned expenditures and sustain operations for the next 12 months. This belief is generally dependent upon our ability to maintain revenue around or above current levels, maintain or improve gross margins, and reduce operating expenses in order to provide net income and positive cash flow from operating activities in the future. This belief also assumes we will not be forced to make any significant cash payments or otherwise be impacted by restrictions of available cash associated with our existing letters of credit, our credit facility or our synthetic lease. Should any of the above beliefs prove incorrect, either in combination or individually, it would likely have a material negative effect on our cash balances and capital resources. We have a significant product transition underway in 3 product areas. To the extent this product migration results in current product revenue reductions that are not offset by increases in our new products, or to the extent revenues come in below current expectations for competitive or any other reasons, our quarterly or annual net income and cash flow results would be adversely affected.

Generation of net income and positive cash flow from operating activities in a consistent and sustained manner has historically been an important source of our cash to fund operating needs and, prospectively, will be required for us to fund our business and to meet our current and long-term obligations. We have taken many actions to offset both the negative impact of lower revenue and increased competition in our market segments as well as the negative effects of the economic downturn between 2000 and 2002. We cannot provide assurance that the actions we have taken in the past or any actions we may take in the future will ensure a consistent, sustainable and sufficient level of net income and positive cash flow from operating activities to fund, sustain or grow our businesses. Certain events that are beyond our control, including prevailing economic, competitive, and industry conditions, as well as various legal and other disputes, may prevent us from achieving these required financial objectives. Any inability to achieve consistent and sustainable net income and cash flow profiles could result in:

- (i) Restrictions on our ability to manage or fund our existing business operations, which could result in significant deterioration in our future results of operations and financial condition.
- (ii) Unwillingness on the part of our bank group partners who provide our credit line and synthetic lease (together, the “credit facilities”) to either:
  - Renew our credit line facility prior to or at its expiration which is March 30, 2006;
  - Provide a waiver or amendment for any covenant violations we may experience in future periods, thereby triggering a default and/or termination under both the credit line and the synthetic lease; or
  - Approve any other amendments we might seek to obtain in order to improve our business.

Any lack of renewal, or waiver or amendment, if needed, could result in the credit line becoming unavailable to us and any amounts outstanding becoming immediately due and payable. In the case of our secured senior credit facility, this would mean the loss of our remaining standby letters of credit totaling \$40.3 million, and in the case of our synthetic lease, this would mean the acceleration of our obligation to purchase the leased facilities for the stipulated sales price of \$50.0 million. This may result in our having to immediately purchase the land and buildings underlying the lease for cash or find a third party to purchase them, potentially at a substantial discount to their appraised value. Quantum would guarantee any shortfall below the \$50.0 million stipulated sales price up to a maximum of \$43.9 million payable by us. Any requirement to pay off either or both of these two items would substantially restrict or reduce cash available to us.

- (iii) Further loss of financial flexibility. The redemption of our existing 7% convertible notes on August 21, 2003 resulted in a reduction of available cash to Quantum of approximately \$37 million because Quantum’s portion of the redemption amount exceeded Quantum’s proceeds from the issuance of the new 4.375% notes. This net cash reduction, while reducing our debt level, represented a significant percentage of our available cash to run our operations, thereby reducing our ability to absorb continued losses and cash flow consumption.
- (iv) Consistent, continued losses would further impair our financial flexibility and could require that we raise additional funding in the capital markets sooner than we otherwise would, and on terms less favorable to us, if available at all.

Any of the above mentioned items, individually or in combination, would have a material and adverse effect on our results of operations, available cash and cash flows, financial condition, access to capital and liquidity.

## Capital Resources

On July 30, 2003, we issued \$160 million in aggregate principal amount of 4.375% convertible subordinated notes due 2010, in a private placement transaction. The notes are unsecured obligations subordinated in right of payment to all of our existing and future senior indebtedness. The notes mature on August 1, 2010, and are convertible at the option of the holders at any time prior to maturity into an aggregate of 36.8 million shares of Quantum common stock at a conversion price of \$4.35 per share. We cannot redeem the notes prior to August 5, 2008. We received net proceeds from the notes of \$155.1 million, after deducting commissions and expenses. We used the net proceeds from the sale of these notes, plus a portion of available cash, to redeem our \$287.5 million 7% convertible subordinated notes due 2004. Splitting the redemption between us and Maxtor, as we each were responsible for a portion of the obligation, our portion of redemption was \$193.6 million. This represents the amount of the 7% convertible subordinated notes plus the premium of 1%, net of the \$95.8 million amount paid to us by Maxtor. The difference between our portion of the redemption and the proceeds received for the 4.375% convertible subordinated notes was \$37 million.

Debentures payable of \$41.4 million were issued as partial consideration for the acquisition of M4 Data in April 2001. The debenture holders called and received payment from us for \$41.4 million in fiscal year 2003. The purchase agreement included additional contingent consideration to be paid annually from 2002 through 2005 based on future revenues, which may result in additional debentures being issued. We expect that debentures issued in the future, if any, under the earn out provisions of the acquisition agreement will be approximately \$1 million annually through fiscal year 2005, when the earn out provisions of the acquisition agreement expire.

At March 31, 2004, there was approximately \$87.9 million remaining on our authorization to repurchase Quantum common stock. No stock repurchases were made during the fiscal year 2004. Our ability to repurchase common stock was restricted under our credit facilities.

The table below summarizes our commitments at March 31, 2004:

	<1 year	1 year and <2 years	2 years and <3 years	3 years and beyond	Total
Convertible subordinated debt	\$ -	\$ -	\$ -	\$ 160,000	\$ 160,000
Short-term debt	537	-	-	-	537
Inventory purchase commitment	41,204	-	-	-	41,204
Operating lease - Colorado facility - contingent obligation (1)	-	-	-	50,000	50,000
Other operating leases	13,117	9,675	5,057	12,699	40,548
Total contractual cash obligations	<u>\$ 54,858</u>	<u>\$ 9,675</u>	<u>\$ 5,057</u>	<u>\$ 222,699</u>	<u>\$ 292,289</u>

(1) Appraised value of the facility, the collateral that would be used to satisfy the contingent obligation, was \$50 million.

## RISK FACTORS

THE READER SHOULD CAREFULLY CONSIDER THE RISKS DESCRIBED BELOW, TOGETHER WITH ALL OF THE OTHER INFORMATION INCLUDED IN THIS ANNUAL REPORT ON FORM 10-K, BEFORE MAKING AN INVESTMENT DECISION. THE RISKS AND UNCERTAINTIES DESCRIBED BELOW ARE NOT THE ONLY ONES FACING QUANTUM. ADDITIONAL RISKS AND UNCERTAINTIES NOT PRESENTLY KNOWN TO US OR THAT ARE CURRENTLY DEEMED IMMATERIAL 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 PAGE 3 OF THIS REPORT FOR ADDITIONAL DISCUSSION OF THESE FORWARD-LOOKING STATEMENTS.

**A large percentage of our sales come from a few customers, and these customers have no minimum or long-term purchase commitments. The loss of, or a significant change in demand from, one or more key customers could materially and adversely affect our business, financial condition and operating results.**

Our sales have been concentrated among a few customers. Sales to our top five customers in fiscal year 2004 represented 51% of total revenue. These sales concentrations do not include revenues from sales of our media that were sold directly to our top five customers by our licensees, for which we earn royalty revenue, or revenues from sales of our tape libraries sold to our top five customers by our customers. Furthermore, customers are not obligated to purchase any minimum product volume and our relationships with our customers are terminable at will.

The merger of Hewlett-Packard and Compaq during calendar year 2002 significantly increased the concentration of our sales and dependency on a single customer. In the fiscal year 2004 approximately 26% of our revenue was derived from this merged entity, and, therefore, we could be materially and adversely affected if Hewlett-Packard were to experience a significant decline in storage revenue whether due to customer loss or otherwise. There is an additional risk since the combined entity owns a competing linear tape open, or LTO, brand of tape drive and media. Hewlett-Packard markets both the LTO and Super DLTape platforms, whereas Compaq had exclusively marketed Super DLTape for tape backup and archiving. To the extent that the combined Hewlett-Packard and Compaq entity significantly reduces its purchases of DLTape and Super DLTape products in favor of LTO products, our tape drive and media revenues, operating results and financial condition would be materially and adversely affected.

If any of our other top five customers were to significantly reduce, cancel or delay their orders from us, our results of operations could be materially adversely affected.

**Our operating results depend on new product introductions, which may not be successful, in which case, our business, financial condition and operating results may be materially and adversely affected.**

To compete effectively, we must continually improve existing products and introduce new ones, such as our recently introduced latest generations of SDLT tape drive, tape automation and the DX-Series Enhanced Backup Systems. We have devoted and expect to continue to devote considerable management and financial resources to these efforts. We cannot provide assurance that:

- We will introduce new products in the time frame we are forecasting;
- We will not experience technical, quality, performance-related or other difficulties that could prevent or delay the introduction of, and market acceptance of, new products;
- 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 because a successful and timely customer qualification must occur before customers will place large product orders; or
- We will achieve high volume production of these new products in a timely manner, if at all.

**We have experienced a downward trend in tape media and tape royalty revenues, primarily caused by year-over-year declines in Quantum branded tape media unit sales, and more recently, declines in media prices, which has had a negative effect on our profits and cash flow. If this trend were to continue or worsen, our business, financial condition and operating results may be even further materially and adversely affected.**

Our royalty and media revenues are dependent on many factors, including the following factors:

- The pricing actions of other media suppliers;
- The size of the installed base of tape drives that use our tape cartridges;
- The performance of our strategic licensing partners, which sell our tape media cartridges;
- The relative growth in units of Super DLTtape drives, the media cartridges for which sell at a higher price than DLTtape cartridges;
- The media consumption habits and rates of end users;
- The pattern of tape drive retirements; and
- The level of channel inventories.

Competition from other tape technologies has had a significant negative impact on our income from media as well as on our sales of tape drives. Similarly, competition among media suppliers has periodically resulted in intense, price-based competition for media sales, most recently in the first half of fiscal year 2004, also affecting media income. If either of these competitive factors continues or intensifies, it would further erode tape drive unit sales, tape drive installed base, media units and media pricing. Since our Quantum branded media revenue and media royalties are dependent upon media pricing and the quantity of media consumed by the installed base of our tape drives, reduced media prices, or a reduced installed tape drive base, would result in further reductions in our Quantum branded media and media royalty revenue. This would materially and adversely affect our business, financial condition and results of operations.

**We do not control licensee pricing or licensee sales of tape media cartridges. To the extent that our royalty revenue is dependent on the prices of cartridges sold by our licensees, should these licensees significantly lower prices on the media products that they sell, such reduced pricing would lower our royalty revenue, which would materially and adversely affect our business, financial condition and operating results.**

We receive a royalty fee based on sales of tape media cartridges by Fuji, Maxell, Imation and Sony. Under our license agreements with these companies, each of the licensees determines the pricing and number of units of tape media cartridges that it sells. To the extent that our royalty revenue is based on the prices of cartridges sold by our licensees, our royalty revenue will vary depending on the level of sales and prices set by the licensees. In addition, lower prices set by licensees could require us to lower our prices on direct sales of tape media cartridges, which would reduce our revenue and margins on this product. As a result, lower prices on our tape media cartridges would reduce media revenue, which could materially and adversely affect our business, financial condition and operating results.

**We have outsourced most of our manufacturing to Jabil and to other third party contract manufacturers. If we cannot obtain our products and parts 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.**

We outsourced tape drive manufacturing to Jabil during the third quarter of fiscal year 2003. We face a number of risks as a result of our decision to outsource manufacturing to Jabil, including, among others:

- *Sole source of product supply.* Jabil is our sole source of supply for our tape drives and certain tape automation products. Because we are relying on one supplier, we are at greater risk of experiencing component shortages or other delays in customer deliveries that could result in customer dissatisfaction and lost sales, which could materially damage customer relationships and result in lost revenue.
- *Cost and purchase commitments.* We may not be able to control the costs we would be required to pay Jabil for the products they manufacture for us. Jabil procures inventory to build our products based upon a forecast of customer demand that we provide. We would be responsible for the financial impact on Jabil of any reduction or product mix shift in the forecast relative to materials that Jabil had already purchased under a prior forecast. Such a variance in forecasted demand could require us to pay Jabil for finished goods in excess of current customer demand or for excess or obsolete inventory. As a result, we could experience reduced gross margins and larger operating losses based on these purchase commitments.
- *Quality.* We will have limited control over the quality of products produced by Jabil. Therefore, the quality of the products may not be acceptable to our customers and could result in customer dissatisfaction, lost revenue, and increased warranty costs.

In addition to Jabil, we have outsourced substantially all of our manufacturing to other contract manufacturers. We face the same risks in relation to these arrangements as those set forth above, in particular the risks of component shortages or other delays in customer deliveries that could result in customer dissatisfaction and lost sales, increased costs for products manufactured for us and the risk that the quality of the products may not be acceptable to us or to our customers, any or all of which could have a material adverse effect on our business.

**Competition has increased, and may increasingly intensify, in the tape drive and tape automation markets as a result of competitors introducing competing products based on new technology standards, which could materially and adversely affect our business, financial condition and results of operations.**

We compete with companies that develop, manufacture, market and sell tape drive and tape automation products. Our principal competitors include Certance (U.S.) Holdings (or Certance (formerly known as Seagate Technology (U.S.) Holdings), Hewlett-Packard, IBM, Sony, ADIC, Overland Data Inc. and StorageTek. These competitors are aggressively trying to advance and develop new technologies to compete more successfully with products based on DLTape and Super DLTape technology. Hewlett-Packard, IBM and Certance formed a consortium to develop and have developed LTO products. These products target the high-capacity data backup market and compete with our products based on Super DLTape technology. This competition has resulted in a trend, which is expected to continue, toward lower prices and lower margins earned on our DLTape and Super DLTape drives and media. The lower demand resulting from the adverse economic conditions experienced in fiscal years 2002 and 2003 had resulted in lower demand in the tape drive and tape automation markets in general, which has also resulted in increased ongoing price competition even as economic conditions have improved. In addition, the merger between Hewlett-Packard and Compaq has resulted in a larger competitor in the tape drive and tape automation markets with greater resources and a potentially greater market reach with a product that competes directly with our Super DLTape drives and Super DLTape media. These factors, when combined with the current environment of intense competition, which has resulted in reduced shipments of our tape drive products, could result in a further reduction in our prices, volumes and margins, which could materially and adversely impact our business, financial condition and results of operations.

Our tape automation products compete with product offerings of Advanced Digital Information Corporation, Overland Data Inc. and StorageTek, which offer tape automation systems incorporating DLTape and Super DLTape technology as well as new linear tape technology. Increased competition has resulted in increased price competition. If this trend continues or worsens and/or if competition further intensifies, our sales and gross margins could decline, which could materially and adversely affect our business, financial condition and results of operations.

**We derive almost all of our revenue from products incorporating tape technology. If competition from alternative storage technologies continues or increases, our business, financial condition and operating results would be materially and adversely harmed.**

We derive almost all of our revenue from products that incorporate some form of tape technology and we expect to continue to derive a substantial majority of our revenue from these products for the foreseeable future. As a result, our future operating results depend on the continued market acceptance of products employing tape drive technology. Our tape products, including tape drives and automation systems, compete with other storage technologies, such as hard disk drives. Hard disk drives have experienced a trend toward lower prices while capacity and performance have increased. If products incorporating other technologies gain comparable or superior market acceptance, or their costs decline far more rapidly than tape drive and media costs, the competition resulting from these alternative technologies would increase as customers turn toward those alternative technologies with an acceptable price/performance offering relative to tape drives and automation systems. As a result, our business, financial condition and operating results would be materially and adversely affected.

**We have taken considerable steps towards reducing our cost structure and anticipate taking further such actions. The steps we have taken and anticipate taking may not reduce our cost structure to a level appropriate in relation to our future sales and therefore these anticipated cost reductions may be inadequate compared to our future sales.**

We have recorded significant restructuring charges and cash payments in order to reduce our cost of sales and operating expenses in response to adverse economic, industry and competitive conditions. We anticipate taking future steps to further reduce our operating costs. These steps and additional possible future restructurings in response to adverse changes in our business and industry may require us to make cash payments that can adversely affect our liquidity if large enough. We may be unable to reduce our cost of sales and operating expenses at a rate and to a level consistent with a future potential adverse sales environment, which may adversely affect our business, financial condition and operating results.



**We have made and may continue to make significant changes to our infrastructure and management, including consolidating or eliminating systems and functions and reducing the number of employees supporting functions. If we do not manage the changes that we implement successfully, our business could be disrupted and that could adversely impact our results of operations and financial condition.**

Managing change will be an important focus for us and the success of our efforts will depend on, among other things, how well we address issues that arise during the process of changing systems and functions and adapt business processes and software to the requirements of our organization. If we are unable to successfully manage the changes that we implement, it could disrupt our business and adversely impact our results of operations and financial condition.

**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. We currently hold 164 United States patents and have 139 United States patent applications pending. 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, resellers, customers and potential customers, 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. 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 United States.

**Third party infringement claims could result in substantial liability and significant costs, and, as a result, our business, financial condition and operating results may be materially and adversely affected.**

From time to time, third parties allege our infringement of and need for a license under their patented or other proprietary technology. For instance, see Note 15 “Litigation” to the Consolidated Financial Statements for a description of StorageTek’s patent infringement suit against us. While we currently believe the amount of ultimate liability, if any, with respect to these actions will not materially affect our financial position, results of operations, or liquidity, the ultimate outcome of any 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 operating results may be materially and adversely affected.

**We are exposed to general economic conditions that have continued to result in significantly reduced sales levels and significant operating losses and, if such adverse economic conditions were to continue or worsen, our business, financial condition and operating results could be further adversely and materially impacted.**

If the adverse economic conditions in the United States and throughout the world economy continue or worsen, we may experience a further material adverse impact on our business, operating results, and financial condition. We took actions in fiscal years 2002 through 2004 to reduce our cost of sales and operating expenses in order to address these adverse conditions. A prolonged continuation or worsening of sales trends would require us to take additional actions to further reduce our cost of sales and operating expenses in subsequent quarters in order to align these costs with reduced revenue. We may be unable to reduce our cost of sales and operating expenses at a rate and to a level consistent with such a future adverse sales environment. If we are required to undertake further expense reductions, we may incur significant additional incremental special charges associated with such expense reductions that are disproportionate to sales, thereby materially and adversely affecting our business, financial condition and operating results.

**We are currently not profitable on a GAAP basis. If we remain unprofitable and are unable to generate positive cash flow from operating activities, our ability to service our debt and fund our other business requirements, as well as obtain additional capital in the future, could be jeopardized and our business could suffer.**

Our ability to meet our debt service obligations and to fund working capital, capital expenditures, acquisitions, research and development and other general corporate needs will depend upon our future financial performance, which will be subject to financial, business and other factors affecting our operations, many of which are beyond our control. If our losses from operations were to persist at current levels or worsen, we may not have sufficient cash resources to service our debt and maintain access to our credit facilities. We cannot provide assurance that we will generate sufficient cash flow from operations, or that future borrowings or equity financing will be available on commercially reasonable terms or at all, or available in an amount sufficient to enable us to pay our debt or fund other liquidity needs. If we are unable to generate sufficient cash flow and/or are unable to service our outstanding debt obligations, we may have to reduce or delay capital expenditures planned for replacements, improvements and expansions, and/or sell assets, thereby affecting our ability to remain competitive and adversely affecting our business.

We must devote substantial resources to new product development, manufacturing, and sales and marketing activities to be competitive in our markets. Historically, cash flow from operating activities has provided us with a significant portion of the cash and liquidity that we have required in order to invest in product development, manufacturing and sales activities. Until or unless we return to consistent, profitable GAAP operating results, we will have significantly less liquidity to invest in our business, which could have a material adverse impact on our business, results of operations, liquidity, and financial condition.

Our ability to achieve profitability may be adversely impacted by higher energy prices to the extent that we or our key suppliers experience higher energy costs which we are unable to offset or recover in the form of higher prices for our products and services.

**Our Storage Systems business currently operates at a loss and may continue to operate at a loss. If we are unable to make Storage Systems profitable, the losses from this group could materially and adversely affect our business, financial condition and results of operations.**

We have invested, and will continue to invest, in the development, promotion and sale of storage solutions. Operating expenses associated with Storage Systems revenue are comparatively high, resulting in losses and cash consumption out of proportion to the revenue generated by the group when compared to our DLTape business. Therefore, we will need to generate significant revenues from Storage Systems, including service and product support revenues, or significantly reduce our related operating expenses for the group in order to make Storage Systems profitable. We cannot provide assurance that Storage Systems will ever produce operating income or will ever generate positive cash flow, and, if we are unable to do so, these losses could negatively impact our business, financial condition and operating results.

Goodwill and intangible assets used in Storage Systems have been reviewed at least annually for possible impairment since the adoption on April 1, 2002 of SFAS No. 142 *Goodwill and Other Intangible Assets*. Although we incurred no goodwill impairment in fiscal year 2004, the impairment tests conducted relative to goodwill resulted in a \$94.3 million charge upon the adoption of SFAS No. 142 in the first quarter of fiscal year 2003 and a \$58.7 million impairment charge in the second quarter of fiscal year 2003. These reviews of goodwill were based on projections of undiscounted and discounted net cash flows from Storage Systems compared to the carrying value of goodwill. The financial projections involved significant estimates with inherent uncertainties regarding future revenues, expenses and cash flows. We cannot provide assurance that future net cash flows will be sufficient to avoid future impairment charges. As a result, in the future, we may incur additional impairment charges related to Storage Systems, which could have a materially adverse impact on the results of our operations or our financial condition. Although we have not incurred impairment charges associated with our other intangible assets, we have substantial intangible asset balances, which are subject to the same risks and uncertainties related to goodwill.

**Our credit agreement and synthetic lease contain various covenants that limit our discretion in the operation of our business, which could have an adverse effect on our business, financial condition and results of operations.**

Our credit agreement and synthetic lease contain numerous restrictive covenants that require us to comply with and maintain certain financial tests and ratios, thereby restricting our ability to:

- Incur debt;
- Incur liens;
- Redeem or prepay subordinated debt;
- Make acquisitions of businesses or entities or sell certain assets;
- Make investments, including loans, guarantees and advances;
- Make capital expenditures beyond a certain threshold;
- Engage in transactions with affiliates;

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

Our ability to comply with covenants contained in our credit agreement or our synthetic lease may be affected by events beyond our control, including prevailing economic, financial and industry conditions. Our failure to comply with our debt-related covenants in one agreement could result in an acceleration of our indebtedness and cross-default under the other agreement, which may have a material adverse effect on our liquidity and financial condition. Even if we are able to comply with all covenants, the restrictions on our ability to operate our business could harm our business by, among other things, limiting our ability to take advantage of financings, mergers, acquisitions and other corporate opportunities.

Our credit agreement is secured by a pledge of all of our assets. If we were to default under our credit agreement 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 the credit agreement. 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.

**Pursuant to our synthetic lease, we have an obligation for a guaranteed value to the lessor at the end of the lease term, which could result in our being required to make a significant cash payment to the lessor, and if we are required to do so, our business, financial condition and results of operations could be materially and adversely impacted.**

We have a synthetic lease for our Colorado Springs facility, which is accounted for as an operating lease in accordance with SFAS No. 13 *Accounting for Leases*. At the end of the lease term, we may renew the lease, purchase the facility, or cause the facility to be sold to a third party, subject to our obligation to the lessor for the guaranteed value. The proceeds of a sale to a third party would be used to satisfy the \$50.0 million obligation to the lessor at the end of the lease term. In the event of sale to a third party, we would be liable for any shortfall between the net proceeds resulting from the sale of the facility and our \$50.0 million obligation to the lessor, up to a maximum of \$43.9 million. In the event of a default on our obligation to the lessor, we would be liable for the entire \$50.0 million. These obligations that would arise from either a sale to a third party or a default could have a material adverse impact on our financial condition and liquidity.

In the past we incurred both a period expense and a cash charge because of a decline in the appraised value of this facility. We have the facility independently appraised on a periodic basis. Any future declines in the appraised value of the facility could result in both a period expense and a cash charge, which could be material and adverse to our financial condition.

Our synthetic lease requires us to maintain specified financial covenants. If we fail to comply with these financial covenants and are unable to obtain a waiver, or amend the lease, for such future non-compliance, it would cause us to default under our credit agreement and synthetic lease and the lessor could terminate the lease, resulting in the acceleration of our obligation to purchase the leased facility at either the full \$50.0 million value or the \$43.9 million guaranteed value, either of which could have a material adverse effect on our financial condition and liquidity.

**In a number of quarters in fiscal years 2003 and 2004 we violated certain financial covenants under our credit agreement and synthetic lease. If in the future we violate financial covenants, it could materially and adversely impact our financial condition and liquidity.**

In December 2002, we terminated a \$187.5 million revolving credit facility with a certain group of banks and entered into a new secured senior credit agreement with a group of five banks, providing a \$100.0 million revolving credit line that was scheduled to expire in June 2004. In March 2004, we amended the secured senior credit facility to extend the maturity to March 2006 and adjusted several covenant requirements. As of March 31, 2004, \$90.3 million of this credit line was committed to standby letters of credit, of which \$50.0 million secured our obligation to the lessor under our synthetic lease. In December 2002, we also entered into a synthetic lease that contained the same financial covenants as our credit agreement. In July 2003, we amended the credit agreement and our synthetic lease to, among other things, change certain financial covenants and events of default and allow for redemption of our 7% Convertible Subordinated Notes due August 2004. In the quarters that we violated covenants, we obtained waivers or amendments.

If in the future we violate any financial or reporting covenant in our credit agreement and receive a notice of default letter from our bank group, our credit line could become unavailable, and any amounts outstanding could become immediately due and payable. If we were unsuccessful in securing a waiver of such violation or an amendment to our credit agreement, we might have to restrict \$90.3 million of our cash to cover the outstanding standby letters of credit issued under the credit agreement. This would have a material and adverse impact on our liquidity.

If we violate any financial or reporting covenants in our credit agreement, it would cause a corresponding violation under our synthetic lease. Absent a waiver or an amendment to our synthetic lease, such a violation would be cause for default under that agreement. For more information regarding our synthetic lease please refer to the immediately preceding risk factor.

Without the availability of the credit agreement, we would have to rely on operating cash flows and debt or equity arrangements other than the credit agreement, if such alternative funding arrangements are available to us at all, in order to maintain sufficient liquidity. If we were not able to obtain sufficient cash from our operations or from these alternative funding sources under such circumstances, our operations, financial condition and liquidity would be materially and adversely affected.

**Our reliance on a limited number of third party suppliers could result in significantly increased costs and delays in the event these suppliers experience shortages or quality problems, and, as a result, our business, financial condition and operating results may be materially and adversely affected.**

We depend on a limited number of suppliers for components and sub-assemblies, including recording heads, media cartridges and integrated circuits, all of which are essential to the manufacture of tape drives and tape automation systems.

We currently purchase the DLTtape and Super DLTtape media cartridges that we sell primarily from Imation, Fuji and Maxell. We cannot provide assurance that Imation, Fuji or Maxell will continue to supply an adequate number of high quality media cartridges in the future. If component shortages occur, or if we experience quality problems with component suppliers, shipments of products could be significantly delayed and/or costs significantly increased, and as a result, our business, financial condition and operating results could be materially and adversely affected. In addition, we qualify only a single source for many components and sub-assemblies, which magnifies the risk of future shortages.

Furthermore, the main supplier of tape heads for our products is located in China. Political instability, trade restrictions, changes in tariff or freight rates, or currency fluctuations in China could result in increased costs and delays in shipment of our products and could materially and adversely impact our business, financial condition and operating results.

**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 operating results.**

In certain product and geographic segments we heavily utilize distributors and value added resellers to perform the functions necessary to market and sell our products. 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. For instance, on May 7, 2003, Digital Storage, Inc., one of our media distributors, filed for Chapter 11 bankruptcy protection. As a result of this bankruptcy, we recorded a net bad debt charge of \$1.4 million in fiscal year 2003. 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.

**We have engaged in and may in the future engage in acquisitions of companies, technologies or products, and the failure to integrate any such acquisitions could harm our business, financial condition and operating results.**

As a part of our business strategy, we have in the past and expect in the future to make additional acquisitions, or significant investments in complementary companies, products or technologies. For instance, as part of this acquisition strategy, during the third quarter of fiscal year 2003, we acquired Benchmark, whose business was complementary to many Quantum products and technologies. Any future acquisitions will be accompanied by the risks commonly encountered in acquisitions of companies. These risks include, among others:

- Difficulties in assimilating its operations and personnel;
- Diversion of management's attention from ongoing business concerns;

- The potential inability to maximize our financial and strategic position through the successful incorporation of acquired technology and rights into our products and services;
- Insufficient revenues to offset increased expenses associated with the acquisition;
- Maintenance of uniform standards, controls, procedures and policies;
- Impairment of existing relationships with employees, suppliers and customers as a result of the integration of new personnel;
- 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 incur losses from these investments;
- Dissatisfaction or performance problems with an acquired company;
- The cost associated with acquisitions; and
- Assumption of unknown liabilities or other unanticipated adverse events or circumstances.

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 harm our business, financial condition and operating results.

**Tax allocations under a tax sharing and indemnity agreement with Maxtor are the subject of a dispute between us and Maxtor. In the event this dispute is not resolved favorably, we could incur significant costs that could have a material adverse effect on our business, financial condition and operating results.**

The tax sharing and indemnity agreement between us and Maxtor entered into in connection with the disposition of the Hard Disk Drive group provided for the allocation of certain liabilities related to taxes. Maxtor and we disagree about the amounts owed by each party under that agreement. The parties are in negotiations to resolve this matter, and no litigation has been initiated to date. However, there can be no assurance that we will be successful in asserting our position. If disputes regarding contested amounts cannot be resolved favorably, we may incur significant liabilities and costs, including litigation costs, as well as costs to settle the related obligations. An unfavorable settlement or litigation outcome could have a material adverse effect on our business, financial condition and operating results.

**Maxtor's failure to perform under the indemnification provisions of a tax sharing and indemnity agreement entered into with us providing for payments to us that relate to tax liabilities, penalties, and interest resulting from the conduct of our business prior to the Hard Disk Drive group disposition date could have a material adverse effect on our business, financial condition and operating results.**

Under a tax sharing and indemnity agreement between us and Maxtor entered into in connection with the disposition of the Hard Disk Drive group, Maxtor has agreed to assume responsibility for payments related to certain taxes, penalties, and interest resulting from the conduct of business by the Quantum DLT and Storage Systems group for all periods before our issuance of tracking stock and the conduct of the Quantum Hard Disk Drive group for all periods before the disposition of the Hard Disk Drive group to Maxtor. If audit adjustments are successfully asserted with respect to such conduct, and if Maxtor fails to indemnify us under this obligation or is not able to pay the reimbursement in full, we would nevertheless be obligated, as the taxpayer, to pay the tax. As a result, we could experience a material adverse effect on our business, financial condition and operating results.

**Maxtor's failure to perform under the agreements in connection with contingent liabilities would harm our business, financial condition and operating results.**

We may have contingent liabilities for some obligations assumed by Maxtor in connection with the disposition of HDD, including real estate and litigation, and Maxtor's failure to perform under these obligations could result in significant costs to us that could have a materially adverse impact on our business, financial condition and operating results.

**The disposition of the Hard Disk Drive group may be determined not to be tax-free, which would result in us or our stockholders, or both, incurring a substantial tax liability, which could materially and adversely affect our business, financial condition and results of operations.**

Maxtor and Quantum have agreed not to request a ruling from the Internal Revenue Service, or any state tax authority confirming that the structure of the combination of Maxtor with the Hard Disk Drive group will not result in any federal income tax or state income or franchise tax to Quantum or the previous holders of the Hard Disk Drive common stock. Instead, Maxtor and we have agreed to effect the disposition and the merger on the basis of an opinion from Ernst & Young LLP, our tax advisor, and a tax opinion insurance policy issued by a syndicate of major insurance companies to us covering up to \$340 million of tax loss caused by the disposition and merger.

If the disposition of the Hard Disk Drive group is determined not to be tax-free and the tax opinion insurance policy does not fully cover the resulting tax liability, we or our stockholders or both could incur substantial tax liability, which could materially and adversely affect our business, financial condition and results of operations.

**The tax opinion insurance policy issued in conjunction with the disposition of the Hard Disk Drive group does not cover all circumstances under which the disposition could become taxable to us, and as a result, we could incur an uninsured tax liability, which could materially and adversely affect our business, financial condition and results of operations.**

In addition to customary exclusions from its coverage, the tax opinion insurance policy does not cover any federal or state tax payable by us if the disposition becomes taxable to us as a result of:

- A change in relevant tax law;
- An acquisition representing a 50% or greater interest in Quantum which began during the one-year period before and nine-month period following the disposition, whether or not approved by our board of directors; or
- An acquisition representing a 50% or greater interest in Maxtor which began during the one-year period before and nine-month period following the disposition, whether or not approved by Maxtor's board of directors.

If any of these events occur, we could incur uninsured tax liability, which could materially and adversely affect our business, financial condition and results of operations.

**If we incur an uninsured tax liability as a result of the disposition of the Hard Disk Drive group, our financial condition and operating results could be negatively affected.**

If the disposition of the Hard Disk Drive group were determined to be taxable to Quantum, we would not be able to recover an amount to cover the tax liability either from Maxtor or under the insurance policy in the following circumstances:

- If the tax loss were not covered by the policy because it fell under one of the exclusions from coverage under the tax opinion insurance policy described above, insurance proceeds would not be available to cover the loss.
- If the tax loss were caused by our own acts or those of a third party that made the disposition taxable (for instance, an acquisition of control of Quantum which began during the one-year period before and nine-month period following the closing), Maxtor would not be obligated to indemnify us for the amount of the tax liability.
- If Maxtor were required to reimburse us for the amount of the tax liability according to its indemnification obligations under the Hard Disk Drive group disposition, but was not able to pay the reimbursement in full, we would nevertheless be obligated, as the taxpayer, to pay the tax.

In any of these circumstances, the tax payments due from us could be substantial. In order to pay the tax, we would have to either deplete our existing cash resources or borrow cash to cover our tax obligation. Our payment of a significant tax prior to payment from Maxtor under Maxtor's indemnification obligations, or in circumstances where Maxtor has no payment obligation, could harm our business, financial condition and operating results.

**Our stock price could become more volatile if certain institutional investors were to increase or decrease the number of shares they own. In addition, there are other factors and events that could affect the trading prices of our common stock.**

Three institutional investors own approximately 47% of our common stock. If any or all of these investors were to decide to purchase additional shares or to sell some or all of the Quantum DLT and Storage Systems shares they currently own, that may cause our stock price to be more volatile. For example, there have been instances in the past where a shareholder with a significant equity position begins selling shares, putting downward pressure on our stock price for the duration of their selling activity. In these situations, selling pressure outweighs buying demand and our stock price has declined.

Trading prices of our common stock may fluctuate in response to a number of other events and factors, such as:

- General economic conditions;
- Changes in interest rates;
- Fluctuations in the stock market in general and market prices for high technology companies in particular;
- Quarterly variations in our operating results;
- New products, services, innovations and strategic developments by our competitors or us, or business combinations and investments by our competitors or us;
- Changes in financial estimates by us or securities analysts and recommendations by securities analysts; and
- Changes in our capital structure, including issuance of additional debt or equity to the public.

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 historical financial information may not be representative of our future results solely as a tape drive and storage solutions business.**

Our historical financial information does not necessarily reflect what our financial position, operating results, and cash flows would have been had we existed solely as a tape drive and storage solutions business prior to fiscal year 2002, which is prior to the disposition of the Hard Disk Drive group. In addition, the historical information is not necessarily indicative of what our operating results, financial position and cash flows will be in the future.

**Our quarterly operating results could fluctuate significantly, and past quarterly operating results should not be used to predict future performance.**

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

- An inadequate supply of tape media cartridges;
- Customers canceling, reducing, deferring or rescheduling significant orders as a result of excess inventory levels, weak economic conditions or other factors;
- Declines in network server demand;
- Failure to complete shipments in the last month of a quarter during which a substantial portion of our products are typically shipped; or
- Increased competition.

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

**A significant portion of our manufacturing and sales operations occurs in foreign locations; we are increasingly exposed to risks associated with conducting our business internationally. Many of our facilities and those of important customers and suppliers are located near known earthquake fault zones or in geographic areas susceptible to other natural disasters, which could disrupt our business and require us to curtail or cease operations.**

We manufacture and sell our products in a number of different markets throughout the world. As a result of our global manufacturing and sales operations, we are subject to a variety of risks that are unique to businesses with international operations of a similar scope, including the following:

- Adverse movement of foreign currencies against the U.S. dollar, the currency (in which our results are reported);
- Import and export duties and value-added taxes;
- Import and export regulation changes that could erode our profit margins or restrict our exports;

- Potential restrictions on the transfer of funds between countries;
- Inflexible employee contracts in the event of business downturns; and
- The burden and cost of complying with foreign laws.

In addition, our suppliers have operations in several emerging or developing economies that have a potential for higher risk than in the developed markets. The risks associated with these economies include, but are not limited to, political risks and natural disasters, including earthquakes. In particular, with several of our outsourced manufacturers located in Malaysia and the Philippines, a significant portion of our product manufacturing may be subject to such political and climactic risks.

**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 materially adverse impact on our business, financial condition and results of operations.**

We do not use derivative financial instruments for hedge or speculative purposes. To minimize foreign currency exposure, we use foreign currency obligations to match and offset net currency exposures associated with certain assets and liabilities denominated in non-functional currencies. Corresponding gains and losses on the underlying transaction generally offset the gains and losses on these foreign currency obligations. We have used in the past, and may use in the future, foreign currency forward contracts 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. Also, since an insignificant amount of our current sales are denominated in currencies other than the U.S. dollar, we do not believe that our total foreign exchange rate exposure is significant. Nevertheless, 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.

**We must maintain appropriate levels of service inventories. If we have too little service inventory, we may experience increased levels of customer dissatisfaction. If we have too much service inventory, we may incur financial losses.**

We maintain levels of service inventories to satisfy future warranty obligations and also to earn service revenue to repair products for which the warranty has expired. We estimate the required amount of service inventories based on historical usage and forecasts of future 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 inventories to satisfy customer needs and to avoid financial losses from excess inventory charges. If we are unable to maintain appropriate levels of service inventories, our business, financial condition and results of operations may be materially and adversely impacted.



## **ITEM 7A. Quantitative and Qualitative Disclosures About Market Risk**

We are exposed to a variety of risks, including changes in interest rates, foreign currency fluctuations and impairment in equity security values.

### Market Interest Rate Risk

Changes in interest rates affect interest income earned on our cash equivalents and short-term investments, and interest expense on short-term and long-term borrowings.

Our cash equivalents and short-term investments consist primarily of short-term fixed income investments and money market funds. The main objective of these investments was safety of principal and liquidity while maximizing return, without significantly increasing risk. A hypothetical 100 basis point parallel decrease in the interest rate curve would result in an approximate \$1.7 million annual decrease in interest income.

Our senior credit facilities are comprised of a \$100.0 million revolving line of credit expiring in March 2006 and a synthetic lease expiring in December 2007. The obligations under the revolving credit line and synthetic lease bear interest at either London interbank offered rate or a base rate, plus a margin determined by a leverage ratio with option periods of one to nine months. Our outstanding convertible bond was for \$160.0 million due 2010 and has a fixed interest rate of 4.375% paid semi-annually in February and August. (refer to Note 11 "Credit Agreements, Short-Term Debt and Convertible Subordinated Debt" to the Consolidated Financial Statements).

We do not enter into derivative transactions related to our cash equivalents or short-term investments nor for our existing or anticipated liabilities.

### Foreign Currency Exchange Rate Risk

As a multinational corporation, we are exposed to changes in foreign exchange rates. These exposures may change over time and could have a material adverse impact on our financial results. Currently, we do not utilize foreign currency forward contracts to manage the risk of exchange rate fluctuations because we believe that we have a natural hedge through our worldwide operating structure. We do not anticipate any material effect on our consolidated financial position utilizing our current hedging strategy.

### Equity Security Risk

We have an equity investment in a technology company that is not publicly traded. This investment was recorded at cost, adjusted for other than temporary impairment and was included in other long-term assets. We do not attempt to reduce or eliminate exposure on this investment. At March 31, 2004, the carrying value of this investment was \$3.9 million, which we received as a part of the disposition of our NAS business.

## ITEM 8. Financial Statements and Supplementary Data

### INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

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**QUANTUM CORPORATION**  
**CONSOLIDATED STATEMENTS OF OPERATIONS**  
(In thousands, except per share data)

	For the year ended March 31,		
	2004	2003	2002
Product revenue	\$ 677,259	\$ 684,156	\$ 820,359
Royalty revenue	131,125	186,653	209,316
Total revenue	808,384	870,809	1,029,675
Cost of revenue	556,725	603,646	652,070
Gross margin	251,659	267,163	377,605
Operating expenses:			
Research and development	103,471	111,926	111,451
Sales and marketing	97,844	100,454	110,733
General and administrative	54,824	71,266	113,541
Goodwill impairment	-	58,689	-
Special charges	15,212	24,200	72,856
Purchased in-process research and development	-	7,802	13,200
	271,351	374,337	421,781
Loss from operations	(19,692)	(107,174)	(44,176)
Equity investment write-downs	-	(17,061)	(7,364)
Interest income and other, net	8,917	11,481	15,904
Interest expense	(17,617)	(24,419)	(22,976)
Loss on debt extinguishment	(2,565)	-	-
Loss before income taxes	(30,957)	(137,173)	(58,612)
Income tax provision (benefit)	32,758	(5,085)	(9,612)
Loss from continuing operations	(63,715)	(132,088)	(49,000)
Discontinued operations:			
Income (Loss) from NAS discontinued operations, net of income taxes	1,693	(37,909)	(33,470)
Gain on disposition of HDD group, net of income taxes	-	-	124,972
Income (loss) from discontinued operations	1,693	(37,909)	91,502
Income (loss) before cumulative effect of an accounting change	(62,022)	(169,997)	42,502
Cumulative effect of an accounting change	-	(94,298)	-
Net income (loss)	\$ (62,022)	\$ (264,295)	\$ 42,502
Loss per share from continuing operations			
Basic	\$ (0.36)	\$ (0.81)	\$ (0.32)
Diluted	\$ (0.36)	\$ (0.81)	\$ (0.32)
Weighted average common shares--continuing operations			
Basic	176,037	162,208	155,169
Diluted	176,037	162,208	155,169
Income (loss) per share from discontinued operations			
Basic	\$ 0.01	\$ (0.23)	\$ 0.59
Diluted	\$ 0.01	\$ (0.23)	\$ 0.59
Weighted average common shares--discontinued operations			
Basic	176,037	162,208	155,169
Diluted	176,037	162,208	155,169
Cumulative effect per share of an accounting change			
Basic	\$ -	\$ (0.58)	\$ -
Diluted	\$ -	\$ (0.58)	\$ -
Net income (loss) per share			
Basic	\$ (0.35)	\$ (1.63)	\$ 0.27
Diluted	\$ (0.35)	\$ (1.63)	\$ 0.27
Weighted average common shares			
Basic	176,037	162,208	155,169
Diluted	176,037	162,208	155,169

See accompanying Notes to the Consolidated Financial Statements.

**QUANTUM CORPORATION**  
**CONSOLIDATED BALANCE SHEETS**  
(In thousands, except share amounts)

	<b>March 31, 2004</b>	<b>March 31, 2003</b>
<b>Assets</b>		
Current assets:		
Cash and cash equivalents	\$ 214,607	\$ 221,734
Short-term investments	50,800	97,055
Accounts receivable, net of allowance for doubtful accounts of \$9,988 and \$8,927	117,397	133,760
Inventories	48,343	61,735
Deferred income taxes	27,514	46,370
Service inventories	51,258	49,104
Other current assets	36,625	26,080
Total current assets	<u>546,544</u>	<u>635,838</u>
Long-term assets:		
Property and equipment, less accumulated depreciation	40,377	59,092
Purchased technology and other intangible assets, less accumulated amortization	60,874	79,444
Goodwill	45,690	40,916
Other long-term assets	12,073	10,606
Receivable from Maxtor Corporation	-	95,833
Total long-term assets	<u>159,014</u>	<u>285,891</u>
	<u><u>\$ 705,558</u></u>	<u><u>\$ 921,729</u></u>
<b>Liabilities and Stockholders' Equity</b>		
Current liabilities:		
Accounts payable	\$ 67,341	\$ 104,495
Accrued warranty	38,015	49,582
Short-term debt	537	-
Accrued compensation	24,420	21,854
Income taxes payable	18,305	14,695
Accrued special charges	8,483	6,255
Deferred revenue	17,531	16,627
Other accrued liabilities	37,252	40,468
Total current liabilities	<u>211,884</u>	<u>253,976</u>
Long-term liabilities:		
Deferred income taxes	27,125	25,091
Convertible subordinated debt	160,000	287,500
Total long-term liabilities	<u>187,125</u>	<u>312,591</u>
Commitments and contingencies		
Stockholders' equity:		
Preferred stock:		
Preferred stock, 20,000,000 shares authorized; no shares issued at March 31, 2004 and March 31, 2003	-	-
Common stock:		
Common stock, \$0.01 par value; 1,000,000,000 shares authorized; 180,317,992 and 175,451,761 shares issued and outstanding at March 31, 2004 and 2003, respectively	1,804	1,755
Capital in excess of par value	253,317	241,671
Retained earnings	48,597	110,619
Accumulated other comprehensive income	2,831	1,117
Stockholders' equity	<u>306,549</u>	<u>355,162</u>
	<u><u>\$ 705,558</u></u>	<u><u>\$ 921,729</u></u>

See accompanying Notes to the Consolidated Financial Statements.

**QUANTUM CORPORATION**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
(In thousands)

	For the year ended March 31,		
	2004	2003	2002
Cash flows from operating activities:			
Loss from continuing operations including cumulative effect of an accounting change	\$ (63,715)	\$ (226,386)	\$ (49,000)
Adjustments to reconcile loss from continuing operations to net cash provided by (used in) operating activities:			
Cumulative effect of an accounting change (SFAS No. 142 adjustment)	-	94,298	-
Purchased in-process research and development	-	7,802	13,200
Depreciation	29,702	36,791	39,298
Amortization	20,479	15,530	28,170
Goodwill write-down	-	58,689	-
Deferred income taxes	20,890	(19,124)	(23,161)
Compensation related to stock incentive plans	507	1,544	18,283
Equity investment write-down	-	17,061	7,364
Impairment of manufacturing facility	2,001	-	-
Changes in assets and liabilities:			
Accounts receivable	16,363	17,351	52,229
Inventories	13,392	41,800	25,569
Accounts payable	(37,154)	34,467	(23,025)
Income taxes payable	3,610	(15,687)	7,214
Accrued warranty	(11,567)	1,067	(12,026)
Other assets and liabilities	3,429	(31,220)	(27,486)
Net cash provided by (used in) operating activities of continuing operations	(2,063)	33,983	56,629
Net cash used in operating activities of discontinued operations	-	(16,358)	(17,790)
Net cash provided by (used in) operating activities	(2,063)	17,625	38,839
Cash flows from investing activities:			
Purchases of short-term investments	(2,183,510)	(724,925)	-
Proceeds from sale of short-term investments	2,229,710	627,925	-
Proceeds from sale of equity securities	-	11,000	-
Purchases of equity securities	-	-	(27,550)
Acquisition of SANlight Inc. (net of cash acquired)	-	(1,945)	-
Acquisition of Benchmark Storage Innovations Inc. (net of cash acquired)	-	(3,020)	-
Acquisition of M4 Data (Holdings) Ltd.	-	-	(15,210)
Proceeds from disposition of property and equipment	-	801	2,669
Purchases of property and equipment	(22,264)	(18,525)	(41,302)
Net cash provided by (used in) investing activities of continuing operations	23,936	(108,689)	(81,393)
Net cash provided by (used in) investing activities of discontinued operations	-	4,709	(12,218)
Net cash provided by (used in) investing activities	23,936	(103,980)	(93,611)
Cash flows from financing activities:			
Receipt of payment on receivable from Maxtor Corporation	95,833	-	-
Settlement of 7% convertible subordinated notes	(287,500)	-	-
Issuance of 4.375% convertible subordinated notes (net of commissions and expense)	155,069	-	-
Repurchases of common stock	-	-	(46,630)
Principal payments of short-term debt	-	(41,363)	-
Proceeds from issuance of common stock, net	7,598	5,477	45,465
Net cash used in financing activities of continuing operations	(29,000)	(35,886)	(1,165)
Net cash provided by financing activities of discontinued operations	-	97	2,278
Net cash provided by (used in) financing activities	(29,000)	(35,789)	1,113
Decrease in cash and cash equivalents from continuing operations	(7,127)	(110,592)	(25,929)
Decrease in cash and cash equivalents from discontinued operations	-	(11,552)	(27,730)
Net decrease in cash and cash equivalents	(7,127)	(122,144)	(53,659)
Cash and cash equivalents at beginning of period	221,734	343,878	397,537
Cash and cash equivalents at end of period	\$ 214,607	\$ 221,734	\$ 343,878

	For the year ended March 31,		
	2004	2003	2002
Supplemental disclosure of cash flow information:			
Cash paid during the year for:			
Interest	\$ 21,811	\$ 15,885	\$ 15,723
Income taxes , net of refunds	\$ 9,426	\$ (28,131)	\$ (29)
Notes payable issued in respect of M4 Data (Holdings) Ltd. acquisition	\$ 976	\$ -	\$ 41,363
Non-cash gain on the disposition of the HDD group	\$ -	\$ -	\$ 124,972
Common Stock issued for achievement of certain earn out provisions of Benchmark Storage Innovations Inc. acquisition	\$ 3,591	\$ -	\$ -
Value of common stock tendered in satisfaction of employees' income taxes on vesting of employee stock options	\$ 351	\$ -	\$ -

See accompanying Notes to the Consolidated Financial Statements.

**QUANTUM CORPORATION**

**CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY**  
(In thousands)

	<b>DLT &amp; Storage Systems Group Common Stock</b>		<b>Hard Disk Drive Group Common Stock</b>		<b>Capital in Excess of Par Value</b>
	<u>Shares</u>	<u>Amount</u>	<u>Shares</u>	<u>Amount</u>	
<b>Balances at March 31, 2001</b>	152,062	\$ 1,551	80,085	\$ 801	\$ 749,066
Comprehensive income:					
Loss from continuing operations	-	-	-	-	-
Income from discontinued operations, net	-	-	-	-	-
Net income	-	-	-	-	-
Other comprehensive loss:					
Foreign currency translation adjustments	-	-	-	-	-
Other comprehensive loss	-	-	-	-	-
Comprehensive income	-	-	-	-	-
Shares issued under employee stock purchase plan	798	8	-	-	6,588
Shares issued under employee stock option plans, net	8,825	88	-	-	27,844
Treasury shares repurchased and retired common stock	(4,717)	(77)	-	-	(9,300)
Stock compensation expense	-	-	-	-	84,640
Tax benefits related to stock option plans	-	-	-	-	1,256
Disposition of HDD group	-	-	(80,085)	(801)	(671,187)
<b>Balances at March 31, 2002</b>	156,968	1,570	-	-	188,907
Comprehensive loss:					
Loss from continuing operations	-	-	-	-	-
Loss from discontinued operations, net	-	-	-	-	-
Cumulative effect of an accounting change	-	-	-	-	-
Net loss	-	-	-	-	-
Other comprehensive income:					
Foreign currency translation adjustments	-	-	-	-	-
Other comprehensive income	-	-	-	-	-
Comprehensive loss	-	-	-	-	-
Shares issued under employee stock purchase plan	2,218	22	-	-	3,972
Shares issued under employee stock option plans, net	208	2	-	-	(3,319)
Shares issued in connection with business acquisitions	16,058	161	-	-	50,058
Stock compensation expense	-	-	-	-	2,053
<b>Balances at March 31, 2003</b>	175,452	1,755	-	-	241,671
Comprehensive loss:					
Loss from continuing operations	-	-	-	-	-
Income from discontinued operations, net	-	-	-	-	-
Net loss	-	-	-	-	-
Other comprehensive income:					
Foreign currency translation adjustments	-	-	-	-	-
Other comprehensive income	-	-	-	-	-
Comprehensive loss	-	-	-	-	-
Shares issued under employee stock purchase plan	2,792	28	-	-	5,385
Shares issued under employee stock option plans, net	1,015	10	-	-	2,256
Shares issued in connection with business acquisitions	1,058	11	-	-	3,498
Stock compensation expense	-	-	-	-	507
<b>Balances at March 31, 2004</b>	180,317	\$ 1,804	-	\$ -	\$ 253,317

See accompanying Notes to the Consolidated Financial Statements.

**QUANTUM CORPORATION**

**CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY – (Continued)**  
(In thousands)

	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Treasury Stock	Total
<b>Balances at March 31, 2001</b>	\$ 584,696	\$ (4,854)	\$ (34,920)	\$ 1,296,340
Comprehensive income:				
Loss from continuing operations	(82,470)	-	-	(82,470)
Income from discontinued operations, net	124,972	-	-	124,972
Net income				42,502
Other comprehensive loss:				
Foreign currency translation adjustments	-	(36)		
Other comprehensive loss	-	(36)		(36)
Comprehensive income	-	-		42,466
Shares issued under employee stock purchase plan	-	-		6,596
Shares issued under employee stock option plans, net	-	-		27,932
Treasury shares repurchased and retired common stock	(72,172)	-	34,920	(46,629)
Stock compensation expense	-	-	-	84,640
Tax benefits related to stock option plans	-	-	-	1,256
Disposition of HDD group	(180,112)	-	-	(852,100)
<b>Balances at March 31, 2002</b>	374,914	(4,890)	-	560,501
Comprehensive loss:				
Loss from continuing operations	(132,088)	-	-	(132,088)
Loss from discontinued operations, net	(37,909)	-	-	(37,909)
Cumulative effect of an accounting change	(94,298)	-	-	(94,298)
Net loss				(264,295)
Other comprehensive income:				
Foreign currency translation adjustments	-	6,007		
Other comprehensive income	-	6,007		6,007
Comprehensive loss	-	-		(258,288)
Shares issued under employee stock purchase plan	-	-		3,994
Shares issued under employee stock option plans, net	-	-		(3,317)
Shares issued in connection with business acquisitions	-	-	-	50,219
Stock compensation expense	-	-	-	2,053
<b>Balances at March 31, 2003</b>	110,619	1,117	-	355,162
Comprehensive loss:				
Loss from continuing operations	(63,715)	-	-	(63,715)
Income from discontinued operations, net	1,693	-	-	1,693
Net loss				(62,022)
Other comprehensive income:				
Foreign currency translation adjustments	-	1,714		
Other comprehensive income	-	1,714		1,714
Comprehensive loss	-	-		(60,308)
Shares issued under employee stock purchase plan	-	-		5,413
Shares issued under employee stock option plans, net	-	-		2,266
Shares issued in connection with business acquisitions	-	-	-	3,509
Stock compensation expense	-	-	-	507
<b>Balances at March 31, 2004</b>	\$ 48,597	\$ 2,831	\$ -	\$ 306,549

See accompanying Notes to the Consolidated Financial Statements.



## QUANTUM CORPORATION

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

#### **Note 1: Description of Business**

Quantum Corporation (“Quantum” or the “Company”) (NYSE: DSS) has two data storage business segments: the DLTtape business and the Storage Systems business. DLT designs, develops, manufactures, licenses, services, and markets tape drives (DLTtape, DLTtape VS, and Super DLTtape drives), and media cartridges (DLTtape and Super DLTtape media cartridges). The Storage Systems business consists of tape automation systems and services and disk-based backup systems.

Until the beginning of fiscal year 2002, Quantum Corporation operated its business through two separate business groups: the DLT & Storage Systems group (“DSS”) and the Hard Disk Drive group (“HDD”). As a result of a recapitalization in August 1999, each of these business groups was represented by its own class of Quantum Corporation common stock. On March 30, 2001, Quantum’s stockholders approved the disposition of HDD to Maxtor Corporation (“Maxtor”). On April 2, 2001, each authorized share of HDD common stock was exchanged for 1.52 shares of Maxtor common stock.

Since the sale of HDD, Quantum’s business has included the two business segments described above: DLT and Storage Systems.

In April 2001, Quantum completed the acquisition of M4 Data (Holdings) Ltd., (“M4 Data”) a privately held data storage company based in the United Kingdom, to leverage M4 Data’s complementary high performance and scalable tape automation products and technologies. In November 2002, Quantum completed the acquisition of Benchmark Storage Innovations, Inc. (“Benchmark”), a privately held company. The acquisition enabled Quantum to expand its tape business by adding Benchmark’s complementary products. In March 2003, Quantum completed the acquisition of the remaining outstanding shares of SANlight Inc. (“SANlight”) that it did not already own. The acquisition provided Quantum with software technology and expertise that it can leverage in its disk-based enhanced backup solutions.

Quantum sold its Network Attached Storage (“NAS”) business, which was part of Storage Systems, to SNAP Appliance, Inc. (formerly known as Broadband Storage, Inc.), a privately held company, in October 2002. Prior to disposing of the NAS business, Quantum had engaged in the NAS business following the acquisition of Meridian Data, Inc., in September 1999 and of certain assets of Connex in August 2001.

#### **Note 2: Summary of Significant Accounting Policies**

The preparation of the Consolidated Financial Statements of Quantum in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amount of assets and liabilities at the date of the financial statements and the reported amount of revenues and expenses during the period. Quantum bases estimates on historical experience and on various assumptions about the future that are believed to be reasonable based on available information. Quantum’s reported financial position or results of operations may be materially different under different conditions or when using different estimates and assumptions, particularly with respect to critical accounting policies, which are discussed below. In the event that estimates or assumptions prove to differ from actual results, adjustments are made in subsequent periods to reflect more current information.

#### **Financial Statement Presentation**

As a result of Quantum’s disposition of the HDD group on April 2, 2001, the Consolidated Financial Statements and related notes have been restated to present the results of the HDD business as discontinued operations (refer to Note 20 “Discontinued Operations”). Accordingly, in the consolidated statements of operations, the gain on the disposition of the HDD group in fiscal year 2002 has been classified as “Gain on disposition of HDD group, net of income taxes”.

The NAS business was sold on October 28, 2002. As a result of this disposition, the Consolidated Financial Statements and related notes have been restated to present the results of the NAS business as discontinued operations. Accordingly, in the consolidated statements of operations, the operating results of the NAS business have been classified as “Income (loss) from NAS discontinued operations, net of income taxes”.

The accompanying Consolidated Financial Statements include the accounts of Quantum and its majority-owned subsidiaries. All material intercompany accounts and transactions have been eliminated. Certain amounts in prior periods have been reclassified to conform to the current presentation.

## **Revenue Recognition**

Revenue from sales of products to OEMs and distributors is recognized: when passage of title and risk of ownership is transferred to customers; when persuasive evidence of an arrangement exists; when the price to the buyer is fixed or determinable; and when collection is reasonably assured. In the period when the revenue is recognized for either OEMs or distributors, allowances are provided for estimated future price adjustments, such as volume rebates and price protection, and future product returns. Since Quantum has historically been able to reliably estimate the amount of allowances required for future price adjustments and product returns, Quantum recognizes revenue, net of projected allowances, upon shipment to its customers.

These allowances are based on the OEMs' and distributors' master agreements, programs in existence at the time the revenue is recognized, historical information, contractual limits and plans regarding price adjustments and product returns. Revenue from distributor arrangements is a significant portion of Quantum's total revenue.

Royalty revenue is recognized based on actual licensee sales when such sales incorporate technology licensed from Quantum. Revenue from separately priced extended warranty and product service contracts is deferred and recognized as revenue ratably over the contract period.

When elements such as hardware and services are contained in a single arrangement, or in related arrangements with the same customer, Quantum allocates revenue to the separate elements based on relative fair value provided the Company has fair value for all elements of the arrangement. If in an arrangement Quantum has fair value for undelivered elements but not the delivered element, the Company defers the fair value of the undelivered elements and the residual revenue is allocated to the delivered elements. Undelivered elements typically include installation and services. If fair value does not exist for undelivered elements, then revenue for the entire arrangement is deferred until all elements have been delivered.

## **Warranty expense and liability**

Quantum generally warrants its products against defects for 12 to 39 months. A provision for estimated future costs and estimated returns for credit relating to warranty is recorded when products are shipped and revenue is recognized.

The estimates of future product failure rates are based on both historical product failure data and anticipated future failure rates. Similarly, the estimates of future costs of repair are based on both historical data and anticipated future costs.

## **Inventory Valuation**

Quantum values its inventories that are held for resale to customers at lower of cost or market. Cost is determined by the first-in, first-out ("FIFO") method, and includes direct material, direct labor, factory overhead and other direct costs. Market is "net realizable value", which for finished goods and goods in process, is the estimated selling price, less costs to complete and dispose of the inventory. For raw materials, it is replacement cost or the cost of acquiring similar products from vendors.

Quantum initially records its inventory at cost and each quarter evaluates the difference, if any, between cost and market. Quantum records write-downs for the amount that cost of inventory exceeds its estimated market value. No adjustment is required when market value exceeds cost.

## **Service Inventories**

Quantum values its service inventories at the lower of cost or market. Service inventories consists of both component parts, which are primarily used to repair defective units, and finished units, which are provided for customer use on a temporary or permanent basis, while the defective unit is being repaired. Cost is determined by the FIFO method, and includes direct material, direct labor, factory overhead and other direct costs. Market is "net realizable value", which for components is replacement cost or the cost of acquiring similar products from vendors. For finished goods, market value is the estimated selling price less costs to complete and dispose of the inventories.

Quantum carries service inventories because Quantum provides product warranty for 12 to 39 months and earns revenue by providing repair service outside this warranty period. Quantum initially records its service inventories at cost and each quarter evaluates the difference, if any, between cost and market.

Quantum records write-downs for the amount that cost of service inventories exceeds its estimated market value. No adjustment is required when market value exceeds cost.

## Goodwill and Intangible Assets

Quantum has a significant amount of goodwill and intangible assets on its balance sheet related to acquisitions. At March 31, 2004 the net \$106.6 million of goodwill and intangible assets represented 15% of total assets.

As a result of adopting SFAS No. 142 *Goodwill and Other Intangible Assets* on April 1, 2002, Quantum discontinued the amortization of goodwill. Instead, goodwill was reviewed for impairment upon adoption of SFAS No. 142 and is reviewed annually thereafter in the fourth quarter, or more frequently when indicators of impairment are present. Refer to Note 3 “Cumulative Effect of an Accounting Change” and Note 4 “Goodwill and Intangible Assets” for a discussion of the impact of adopting and applying SFAS No. 142.

Intangible assets are carried and reported at acquisition cost, net of accumulated amortization subsequent to acquisition. The acquisition cost is amortized over estimated useful lives, which range from 2 to 10 years. Intangible assets are reviewed for impairment whenever events or circumstances indicate impairment might exist, or at least annually, in accordance with SFAS No. 144 *Accounting for the Impairment or Disposal of Long-lived assets*. Projected undiscounted net cash flows expected to be derived from the use of those assets are compared to the respective net carrying amounts to determine whether any impairment exists. Impairment, if any, is based on the excess of the carrying amount over the fair value of those assets.

## Special Charges

In recent periods and over the past several years, Quantum recorded significant charges related to the realignment and restructuring of its business operations. These charges represented expenses incurred in connection with certain cost reduction programs that Quantum implemented and consisted of the cost of involuntary termination benefits, separation benefits, stock compensation charges, facilities charges and other costs of exiting activities or geographies.

In the fourth quarter of fiscal year 2003, Quantum became subject to SFAS No. 146 *Accounting for Costs Associated with Exit or Disposal Activities*, which superseded EITF Issue No. 94-3 *Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (including Certain Costs Incurred in a Restructuring)*. SFAS No. 146 requires that a liability for a cost associated with an exit or disposal activity be recognized when the liability is incurred rather than at the date of an entity’s commitment to an exit plan. The statement further establishes fair value as the objective for initial measurement of the liability and that employee benefit arrangements requiring future service beyond a “minimum retention period” be recognized over the future service period.

Prior to the fourth quarter of fiscal year 2003, Quantum accounted for special charges under the provisions of EITF Issue No 94-3. Under that pronouncement, Quantum recorded a liability in the period in which management approved a restructuring plan if:

- Management having the appropriate level of authority approved and committed Quantum to the specific exit plan;
- The period of time to complete the plan indicated that significant changes to the plan of termination were not likely; and
- The plan involving terminations identified the number of employees and positions to be terminated, and the benefit arrangement was communicated to affected employees.

Only costs resulting from an exit plan that were not associated with, or that did not benefit activities that were continued, were eligible for recognition as liabilities at the commitment date.

## Foreign Currency Translation and Transactions

Assets, liabilities, and operations of foreign offices and subsidiaries are recorded based on the functional currency of the entity. For a majority of Quantum’s material foreign operations, the functional currency is the U.S. dollar. The assets and liabilities of foreign offices with a local functional currency are translated, for consolidation purposes, at current exchange rates from the local currency to the reporting currency, the U.S. dollar. The resulting gains or losses are reported as a component of other comprehensive income (loss) within stockholders’ equity. Although over one third of Quantum’s sales are made to customers in non-U.S. locations, a majority of Quantum’s material transactions are denominated in U.S. dollars. Accordingly, transaction gains or losses have been immaterial to Quantum’s Consolidated Financial Statements for all years presented. The effect of foreign currency exchange rate fluctuations on cash was also immaterial for the years presented. Assets and liabilities denominated in other than the functional currency are remeasured each month with the remeasurement gain or loss recorded in other income. The effect of this remeasurement was immaterial to Quantum’s Consolidated Financial Statements for all years presented.

## Shipping and Handling Fees

Shipping and handling fees are included in cost of revenue and were \$16.3 million, \$22.6 million, and \$21.2 million in fiscal years 2004, 2003 and 2002, respectively.

## **Income Taxes**

Quantum accounts for income taxes in accordance with SFAS No. 109 *Accounting for Income Taxes*, which requires that deferred tax assets and liabilities be recognized for the effect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. SFAS No. 109 also requires that deferred tax assets be reduced by a valuation allowance if it is more likely than not that some portion or all of the deferred tax asset will not be realized.

## **Cash Equivalents and Short-Term Investments**

Quantum considers all highly liquid debt instruments with a maturity of 90 days or less at the time of purchase to be cash equivalents. Cash equivalents are carried at fair value, which approximates their cost. Quantum's short-term investments have maturities of more than 90 days at the time of purchase.

Quantum has classified all cash equivalents and short-term investments as available-for-sale. Securities classified as available-for-sale are carried at fair value with unrealized gains and losses reported as a component of accumulated other comprehensive income (loss) in stockholders' equity. The cost of debt securities is adjusted for amortization of premiums and accretion of discounts to maturity. Such amortization is included in interest income. Realized gains and losses and declines in value judged to be other-than-temporary are recorded in other income or expense. The cost of securities sold is based on the specific identification method.

## **Concentration of Credit Risk and Allowances for Doubtful Accounts**

Quantum performs ongoing credit evaluations of its customers' financial condition and generally requires no collateral from its customers. These evaluations require significant judgment and are based on multiple sources of information and analyze such factors as Quantum's historical bad debt experiences, industry and geographic concentrations of credit risk, current economic trends and changes in customer payment terms.

Quantum records allowances for estimated losses resulting from the inability of its customers to make required payments. When Quantum becomes aware that a specific customer is unable to meet its financial obligations, Quantum records a specific allowance to reflect the level of credit risk in the customer's outstanding receivable balance. In addition, Quantum records additional allowances based on certain percentages of its aged receivable balances. Quantum records its bad debt expenses as general and administrative expenses.

Sales to Quantum's top five customers in fiscal year 2004 represented 51% of revenue, compared to 39% of revenue in fiscal year 2003 and 45% of revenue in fiscal year 2002. Sales to Hewlett-Packard were 26% of revenue in fiscal year 2004, compared to combined sales to Hewlett-Packard and Compaq representing 22% of revenue in fiscal year 2003, and 28% of revenue in fiscal year 2002. Sales to Dell increased to 14% of revenue in fiscal year 2004, compared to less than 10% of revenue in fiscal years 2003 and 2002. These sales concentrations do not include revenues from sales of Quantum's media that was sold directly to these customers by Quantum's licensees, for which Quantum earns royalty revenue, or revenues from sales of tape libraries sold directly to these customers by Quantum's other OEM tape drive customers.

Quantum invests its excess cash in deposits with major banks and in money market funds and short-term debt securities of companies with strong credit ratings from a variety of industries. These securities generally mature within 365 days and, therefore, bear minimal risk. Quantum has not experienced any material losses on these investments and limits the amount of credit exposure to any one issuer and to any one type of investment.

## **Investments in Other Entity**

Investments in other entities are recorded in other long-term assets. Investments in other entities (generally less-than-20-percent-owned companies) that are not represented by marketable securities are carried at cost less write-downs for declines in value that are judged to be other-than-temporary. Dividends, if any, are recorded in other income when received. As of March 31, 2004 the Company held an investment in an entity that is Variable Interest Entity, but Quantum is not the primary beneficiary as defined in FIN No. 46 *Consolidation of Variable Interest Entities*.

## Property, Plant and Equipment

Property, plant 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 (generally three to 10 years for machinery, equipment, furniture, and leasehold improvements, and 25 years for buildings).

## Advertising Expense

Quantum expenses advertising costs as incurred. Advertising expense from continuing operations for the years ended March 31, 2004, 2003, and 2002, was \$8.6 million, \$8.6 million, and \$6.4 million, respectively.

## Stock-Based Compensation

As permitted by SFAS No. 123 *Accounting for Stock-Based Compensation*, Quantum accounts for employee stock-based compensation in accordance with Accounting Principles Board Opinion No. 25, “*Accounting for Stock Issued to Employees*” (“APB 25”), and related interpretations. Under APB 25, when the exercise price of its employee stock awards equals or exceeds the market price of the underlying stock on the date of grant, no compensation expense is recognized. Any deferred stock compensation calculated according to APB 25 is amortized over the vesting period of the individual stock awards. In general, the vesting period of these stock awards is graded. Stock awards granted to nonemployees are accounted for at fair value in accordance with the provisions of SFAS No. 123, with the associated value recognized over the vesting period of the award.

Pro forma information regarding net income (loss) and net income (loss) per share is required by FAS 123. This information is required to be determined as if the Company had accounted for its employee stock awards (including shares issued under the Employee Stock Purchase Plan, collectively called “stock-based awards”), under the fair value method of FAS 123, as amended by SFAS 148 *Accounting for Stock-Based Compensation — Transition and Disclosure*. Stock-based awards have been valued using the Black-Scholes option pricing model. Among other things, the Black-Scholes model considers the expected volatility of the Company’s stock price, determined in accordance with FAS 123, in arriving at an option valuation.

For purposes of pro forma disclosures, the estimated fair value of Quantum’s employee stock options is amortized to expense over the vesting period of the option. The pro forma stock-based employee compensation expense has no impact on the Company’s cash flows. In the future, the Company may elect, or be required, to use a different valuation model, which could result in a significantly different impact on pro forma net income (loss). For purposes of this reconciliation, the Company adds back to previously reported net income all stock-based employee compensation expense that relates to acquisitions or to awards made below fair market value, then deducts the pro forma stock-based employee compensation expense determined under the fair value method for all awards. Quantum’s pro forma net income (loss) and net income (loss) per share follows:

(in thousands, except per-share data)

	For the year ended March 31,		
	2004	2003	2002
Reported net income (loss)	\$ (62,022)	\$ (264,295)	\$ 42,502
Add back employee stock option expense	238	1,141	21,747
Option fair value amortization	(17,187)	(19,420)	(23,575)
Pro forma net income (loss)	<u>\$ (78,971)</u>	<u>\$ (282,574)</u>	<u>\$ 40,674</u>
Pro forma net income (loss) per share:			
Basic	<u>\$ (0.45)</u>	<u>\$ (1.74)</u>	<u>\$ 0.26</u>
Diluted	<u>\$ (0.45)</u>	<u>\$ (1.74)</u>	<u>\$ 0.26</u>

## Risks and Uncertainties

As is typical in the information storage industry, a significant portion of Quantum’s customer base is concentrated among a small number of OEMs. The loss of any one of Quantum’s more significant customers, or a significant decrease in the sales volume with one of these significant customers, could have a material adverse effect on Quantum’s results of operations and financial condition. Furthermore, if adverse general economic conditions were to continue or worsen, the resulting effect on Information Technology (“IT”) spending could also have a material adverse effect on Quantum’s results of operations and financial condition.

The merger of Hewlett-Packard and Compaq has significantly increased the concentration of Quantum’s sales and dependency on a single customer. Quantum could be materially affected if Hewlett-Packard, which accounted for 26% of Quantum’s revenue in fiscal year 2004, experiences a significant drop in its storage business revenue due to customer loss or integration issues following

its merger with Compaq, or if Hewlett-Packard decided to significantly reduce or cancel its orders from Quantum. Quantum also faces future uncertainties since the combined Hewlett-Packard and Compaq owns a competing LTO brand of tape drive and media. This sales concentration does not include revenues from sales of Quantum's media that was sold directly to Hewlett-Packard by Quantum's licensees, for which Quantum earns royalty revenue, or revenues from sales of tape libraries sold directly to Hewlett-Packard by Quantum's other OEM tape drive customers.

A limited number of tape drive storage products make up a significant majority of Quantum's sales, and due to increasingly rapid technological change in the industry, Quantum's future operating results depend on its ability to develop and successfully introduce new products.

Quantum's main supplier of tape heads is located in China. Political instability, trade restrictions, the SARS health problem, changes in tariff or freight rates or currency fluctuations in China could result in increased costs and delays in shipment of Quantum's products and could materially and adversely impact its operating results.

Quantum has outsourced a significant portion of its manufacturing to a small number of contract manufacturers. This concentration presents risks of component shortages or other delays in customer deliveries, increased costs for products manufactured for Quantum and risks associated with unacceptable quality of the products.

### **Derivative Instruments and Hedging Activities**

Quantum recognizes all derivatives as either assets or liabilities in the balance sheet and measures those instruments at fair value. Quantum did not have any derivative instruments outstanding during fiscal year 2004 or 2003.

### **Accumulated Other Comprehensive Income**

Accumulated other comprehensive income consists of foreign currency translation and was \$2.8 million and \$1.1 million as of March 31, 2004 and March 31, 2003, respectively.

### **Note 3: Cumulative Effect of an Accounting Change**

SFAS No. 142 *Goodwill and Other Intangible Assets*, which requires companies to discontinue the amortization of goodwill and certain intangible assets with an indefinite useful life, became effective for Quantum on April 1, 2002. Accordingly, goodwill and intangible assets deemed to have an indefinite useful life must be reviewed for impairment upon adoption of SFAS No. 142 and annually thereafter, or more frequently when indicators of impairment exist.

The assessment of impairment conducted in the first quarter of fiscal year 2003, the quarter in which Quantum adopted SFAS No. 142, required Quantum to identify its reporting units and determine the carrying value of each reporting unit by assigning the assets and liabilities, including the existing goodwill and intangible assets, to those reporting units. At the time of adoption, Storage Systems was the only business unit with goodwill. The fair value of the reporting unit underlying Storage Systems was estimated using both a discounted cash flow and market approach methodology. The reporting unit's carrying amount exceeded its fair value, indicating that the reporting units' goodwill was impaired, therefore requiring Quantum to perform the second step of the transitional impairment test. In the second step, Quantum compared the implied fair value of the reporting unit's goodwill, determined by allocating the reporting unit's fair values to all of its assets (recognized and unrecognized) and liabilities in a manner similar to a purchase price allocation in accordance with SFAS No. 141 *Business Combinations*.

Upon adoption of SFAS No. 142 in the first quarter of fiscal year 2003, Quantum recorded a non-cash accounting change adjustment of \$94.3 million, reflecting a reduction to the carrying value of its goodwill, as a cumulative effect of an accounting change in the accompanying Consolidated Statements of Operations.

Note 4 "Goodwill and Intangible Assets" provides additional disclosure on the impact to Quantum's Consolidated Financial Statements as a result of applying SFAS No. 141 and SFAS No. 142.

### **Note 4: Goodwill and Intangible Assets**

As a result of adopting SFAS No. 142 *Goodwill and Other Intangible Assets* on April 1, 2002, Quantum recorded an accounting change adjustment of \$94.3 million in the first quarter of fiscal year 2003 and a goodwill impairment charge of \$58.7 million in the second quarter of fiscal year 2003 related to the Storage Systems group. The impairment charge recorded in the second quarter of fiscal year 2003 was attributable to the Storage Systems group and was primarily caused by the deterioration in the

market values of comparable companies, and to a lesser extent, by a reduction in anticipated future cash flows. The fair value of the Storage Systems group was calculated using a combination of a discounted cash flow analysis involving projected data, and a comparable market approach, which involved a comparison with companies also in the tape automation business.

As required by SFAS No. 142, intangible assets that do not meet the criteria for recognition apart from goodwill must be reclassified. In applying these criteria, Quantum transferred \$2.9 million of assembled workforce from intangible assets to goodwill in the first quarter of fiscal year 2003. Also in accordance with SFAS No. 142, Quantum discontinued the amortization of goodwill effective April 1, 2002 and instead will test it for impairment annually or whenever events or changes in circumstances suggest that the carrying amount may not be recoverable, such as what occurred in the second quarter of fiscal year 2003.

On November 13, 2002, Quantum acquired Benchmark Storage Innovations Inc. (refer to Note 5 “Acquisitions”), resulting in an additional \$28.2 million of intangible assets and \$26.8 million of goodwill upon acquisition, with a further goodwill amount of \$3.2 million resulting from the distribution of Quantum shares due to quarterly earn out objectives being achieved. On February 4, 2003, Quantum acquired SANlight Inc. (refer to Note 5 “Acquisitions”), resulting in an additional \$2.7 million of intangible assets.

The following financial information reflects consolidated results adjusted as though the accounting for goodwill and intangible assets was consistent for all periods presented:

(in thousands, except per-share)

	Year Ended March 31,		
	2004	2003	2002
Reported net income (loss) before cumulative effect of an accounting change	\$ (62,022)	\$ (169,997)	\$ 42,502
Add back goodwill (including assembled workforce) amortization, net of tax	-	-	16,053
Adjusted net income (loss)	<u>\$ (62,022)</u>	<u>\$ (169,997)</u>	<u>\$ 58,555</u>
Adjusted basic net income (loss) per share:			
Reported basic net income (loss) per share before cumulative effect of an accounting change	\$ (0.35)	\$ (1.05)	\$ 0.27
Add back goodwill (including assembled workforce) amortization, net of tax	-	-	0.10
Adjusted basic net income (loss) per share	<u>\$ (0.35)</u>	<u>\$ (1.05)</u>	<u>\$ 0.37</u>
Adjusted diluted net income (loss) per share:			
Reported diluted net income (loss) per share before cumulative effect of an accounting change	\$ (0.35)	\$ (1.05)	\$ 0.27
Add back goodwill (including assembled workforce) amortization, net of tax	-	-	0.10
Adjusted diluted net income (loss) per share	<u>\$ (0.35)</u>	<u>\$ (1.05)</u>	<u>\$ 0.37</u>

The following table provides a summary of the carrying amount of goodwill and includes amounts originally allocated to an intangible asset representing the value of the assembled workforce:

(in thousands)	For the year ended March 31,		
	2004	2003	Change
Goodwill	\$ 214,106	\$ 209,332	\$ 4,774
Less accumulated amortization	(41,230)	(41,230)	-
Less goodwill impairment	(58,689)	(58,689)	-
Accumulated effect of an accounting change (1)	(68,497)	(68,497)	-
Goodwill	<u>\$ 45,690</u>	<u>\$ 40,916</u>	<u>\$ 4,774</u>

(1) Excludes \$25.8 million related to the NAS business, which has been classified as discontinued operations.

The following table summarizes goodwill by acquisition.

(in thousands)	As of March 31,			Segment
	2004	2003	Change	
ATL Products, Inc. (acquired October 1998)	\$ 7,711	\$ 7,711	\$ -	Storage Systems
M4 Data	4,734	3,223	1,511	Storage Systems
Benchmark (allocated to DLT)	23,948	21,736	2,212	DLT
Benchmark (allocated to Storage Systems)	9,297	8,246	1,051	Storage Systems
	<u>\$ 45,690</u>	<u>\$ 40,916</u>	<u>\$ 4,774</u>	

Acquired intangible assets are amortized over their estimated useful lives, which range from 2 to 10 years. Management, in estimating the useful lives of intangible assets, considered the following factors:

- The cash flow projections used to estimate the useful lives of the intangible assets showed a trend of growth that was expected to continue for an extended period of time;
- The tape automation products, in particular, have long development cycles and have experienced long product life cycles; and
- The ability to leverage core technology into new tape automation products, and to therefore extend the lives of these technologies.

The following tables provide a summary of the carrying amount of intangible assets that will continue to be amortized:

(in thousands)	As of March 31, 2004			As of March 31, 2003		
	Gross Amount	Accumulated Amortization	Net Amount	Gross Amount	Accumulated Amortization	Net Amount
Purchased technology	\$ 84,600	\$ (39,871)	\$44,729	\$ 84,600	\$ (27,115)	\$57,485
Trademarks	22,560	(9,879)	12,681	22,560	(6,914)	15,646
Non-compete agreements	2,516	(2,091)	425	2,556	(1,566)	990
Customer lists	14,100	(11,720)	2,380	14,100	(10,308)	3,792
Assembled workforce	4,082	(3,423)	659	4,133	(2,602)	1,531
	<u>\$127,858</u>	<u>\$ (66,984)</u>	<u>\$60,874</u>	<u>\$127,949</u>	<u>\$ (48,505)</u>	<u>\$79,444</u>

Net goodwill and intangible assets at March 31, 2004 and March 31, 2003 represented approximately 15% and 13% of total assets, respectively. The goodwill and intangible asset balances, net of amortization, at March 31, 2004 and March 31, 2003 were \$106.6 million and \$120.4 million, respectively.

The total amortization expense related to goodwill and intangible assets is provided in the table below:

(in thousands)	For the year ended March 31,		
	2004	2003	2002
Goodwill	\$ -	\$ -	\$15,170
Purchase technology	12,756	9,335	7,279
Trademarks	2,965	2,247	1,336
Assembled workforce	821	102	880
Customer lists	1,412	2,292	2,287
Non-compete agreements	525	66	-
	<u>\$ 18,479</u>	<u>\$ 14,042</u>	<u>\$26,952</u>

The total expected future amortization related to intangible assets is provided in the table below:



(in thousands)	Amortization
Fiscal year 2005	\$ 17,336
Fiscal year 2006	16,253
Fiscal year 2007	14,025
Fiscal year 2008	9,699
Fiscal year 2009	3,561
Total as of March 31, 2004	<u>\$ 60,874</u>

## **Note 5: Acquisitions**

### **SANlight Inc**

On February 4, 2003, Quantum completed the acquisition of SANlight, Inc. ("SANlight") pursuant to which SANlight became a wholly owned subsidiary of Quantum. SANlight was a privately held development stage enterprise in storage solution technology in which Quantum previously owned stock. Under the terms of the agreement, Quantum acquired the remaining outstanding shares of SANlight that it did not already own. The purchase price was approximately \$9.2 million, consisting of 2.4 million shares of Quantum common stock and acquisition costs of approximately \$2.1 million.

The acquisition provided Quantum with software technology and expertise it can leverage in its enhanced backup solutions, such as the Quantum DX30 and DX 100. The acquisition will also help augment Quantum's enhanced data backup offerings by enabling solutions that incorporate its own technologies and those of its software partners.

SANlight's results of operations are included in Quantum's financial statements from the date of acquisition, and the assets and liabilities were recorded based on their fair values as of the date of acquisition. Quantum assigned SANlight's assets and liabilities into the Storage Systems business. There were no employee stock options or warrants assumed as a result of the acquisition. Pro forma results of operations have not been presented because the effect of the acquisition was not material to Quantum's financial position or results of operations.

The purchase price at the time of the acquisition was allocated based on the estimated fair value of net tangible and intangible assets acquired, and liabilities assumed, to the following assets and liabilities:

(in thousands)	Purchase Price Allocation
Net liabilities assumed	\$ (247)
Deferred tax liabilities	(1,022)
Purchased in-process research and development	7,802
Intangible assets:	
Assembled workforce	1,632
Non-compete covenants	1,056
	<u>\$ 9,221</u>

The intangible assets are being amortized on a straight-line basis over estimated useful lives of two years.

The purchase price was allocated based on the estimated fair value of net tangible and intangible assets acquired and assumed liabilities as well as in-process research and development costs. As of the acquisition date, technological feasibility of the in-process technology had not been established and the technology had no alternative future use. Therefore, Quantum expensed approximately \$7.8 million of the purchase price as in-process research and development in the fourth quarter of fiscal year 2003.

The amount of the purchase price allocated to purchased in-process research and development was determined by estimating the stage of development of each in-process research and development project at the date of acquisition, estimating cash flows resulting from the expected revenue generated from such projects, and discounting the net cash flows back to their present value using a 45% discount rate, which represented a premium to Quantum's cost of capital. Expected revenue from the purchase of in-process projects was projected to grow from zero in fiscal year 2003 to approximately \$29 million in fiscal year 2005, and then, as other new products and technologies are expected to enter the market, increase to \$233 million in fiscal year 2008. These projections were based on management's estimates of market size and growth, expected trends in technology and the expected timing of new product introductions.

### Benchmark Storage Innovations Inc.

On November 13, 2002, Quantum completed the acquisition of Benchmark Storage Innovations, Inc. ("Benchmark"), a privately held company. The acquisition was accounted for as a purchase business combination at a total cost of approximately \$67.5 million. The acquisition enabled Quantum to expand its tape business by adding Benchmark's complementary products to serve the data protection needs of both new and existing customers in the value segment of the market, which was not part of Quantum's existing offerings. Goodwill from the acquisition of \$26.8 million resulted from Quantum's belief that it was economically beneficial to acquire the technology rather than develop it internally.

Under the terms of the agreement, Quantum, which held a minority interest in Benchmark, acquired all the outstanding Benchmark common stock, preferred stock, options and warrants in consideration for approximately \$67.5 million. The consideration consisted of \$11.0 million in cash and 13.1 million shares of common stock given to the former shareholders of Benchmark. The agreement requires Quantum to issue up to an additional 1.9 million shares of common stock under the purchase agreement if certain performance milestones are achieved in the first year after the completion of the acquisition. During fiscal years 2004 and 2003, 1.0 million shares and 0.9 million shares were issued, respectively, as a result of the achievement of quarterly milestones. In fiscal years 2004 and 2003, goodwill has been adjusted for earn-out. There were no employee stock options or warrants assumed as a result of the acquisition.

Benchmark's results of operations are included in Quantum's Consolidated Financial Statements from the date of acquisition, and the assets and liabilities were recorded based on their fair values as of the date of acquisition. Quantum assigned Benchmark's tape drive and media products into the DLTape business and Benchmark's autoloader product into the Storage Systems business.

The purchase price at the time of the acquisition was allocated based on the estimated fair value of net tangible and intangible assets acquired, and liabilities assumed, to the following assets and liabilities:

(in thousands)	Purchase Price Allocation
Deferred tax assets	\$ 4,599
Other current assets	33,698
Fixed assets	3,505
Current liabilities	(24,159)
Deferred tax liabilities	(5,082)
Intangible assets:	
Completed technology	25,600
Trademarks	2,560
Goodwill	26,762
	<u>\$ 67,483</u>

The intangible assets are being amortized on a straight-line basis over estimated useful lives ranging from four to five years.

### M4 Data (Holdings) Ltd

On April 12, 2001, Quantum completed the acquisition of M4 Data (Holdings) Ltd. ("M4 Data"), a privately held data storage company based in the United Kingdom. M4 Data provided high performance and scalable tape automation products for the data storage market. The acquisition was accounted for as a purchase business combination at a total cost of approximately \$58.0 million.

Under the terms of the agreement, Quantum acquired all the outstanding stock of M4 Data in consideration for approximately \$58.0 million, which consisted of \$15.2 million in cash proceeds, the assumption by Quantum of \$41.4 million in debentures and \$1.4 million in acquisition-related costs. In the first quarter of fiscal year 2003, the holders called and received payment from Quantum for \$38.7 million of the debentures, and an additional \$2.7 million of the debentures in the third quarter of fiscal year 2003. The purchase agreement also includes additional contingent consideration to be paid annually by Quantum from 2002 through 2005 based on future revenues, which may result in additional debentures being issued. Additional debentures of \$0.9 million and \$0.4 million were issued in fiscal years 2004 and 2003, respectively, based on fiscal year 2003 and 2002 revenues, respectively. In fiscal years 2004 and 2003, goodwill has been adjusted for earn-out.

M4 Data's results of operations are included in the financial statements from the date of acquisition, and the assets and liabilities acquired were recorded based on their fair values as of the date of acquisition.

The purchase price has been allocated based on the estimated fair value of net tangible and intangible assets acquired, assumed liabilities, and in-process research and development. As of the acquisition date, the in-process technology was deemed to have no

alternative future use. Therefore, Quantum expensed \$13.2 million of the purchase price as in-process research and development in fiscal year 2002. The intangible assets are being amortized on a straight-line basis over periods ranging from three to six years.

The amount of the purchase price allocated to in-process research and development was determined based on the estimated stage of development of each in-process research and development project at the date of acquisition and estimated cash flows resulting from the expected revenue generated from such projects, with the net cash flows discounted to present value at a discount rate of 34%, which represented a premium to Quantum's cost of capital.

Revenue from the M4 Data acquisition for the purchased in-process projects was expected to grow from approximately \$60 million in 2002 to more than \$260 million in 2008. The M4 Data in-process research and development projects were completed in the second quarter of fiscal year 2003.

In March 2004, M4 manufacturing facility in the United Kingdom was closed and the manufacturing activity was outsourced to Jabil in Mexico.

#### **Note 6: Special Charges**

In fiscal years 2004, 2003, and 2002, we implemented plans to reduce costs in an effort to return to profitability. The restructuring charges that resulted from these cost reduction efforts relate to the following:

- Plans to outsource certain manufacturing
- Plans to consolidate most of the operations supporting our two business segments
- Other general expense reduction

These plans to reduce costs impacted both of our operating segments, DLT and Storage Systems, as well as corporate functions.

The following tables show the type of activity for the fiscal years 2004, 2003, and 2002.

(in thousands)

	For the year ended March 31,		
<u>By expense type</u>	2004	2003	2002
Severance and Benefits (1)	\$ 8,967	\$ 21,642	\$ 36,198
Facilities	4,979	1,628	23,829
Demo Equipment	-	-	6,764
Fixed Assets	1,266	930	3,905
Other (1)	-	-	2,160
Total	<u>\$ 15,212</u>	<u>\$ 24,200</u>	<u>\$ 72,856</u>
<u>By cost reduction actions</u>			
Outsource certain manufacturing and service functions	\$ 6,800	\$ 11,000	\$ 28,000
Consolidate the operations supporting our two business segments	5,300	13,200	-
Strategic realignment and charges related to the disposition of the HDD Group	-	-	27,677
Other general expense reduction	3,112	-	17,179
Total	<u>\$ 15,212</u>	<u>\$ 24,200</u>	<u>\$ 72,856</u>

(1) For fiscal year 2002, excludes \$4.5 million related to the NAS business, which has been classified as discontinued operations.

#### **Fiscal year 2004**

##### *Outsource certain manufacturing and service*

- A charge of \$2.1 million was recorded, which related to severance for 92 employees who were terminated as a result of outsourcing certain manufacturing to Jabil in Mexico from Quantum in the United Kingdom. An additional charge of \$1.0 million was recorded to write-off fixed asset related to this plan.
- A charge of \$0.9 million was recorded as a part of plan to outsource certain repair services to Jabil in Mexico from Quantum in Dundalk, Ireland. The charge primarily included severance benefits for 143 employees in Dundalk, Ireland.
- A charge of \$0.8 million was recorded for severance benefits for 17 employees located at our facility in Colorado Springs, Colorado. These costs resulted from plans to reduce procurement activities following the outsourcing of certain manufacturing to Jabil and reductions following the integration of the Benchmark acquisition.

- Quantum incurred a non-cash charge of \$2.0 million to write down its former manufacturing facility in Malaysia to the appraised value, following Quantum vacating this facility as part of the outsourcing of certain manufacturing to Jabil.

*Consolidation of the operations supporting the two business segments*

- In November 2003, Quantum recorded charges of \$5.3 million as a part of a plan to consolidate most of the operations supporting Quantum's DLT and Storage Systems business into one organization with consolidated operational functions and a combined sales force. The charge included severance benefits for 113 employees located in Colorado Springs, Colorado; Irvine, California; San Jose, California; and in the United Kingdom; and vacant facility charges.

*Other general expense reductions*

- A net charge of \$3.1 million was recorded primarily for vacant facilities in Boulder, Colorado and following the renegotiation and extension of an operating lease associated with vacant space (refer to Note 16 "Commitments and Contingencies.")

Fiscal year 2003

*Outsource certain manufacturing and service*

- A charge of \$7.2 million was recorded as part of a plan to outsource sub-assembly manufacturing of Quantum's P-Series enterprise tape libraries, consolidate the number of research and development sites for disk-based backup and tape automation, and centralizing sales and marketing support functions. The charge included severance benefits for 140 employees, fixed asset write-offs and vacant facility charges.
- A charge of \$3.8 million was recorded, which related to severance for the 870 employees who were terminated as a result of outsourcing Quantum's tape drive manufacturing and certain tape automation manufacturing to Jabil.

*Other general expense reductions*

- A charge of \$3.7 million was recorded primarily for separation costs related to Quantum's former Chief Executive Officer, who remains on Quantum's Board of Directors.
- A charge of \$3.3 million was recorded for headcount reductions as part of the integration of Benchmark under a plan to preclude any net increase in headcount following the acquisition, which resulted in a reduction to Quantum's existing headcount. The charge related to severance benefits for 75 employees.
- A charge of \$3.4 million was recorded in order to reduce future operating costs through a headcount reduction. The charge related to severance benefits for 74 employees.
- A special charge of \$2.5 million was recorded, which related to severance costs for 41 employees. The severance costs were mostly related to the elimination of engineering in the UK and reduced sales staff in Japan.
- A net charge of \$0.2 million was recorded for vacant facilities' costs.

Fiscal year 2002

*Outsource certain manufacturing and service*

- In July 2001, Quantum announced an additional restructuring of the DLTtape business. This restructuring resulted in the closure of the remaining tape drive production facility in Colorado Springs, Colorado. A charge of \$16.6 million was recorded related to the discontinuation of tape drive production facility in Colorado Springs, Colorado, and consisted of the following:
  1. Severance and benefits costs of \$8.4 million representing severance for 350 employees;
  2. Additional vacant facilities costs of \$5.0 million in Colorado Springs, Colorado; and
  3. Write-off of fixed assets and leasehold improvements of \$3.2 million.
- An additional vacant facility charge of \$11.2 million in fiscal year 2002 was recorded related to the synthetic lease for Quantum's Colorado Springs facility, which had been the center of DLTtape business's operations that were subsequently transferred to Penang, Malaysia. We periodically review the valuation of the leased facilities, and in the

fourth quarter of fiscal year 2002, a third party valuation appraisal resulted in Quantum recording this charge of \$11.2 million, which reflected the difference between the current estimated market value of vacant facilities in Colorado Springs and the residual value guarantee to the lessor. Please refer to Note 16 “Commitments and Contingencies” for further discussion of this synthetic lease.

#### *Other general expense reductions*

- A special charge of \$27.7 million, consisting of stock compensation and severance charges, was recorded related to downsizing with the disposition of the HDD group.
- A charge of approximately \$13.7 million was recorded related to staff reductions and other costs associated with cost saving actions in Storage Systems activities. These costs were comprised of severance costs of \$2.4 million; vacant facilities costs of \$3.9 million for facilities in Irvine, California; sales and marketing demonstration equipment disposals of \$6.3 million; and contract cancellation fees of \$1.1 million.
- A charge of \$2.6 million was recorded related to the closure of Quantum’s Geneva, Switzerland sales office, and associated European distributor operations. These costs reflected vacant facilities costs, severance costs and the write-off of fixed assets.
- A special charge of \$2.6 million was recorded for employee reductions in Quantum’s former corporate headquarters in Milpitas, California. These costs reflected severance costs for 18 employees, facilities and fixed asset costs, and legal fees.
- A charge of \$1 million was reversed on our income statement in fiscal year 2002, as a result of lower than expected severance costs related to Quantum’s decision to consolidate DLTape engineering activities in fiscal year 2001.

#### Special charge activity and future payouts

The following two tables show the activity and the estimated timing of future payouts for cost reduction plans:

(in thousands)	Severance and Benefits	Facilities	Demo equipment	Fixed assets	Other	Total
Balance at March 31, 2001	\$ 6,852	\$ 533	\$ -	\$ -	\$ 696	\$ 8,081
Provision	37,298	23,829	6,764	3,905	2,160	\$ 73,956
Cash payments	(21,929)	(4,712)	-	-	(696)	\$ (27,337)
Non-cash charges	(16,784)	(1,015)	(6,764)	(3,905)	(905)	\$ (29,373)
Special charge reversal	(1,100)	-	-	-	-	\$ (1,100)
Balance at March 31, 2002	4,337	18,635	-	-	1,255	\$ 24,227
Provision	21,727	2,752	-	930	-	\$ 25,409
Cash payments	(25,000)	(15,638)	-	-	(495)	\$ (41,133)
Non-cash charges	(109)	-	-	(930)	-	\$ (1,039)
Special charge reversal	(85)	(1,124)	-	-	-	\$ (1,209)
Balance March 31, 2003	870	4,625	-	-	760	\$ 6,255
Provision	9,306	5,164	-	1,266	-	\$ 15,736
Cash payments	(6,431)	(2,909)	-	-	(760)	\$ (10,100)
Non-cash charges	(789)	(2,048)	-	(1,266)	-	\$ (4,103)
Special charge reversal	(339)	(185)	-	-	-	\$ (524)
Balance March 31, 2004	<u>\$ 2,617</u>	<u>\$ 4,647</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 7,264</u>
Estimated timing of future payouts:						
Fiscal Year 2005	\$ 2,330	\$ 2,938	\$ -	\$ -	\$ -	\$ 5,268
Fiscal Year 2006 to 2008	287	1,709	-	-	-	\$ 1,996
	<u>\$ 2,617</u>	<u>\$ 4,647</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 7,264</u>

The \$7.3 million remaining special charge accrual at March 31, 2004 is comprised of obligations for severance and vacant facilities. The severance charges will be paid during fiscal year 2005 and the facilities charges relating to vacant facilities in Irvine, California; Colorado Spring, Colorado; and Boulder, Colorado will be paid over the lease term, which is through the third quarter of fiscal year 2008.

The above table excludes \$1.2 million remaining special charge accrual related to NAS restructuring at March 31, 2004.

## Note 7: Net Income (Loss) Per Share

The following tables set forth the computation of basic and diluted net income (loss) per share:

(in thousands, except per-share data)

	For the year ended						
	March 31, 2004			March 31, 2003			
	Cont. Ops	Disc Ops.	Total Quantum	Cont. Ops	Disc Ops.	Cumulative effect of an accounting change	Total Quantum
Numerator:							
Numerator for basic and diluted net income (loss) per share	\$ (63,715)	\$ 1,693	\$ (62,022)	\$ (132,088)	\$ (37,909)	\$ (94,298)	\$ (264,295)
Denominator:							
Denominator for basic net income (loss) per share—weighted average shares	176,037	176,037	176,037	162,208	162,208	162,208	162,208
Effect of dilutive securities:							
Outstanding options	-	-	-	-	-	-	-
Denominator for diluted net income (loss) per share—adjusted weighted average shares	176,037	176,037	176,037	162,208	162,208	162,208	162,208
Basic net income (loss) per share	\$ (0.36)	\$ 0.01	\$ (0.35)	\$ (0.81)	\$ (0.23)	\$ (0.58)	\$ (1.63)
Diluted net income (loss) per share	\$ (0.36)	\$ 0.01	\$ (0.35)	\$ (0.81)	\$ (0.23)	\$ (0.58)	\$ (1.63)

	For the year ended		
	March 31, 2002		
	Cont. Ops	Disc Ops.	Total Quantum
Numerator:			
Numerator for basic and diluted net income (loss) per share	\$ (49,000)	\$ 91,502	\$ 42,502
Denominator:			
Denominator for basic net income (loss) per share—weighted average shares	155,169	155,169	155,169
Effect of dilutive securities:			
Outstanding options	-	-	-
Denominator for diluted net income (loss) per share—adjusted weighted average shares	155,169	155,169	155,169
Basic net income (loss) per share	\$ (0.32)	\$ 0.59	\$ 0.27
Diluted net income (loss) per share	\$ (0.32)	\$ 0.59	\$ 0.27

The following subordinated notes were excluded from the computation of diluted net income (loss) per share for all periods because the effect would have been antidilutive:

- 4.375 % convertible subordinated notes issued in July 2003 are convertible at the option of the holders at any time prior to maturity, unless previously converted, into an aggregate of 36.8 million shares of Quantum common stock at a conversion price of \$4.35 per share.
- 7% convertible subordinated notes issued in July 1997 were convertible into 6,206,152 shares of Quantum common stock (or 21.587 shares per \$1,000 note), and into 4,716,676 shares of Maxtor common stock (or 16.405 shares per \$1,000 note). Quantum used the net proceeds from the sale of 4.375% convertible notes to redeem its 7% convertible subordinated notes.

Options to purchase 33.8 million, 33.2 million, and 27.6 million shares of Quantum common stock were outstanding for the fiscal years ended March 31, 2004, 2003, and 2002 but were not included in the computation of diluted net income per share due to reporting a loss from continuing operations.

## **Note 8: Financial Instruments**

### **Available-for-Sale Securities**

The following is a summary of Quantum's available-for-sale securities, all of which are classified as cash equivalents or short-term investments:

(in thousands)	As of March 31,	
	2004	2003
Certificates of deposit	\$ 179,681	\$ 142,000
Money market funds	25,681	61,972
Corporate commercial paper and bank notes	50,800	104,146
U.S. Treasury securities	-	3,050
Other	9,245	7,621
	<u>\$ 265,407</u>	<u>\$ 318,789</u>
Included in cash and cash equivalents	\$ 214,607	\$ 221,734
Included in short-term investments	50,800	97,055
	<u>\$ 265,407</u>	<u>\$ 318,789</u>

The difference between the amortized cost of available-for-sale securities and fair value was immaterial at March 31, 2004 and March 31, 2003. There were no unrealized gains or losses on available-for-sale securities in fiscal years 2004 and 2003. At March 31, 2004, the average available-for-sale portfolio duration was less than 45 days and no securities had maturities longer than one year.

### **Derivative Financial Instruments**

Quantum did not utilize foreign currency forward exchange contracts in fiscal years 2004 and 2003 and there were no foreign currency forward contracts outstanding at March 31, 2004 or March 31, 2003.

### **Carrying Amount and Fair Values of Financial Instruments**

The estimated fair values of Quantum's borrowings are summarized as follows:

(in thousands)	As of March 31,			
	2004		2003	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Short-term debt	\$ 537	\$ 537	\$ -	\$ -
Convertible subordinated debt	160,000	192,441	287,500	274,634
	<u>\$ 160,537</u>	<u>\$ 192,978</u>	<u>\$ 287,500</u>	<u>\$ 274,634</u>

The carrying value of the short-term debt approximates fair value due to the short-term nature of debt. The fair values for the convertible subordinated debt were based on the quoted market price at the balance sheet dates.

## **Note 9: Inventories, Service Inventories and Property, Plant and Equipment**

Inventories consisted of:

(in thousands)

	As of March 31,	
	2004	2003
Materials and purchased parts	\$ 18,264	\$ 32,415
Work in process	1,597	4,264
Finished goods	28,482	25,056
	<u>\$ 48,343</u>	<u>\$ 61,735</u>

Service inventories consisted of:

(in thousands)

	As of March 31,	
	2004	2003
Component parts	\$ 16,037	\$ 13,688
Finished units	35,221	35,416
	<u>\$ 51,258</u>	<u>\$ 49,104</u>

Property, plant and equipment consisted of:

(in thousands)

	As of March 31,	
	2004	2003
Machinery and equipment	\$ 146,542	\$ 147,614
Furniture and fixtures	6,659	5,724
Buildings and leasehold improvements	26,549	40,973
Land	257	1,556
	<u>\$ 180,007</u>	<u>\$ 195,867</u>
Less accumulated depreciation and amortization	(139,630)	(136,775)
	<u>\$ 40,377</u>	<u>\$ 59,092</u>

Certain items previously reported in specific financial statement captions have been reclassified to conform to the current period's classification. Such reclassifications have not impacted previously reported net loss amounts. Specifically, automation units used for permanent demonstration and testing purposes have been reclassified from "Inventories" to "Property and Equipment, net" in the Consolidated Balance Sheets and the Consolidated Statements of Cash Flows have been adjusted to reflect this reclassification. Automation units that were permanently used for demonstration and testing purposes with a net carrying amount of \$4.6 million and which were included in inventories at March 31, 2003 in Quantum's fiscal year 2003 Form 10-K have been reclassified to property and equipment in the Consolidated Balance Sheets.

#### **Note 10: Accrued Warranty and Indemnifications**

##### **Accrued Warranty**

The following table details the change in the accrued warranty balance:

(in thousands)

	Fiscal Year	
	2004	2003
Balance at April 1	\$ 49,582	\$ 42,176
Additional warranties issued	20,894	32,104
Adjustments for warranties issued in prior fiscal years	6,385	9,395
Settlements made in cash	(38,846)	(41,952)
Benchmark balance acquired	-	7,859
Balance at March 31	<u>\$ 38,015</u>	<u>\$ 49,582</u>

Quantum warrants its products against defects for periods ranging from 12 to 39 months. A provision for estimated future costs and estimated returns for credit relating to warranty is recorded when products are shipped and revenue recognized. Quantum's estimate of future costs to satisfy warranty obligations is primarily based on estimates of future failure rates and its estimates of future costs of repair including materials consumed in the repair, and labor and overhead amounts necessary to perform the repair.

The estimates of future product failure rates are based on both historical product failure data and anticipated future failure rates. If future actual failure rates differ from its estimates, Quantum records the impact in subsequent periods. Similarly, the estimates of



future costs of repair are based on both historical data and anticipated future costs. If future actual costs to repair were to differ significantly from its estimates, Quantum would record the impact of these unforeseen cost differences in subsequent periods.

### Indemnifications

Quantum has off-balance sheet transactions consisting of certain financial guarantees, both express and implied, related to product liability and potential infringement of intellectual property. Other than certain product liabilities recorded at March 31, 2004, Quantum did not record a liability associated with these guarantees, as Quantum 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 Quantum maintains.

### **Note 11: Credit Agreements, Short-Term Debt and Convertible Subordinated Debt**

Quantum's debt includes the following:

(in thousands)	As of March 31,	
	2004	2003
Short-term debt (M4 Data (Holdings) Ltd. debentures)	\$ 537	\$ -
Convertible subordinated debt	160,000	287,500
	<u>\$ 160,537</u>	<u>\$ 287,500</u>
For the year ended March 31,		
	2004	2003
Weighted average interest rate	5.86%	7.00%

### Convertible subordinated debt

On July 30, 2003, Quantum issued \$160.0 million in aggregate principal amount of 4.375% convertible subordinated notes due 2010, in a private placement transaction. The notes are unsecured obligations subordinated in right of payment to all of Quantum's existing and future senior indebtedness. The notes mature on August 1, 2010, and are convertible at the option of the holder at any time prior to maturity, unless previously converted, into an aggregate of 36.8 million shares of Quantum common stock at a conversion price of \$4.35 per share. Quantum cannot redeem the notes prior to August 5, 2008. Quantum received net proceeds from the notes of \$155.1 million, after deducting commissions and expenses. In August 2003, Quantum used the net proceeds from the sale of the notes plus cash to redeem its 7% convertible subordinated notes due in 2004.

Quantum had issued the \$287.5 million of 7% convertible subordinated notes in July 1997. The notes had a maturity date of August 1, 2004, and were convertible at the option of the holder at any time prior to maturity, unless previously redeemed, into shares of Quantum common stock and Maxtor common stock. The notes were classified as long-term and were convertible into 6.2 million shares of Quantum common stock (or 21.587 shares per \$1,000 note), and 4.7 million shares of Maxtor common stock (or 16.405 shares per \$1,000 note). Quantum recorded a receivable from Maxtor of \$95.8 million for the principal portion of the debt previously attributed to the HDD group and for which Maxtor agreed to reimburse Quantum for both principal and associated interest payments. The redemption which occurred on August 21, 2003, included all these 7% convertible subordinated notes and was at 101% of the aggregate principal amount. The aggregate redemption price of the notes was \$290.4 million, which included a premium paid of \$2.9 million. On August 14, 2003, Quantum received \$95.8 million from Maxtor, which represented the full amount for Maxtor's portion of the debt plus the premium on their portion of the notes due 2004.

### Short-term debt (M4 Data debentures)

Quantum acquired all the outstanding stock of M4 Data on April 12, 2001 for approximately \$58.0 million in consideration, including \$41.4 million in debentures. The debenture holders called and received payment from Quantum for this \$41.4 million in fiscal year 2003. The purchase agreement also included additional contingent consideration to be paid annually from 2002 through 2005 based on future revenues, which may result in additional debentures being issued and this occurred in the first quarter of fiscal year 2004. The outstanding debentures of \$0.5 million that were issued in the first quarter of fiscal year 2004 based on revenues in the preceding fiscal year are immediately callable by the holders.

The debentures are unsecured obligations subordinated in right of payment to all of Quantum's existing and future senior indebtedness. The debentures do not contain financial covenants, reporting covenants or cross default provisions.

## Credit line

In December 2002, Quantum entered into a secured senior credit facility with a group of five banks, providing Quantum with a \$100.0 million revolving credit line and a \$50.0 million synthetic lease that contains the same financial covenants as the revolving credit line. In March 2004, Quantum amended the secured senior credit facility to extend the maturity to March 2006 and adjusted several covenant requirements. As of March 31, 2004, \$90.3 million of this revolving credit line is committed to standby letters of credit, of which \$50.0 million secures Quantum's obligation to the lessor under its synthetic lease (see Note 16 "Commitments and Contingencies"). Borrowings under the revolving credit line bear interest at either the London interbank offering rate (LIBOR) or a base rate, plus a margin determined by a leverage ratio with option periods of one to nine months. The credit facility is secured by a blanket lien on all of the assets of Quantum and contains certain financial and reporting covenants, which Quantum is required to satisfy as a condition of the credit line. In prior quarters Quantum violated certain financial covenants under this credit agreement and received waivers or amendments for such violations. There is also a cross default provision between this facility and the synthetic lease facility such that a default on one facility constitutes a default on the other facility. As of March 31, 2004, Quantum was in compliance with all of the credit line covenants.

## **Note 12: Common Stock and Stockholder Rights Agreement**

The number of authorized shares of common stock is 1,000,000,000. The number of authorized shares of preferred stock is 20,000,000.

Quantum has a stockholder rights agreement (the "Rights Plan") that provides existing stockholders with the right to purchase preferred stock in the event of certain changes in Quantum's ownership. Specifically, existing stockholders will have the right to purchase one one-thousandth of a share of Series B Junior Participating Preferred Stock for each share of common stock held, or, under certain circumstances, shares of common stock with a market value twice the exercise price of such right. The purchase price in either case is determined by the Board of Directors, subject to adjustment.

Subject to certain exceptions, including the amendment discussed below with respect to Private Capital Management, these rights may be exercised the tenth day after any person or group becomes the beneficial owner (or makes an offer that would result in such beneficial ownership) of 20% or more of the outstanding common stock. If such change in beneficial ownership is combined with a merger of Quantum or a sale of more than 50% of the assets of Quantum, then the existing stockholders have the right to purchase, for the exercise price, a number of shares of common stock in the surviving entity having a market value of twice the exercise price of such right. The Rights Plan may serve as a deterrent to takeover tactics that are not in the best interests of stockholders. There are 1,000,000 preferred shares reserved for issuance under the Rights Plan.

On October 28, 2002, Quantum amended its Rights Agreement to allow Private Capital Management to acquire up to 25% of the outstanding common stock of Quantum without triggering the issuance of the preferred shares in exchange for its entering into a Stockholder Agreement with Quantum that places certain restrictions on Private Capital Management with respect to its ownership and control of its shares of Quantum's common stock. The effect of this amendment to the Rights Agreement on holders of Quantum's common stock is that it is less likely that the preferred shares under the Rights Agreement will be issued to the holders of Quantum's common stock.

During fiscal year 2000, the Board of Directors authorized Quantum to repurchase up to \$700 million of its common stock in open market or private transactions. At March 31, 2004, there was approximately \$87.9 million remaining on Quantum's authorization to repurchase Quantum common stock, although Quantum's ability to repurchase is restricted under its credit facility.

## **Note 13: Stock Incentive Plans**

On March 30, 2001, Quantum's stockholders approved the disposition of the HDD group to Maxtor Corporation. At that time, Quantum employees held options to purchase the common stock of both DSS and HDD. On April 2, 2001, each authorized outstanding share of HDD common stock was exchanged for 1.52 shares of Maxtor common stock. The treatment of HDD employee equity holdings that were outstanding on March 30, 2001, was dependent on the employees' employment scenario subsequent to the disposition of the HDD group to Maxtor and was as follows:

- Employees remaining with Quantum: HDD stock options and HDD restricted stock were converted into DSS stock options and restricted stock, respectively.
- Employees terminated on April 2, 2001, or who remained employed on a transitional arrangement: Unvested HDD stock options and HDD restricted stock were converted into shares of DSS restricted stock. Vested HDD stock options were converted into vested Maxtor options.

- Employees transferred to Maxtor: HDD stock options and HDD restricted stock were converted into Maxtor stock options and restricted stock, respectively.

(i) Stock Compensation Expenses

The following table details stock compensation charges and the classifications within the consolidated statements of operations:

(in thousands)

	For the year ended March 31,		
	2004	2003	2002
Stock compensation related to the disposition of the HDD group:			
Cost of revenue or Operating expenses	\$ -	\$ 306	\$ 15,288
Special charges	-	-	17,108
	-	306	32,396
Stock compensation not related to the disposition of the HDD group:			
Cost of revenue or Operating expenses	507	1,238	2,995
	\$ 507	\$ 1,544	\$ 35,391

The decrease in stock compensation expense in fiscal year 2004 as compared to fiscal year 2003 mainly reflected the reduced number of restricted stock grants that were outstanding, while the decrease in stock compensation from fiscal year 2003 as compared to fiscal year 2002 was mainly due to HDD disposition-related stock compensation expense of \$32.4 million recorded in fiscal year 2002 for the conversion and/or acceleration of stock equity awards for employees remaining with Quantum after the disposition of HDD. The classification of the \$32.4 million of stock compensation expense between “Cost of revenue or Operating expenses” and “Special charges” was dependent on two factors: the unusual and non-recurring nature of the event (i.e., the disposition of the HDD business) that gave rise to stock awards and stock award modifications; and whether the vesting had already occurred or was accelerated to full vesting at the time of the award or modification. If vesting had already occurred or was accelerated to full vesting then there was no future benefit to Quantum and the related stock compensation expense for the vested portion of the award was treated as “Special charges”. When the unvested portion of an award was to be earned and vest over a future service period providing future value to Quantum, the related stock charge was recognized ratably as compensation expense over the vesting period in the appropriate category of “Cost of revenue or Operating expense”.

Stock compensation expense recorded in fiscal year 2003 that related to the disposition of HDD reflects the vesting of DSS options and DSS restricted stock grants, that were converted from HDD options and HDD restricted stock grants, respectively, on April 2, 2001, the date of disposition of HDD to Maxtor.

Stock compensation expense not related to the disposition of HDD, which decreased each year from fiscal year 2002 to fiscal year 2004 consists mainly of the vesting of DSS restricted stock grants. These decreases reflect the lower number and value of restricted stock grants that are outstanding.

(ii) Stock Incentive Plans

Long-Term Incentive Plan

Quantum has a Long-Term Incentive Plan (the “Plan”) that provides for the issuance of stock options, stock appreciation rights, stock purchase rights, and long-term performance awards (collectively referred to as “options”) to employees, consultants, officers and affiliates of Quantum. The Plan has reserved for future issuance 37.7 million shares of stock and allows for an annual increase in the number of shares available for issuance, subject to a limitation. Available for grant as of March 31, 2004, were 11.7 million shares of stock. Options under the Plan generally expire no later than ten years from the grant date and generally vest over four years. Restricted stock granted under the Plan generally vests over two to three years.

In fiscal years 2004, 2003 and 2002, Quantum granted 45 thousand, 11 thousand and 4.8 million shares, respectively, of Quantum Corporation restricted stock under the Plan at an exercise price of \$0.01 per share.

Supplemental Stock Plan

Quantum has a Supplemental Stock Plan (the “SSOP”), which is not approved by its stockholders, that provides for the issuance of stock options and stock purchase rights (collectively referred to as “options”) to employees and consultants of Quantum. The

SSOP has reserved for future issuance 8.0 million shares of stock. Options under the SSOP generally vest over two to four years and expire ten years after the grant date. Restricted stock granted under the SSOP generally vests over two to three years.

The SSOP was terminated effective April 1, 2003, from which time no new stock options or stock purchase rights will be granted under this Plan. Outstanding stock options or stock purchase rights granted under the SSOP prior to April 1, 2003, shall remain outstanding and continue to be governed by the terms and conditions of the SSOP, which will remain in effect with respect to these outstanding stock options or stock purchase rights.

In fiscal years 2003 and 2002, Quantum granted no shares and 0.1 million shares, respectively, of Quantum Corporation restricted stock under the Plan at an exercise price of \$0.01 per share.

### Stock Option Plans

Quantum has other stock option plans (the "Plans") under which 4.9 million shares of common stock were reserved for future issuance at March 31, 2004 to employees, officers and directors of Quantum. Options under the Plans are granted at prices determined by the Board of Directors, but at not less than the fair market value. Options currently expire no later than ten years from the grant date and generally vest ratably over one to four years. At March 31, 2004, options with respect to 2.8 million shares of stock were available for grant.

In fiscal year 2004, Quantum granted 0.1 million shares of Quantum Corporation restricted stock under the Plans at an exercise price of \$0.01 per share. No shares of restricted stock were granted under the Plans in fiscal years 2003 and 2002.

A summary of activity relating to Quantum's stock option plans follows:

	For the year ended March 31,					
	2004		2003		2002	
	Options (000's)	Weighted-Avg. Exercise Price	Options (000's)	Weighted-Avg. Exercise Price	Options (000's)	Weighted-Avg. Exercise Price
Outstanding at beginning of period	33,174	\$ 7.46	27,590	\$ 10.51	32,669	\$ 11.91
Granted	9,000	\$ 3.22	17,767	\$ 4.32	20,574	\$ 6.67
Canceled	(7,235)	\$ 7.95	(11,467)	\$ 10.20	(14,134)	\$ 11.80
Exercised	(1,084)	\$ 2.41	(716)	\$ 2.20	(11,519)	\$ 6.04
Outstanding at end of period	<u>33,855</u>	\$ 6.39	<u>33,174</u>	\$ 7.46	<u>27,590</u>	\$ 10.51
Exercisable at end of period	<u>19,302</u>	\$ 8.08	<u>16,522</u>	\$ 9.55	<u>16,482</u>	\$ 10.58

The exercise prices for stock options outstanding at March 31, 2004 range from \$0.96 to \$24.11.

The following tables summarize information about options outstanding and exercisable at March 31, 2004:

Range of Exercise Prices	Outstanding at March 31, 2004 (000's)	Weighted Average Exercise Price	Weighted Average Remaining contractual Life	Exercisable at March 31, 2004 (000's)	Weighted Average Exercise Price
\$ 0.96 - \$ 2.95	8,955	\$ 2.57	6.19	3,198	\$ 2.51
\$ 2.96 - \$ 5.44	7,194	\$ 3.46	8.82	1,645	\$ 3.26
\$ 5.50 - \$ 8.69	7,726	\$ 7.11	6.53	5,586	\$ 7.22
\$ 8.71 - \$ 12.02	7,057	\$ 9.92	5.94	6,046	\$ 9.87
\$ 12.05 - \$ 24.11	2,923	\$ 14.93	4.93	2,827	\$ 15.00
	<u>33,855</u>	\$ 6.40	6.67	<u>19,302</u>	\$ 8.08

Expiration dates ranged from April 2, 2004 to March 30, 2014 for options outstanding at March 31, 2004. Employee stock options issued by Quantum generally have contractual lives of 10 years. However, in accordance with Swiss laws, employee stock options issued to Quantum's Swiss employees have contractual lives of 11 years. Prices for options exercised during the three-year period ended March 31, 2004, range from \$0.01 to \$11.90.

Proceeds received by Quantum from exercises are credited to common stock and capital in excess of par value.

### Stock Purchase Plan

Quantum has an employee stock purchase plan (the “Purchase Plan”) that allows for the purchase of stock at 85% of fair market value at the date of grant or the exercise date, whichever value is less. The Purchase Plan is qualified under Section 423 of the Internal Revenue Code. Of the 34.6 million shares authorized for issuance under the plan, 3.3 million were available for issuance at March 31, 2004. Employees purchased 2.8 million shares, 2.2 million shares and 0.8 million shares of Quantum Corporation common stock under the Purchase Plan in fiscal years 2004, 2003 and 2002, respectively.

The weighted average exercise price of Quantum Corporation stock purchased under the Purchase Plan was \$1.95, \$1.79 and \$8.27, in fiscal years 2004, 2003 and 2002, respectively.

(iii) Pro forma information

Quantum follows SFAS No. 123 *Accounting for Stock-Based Compensation* and as permitted, elected to continue to account for its stock-based compensation plans under APB Opinion No. 25 and disclose the pro forma effects of the plans on net income and earnings per share. With the exception of option conversions that were related to the disposition of the HDD group as discussed above under “Stock Compensation Expenses” and grants of restricted stock, all options have been issued at fair market value and therefore no compensation expense has been recognized for the stock option plans and the employee stock purchase plans.

Pro forma net income and earnings per share information, as required by SFAS No. 123, have been determined as if Quantum had accounted for its employee stock options (including shares issued under the Long-Term Incentive Plan, Supplemental Plan, Stock Option Plans, and the Stock Purchase Plan, collectively called “options”) under the fair value method of that statement.

The effect on reported net income (loss) and net income (loss) per share of accounting for employee stock options under the fair value method is disclosed under “Stock-Based Compensation” in Note 2 “Summary of Significant Accounting Policies.”

The fair value of options granted in fiscal years 2004, 2003 and 2002 reported below have been estimated at the date of grant using a Black-Scholes option pricing model with the following weighted average assumptions:

	Long-Term Incentive Plan, Supplemental Plan and Stock Option Plans			Stock Purchase Plan		
	For the year ended March 31,			For the year ended March 31,		
	2004	2003	2002	2004	2003	2002
<u>Quantum Corporation</u>						
Option life (in years)	2.32	3.01	1.68	1.39	1.33	1.46
Risk-free interest rate	1.82%	1.48%	3.32%	1.62%	2.19%	5.55%
Stock price volatility	0.80	0.68	0.63	0.72	0.69	0.70
Dividend yield	—	—	—	—	—	—

The Black-Scholes option-pricing model was developed for use in estimating the fair value of traded options that have no vesting restrictions and are fully transferable. In addition, option valuation models require the input of highly subjective assumptions, including the expected stock price volatility. Because Quantum’s options have characteristics significantly different from those of traded options, and because changes in the subjective input assumptions can materially affect the fair value estimate, in the opinion of management, the existing models do not necessarily provide a reliable single measure of the fair value of the options.

The following is a summary of weighted-average grant date fair values:

	Weighted-Average Grant Date Fair Value		
	For the year ended March 31,		
	2004	2003	2002
Options granted under the Long-Term Incentive Plan, Supplemental Plan and Stock Option Plans	\$ 1.51	\$ 1.94	\$ 5.05
Restricted stock granted under the Long-Term Incentive Plan, Supplemental Plan and Stock Option Plans	\$ 3.78	\$ 7.52	\$ 11.80
Shares granted under the Stock Purchase Plan	\$ 1.28	\$ 2.13	\$ 6.29

**Note 14: Income Taxes**

The income tax provision (benefit) for continuing operations consists of the following:

	As of March 31,		
	2004	2003	2002
Federal:			
Current	\$ 128	\$ -	\$ -
Deferred	<u>10,440</u>	<u>(11,571)</u>	<u>(25,281)</u>
	10,568	(11,571)	(25,281)
State:			
Current	245	479	
Deferred	<u>11,303</u>	<u>(3,644)</u>	<u>(692)</u>
	11,548	(3,165)	(692)
Foreign:			
Current	11,445	13,169	17,808
Deferred	<u>(803)</u>	<u>(3,518)</u>	<u>(1,447)</u>
	10,642	9,651	16,361
Income tax provision (benefit)	<u>\$ 32,758</u>	<u>\$ (5,085)</u>	<u>\$ (9,612)</u>

The income tax provision (benefit) for continuing operations differs from the amount computed by applying the federal statutory rate of 35% to income before income taxes as follows:

(in thousands)	As of March 31,		
	2004	2003	2002
Tax (benefit) at federal statutory rate	\$ (10,243)	\$ (48,010)	\$ (20,464)
State income tax (benefit) and related valuation allowance, net of federal benefit, if any.	11,548	(2,151)	(813)
Unbenefited net operating losses	19,379	-	-
Valuation allowance	10,440	-	-
Foreign Taxes	1,506	-	-
Nondeductible stock compensation	-	-	7,284
Research and development credit	-	(2,460)	(4,000)
Acquired in-process research and development	-	2,730	4,620
Goodwill amortization	-	-	5,317
U.S tax provided (not provided) on foreign earnings	-	22,583	(4,408)
Nondeductible write-downs of equity investments	-	-	2,811
Non-deductible goodwill write-off	-	20,541	-
Other	128	1,682	41
	<u>\$ 32,758</u>	<u>\$ (5,085)</u>	<u>\$ (9,612)</u>

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes.

Significant components of deferred tax assets and liabilities are as follows:

(in thousands)

	As of March 31,	
	2004	2003
Deferred tax assets:		
Inventory valuation methods	\$ 9,187	\$ 9,196
Accrued warranty expense	14,861	15,705
Distribution reserves	3,639	6,584
Loss carryforwards	61,282	61,420
Foreign tax and research and development credit carryforwards	79,433	66,062
Special charge accruals	2,942	7,364
Other accruals and reserves not currently deductible for tax purposes	19,431	18,769
Depreciation and amortization methods	25,520	19,419
	<u>\$ 216,295</u>	<u>\$ 204,519</u>
Less valuation allowance	<u>(75,191)</u>	<u>(28,645)</u>
Deferred tax asset	<u>\$ 141,104</u>	<u>\$ 175,874</u>
Deferred tax liabilities:		
Acquired intangibles	(16,584)	(24,514)
Tax on unremitted foreign earnings	(119,637)	(124,972)
Other	(4,494)	(5,109)
Deferred tax liability	<u>\$ (140,715)</u>	<u>\$ (154,595)</u>
Net deferred tax asset	<u>\$ 389</u>	<u>\$ 21,279</u>

The tax benefits associated with nonqualified stock options, disqualifying dispositions of incentive stock options and employee stock purchase plan shares, had no impact on taxes currently payable or deferred tax assets in fiscal years 2004 and 2003, and reduced taxes currently payable or increased the deferred tax assets as shown above by \$1.3 million in fiscal year 2002. Such benefits are credited to equity when realized. Of the \$75.2 million and \$28.6 million valuation allowances for fiscal years 2004 and 2003, \$7.1 million and \$6.7 million, respectively, relates to the tax benefits of employee stock plans, the benefit of which will be credited to stockholders' equity, if realized.

Pretax income from foreign operations were \$26.1 million for fiscal year 2004, compared to a loss of \$0.5 million and income of \$74.4 million for fiscal years ended March 31, 2003 and 2002, respectively.

As of March 31, 2004, Quantum had federal net operating loss and tax credit carryforwards of approximately \$171.0 million and \$31.7 million, respectively. These carryforwards expire in varying amounts between fiscal years 2005 and 2024 if not previously utilized. These loss carryforwards include \$16.0 million of acquired net operating losses, the utilization of which is limited under the tax law ownership change provisions.

Due to Quantum's history of net losses, and our difficulty in predicting future results, Quantum believes that it cannot rely on projections of future taxable income to realize the deferred tax assets. Accordingly, the company has established a full valuation allowance against its U.S. net deferred tax assets.

Significant management judgment is required in determining Quantum's deferred tax assets and liabilities and valuation allowances for purposes of assessing Quantum's ability to realize any future benefit from Quantum's net deferred tax assets. Quantum intends to maintain this valuation allowance until sufficient positive evidence exists to support the reversal of the valuation allowance. Quantum's 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, Quantum's valuation allowance.

#### **Note 15: Litigation**

On August 7, 1998, Quantum was named as one of several defendants in a patent infringement lawsuit filed in the U.S. District Court for the Northern District of Illinois, Eastern Division. The plaintiff, Papst Licensing GmbH, owns numerous United States patents, which Papst alleges are infringed upon by hard disk drive products that were sold by HDD. In October 1999 the case was transferred to a federal district court in New Orleans, Louisiana, where it has been joined with other lawsuits involving Papst for purposes of coordinated discovery under multi-district litigation rules. The other lawsuits have Maxtor, Minebea Limited, and IBM as parties. The outcome of this patent infringement lawsuit is uncertain. Quantum currently cannot estimate the extent of the potential damages in the Papst dispute against it because the complaint by Papst asserts an unspecified amount of damages. As part of Quantum's disposition of HDD to Maxtor, Maxtor has agreed to assume the defense of the Papst claims against HDD and has also agreed to indemnify Quantum with respect to litigation relating to this dispute. Nevertheless, if Papst prevails and Maxtor was unable for any reason to indemnify Quantum in accordance with the merger agreement, Quantum's resulting liability could have a materially adverse impact on Quantum's results of operations and financial position.

On April 14, 2003, Quantum filed a patent infringement complaint in the U.S. District Court in the Northern District of California against Storage Technology Corporation (“StorageTek”). The suit alleges that StorageTek has engaged in the unlawful manufacture and sale within the United States of tape and tape drive products that infringe upon two separate Quantum patents. The suit seeks a permanent injunction against StorageTek as well as the recovery of monetary damages, including treble damages for willful infringement. On April 15, 2003, StorageTek filed suit against Quantum in the U.S. District Court in Colorado, alleging that Quantum infringes two patents relating to the use of an optical servo system in a tape drive. The suit seeks a permanent injunction against Quantum as well as the recovery of monetary damages, including treble damages for willful infringement. Quantum believes that StorageTek’s claims are without merit, that the patents are invalid and Quantum intends to defend the lawsuit vigorously. Given the inherent uncertainty of the litigation, Quantum currently cannot estimate the extent of the potential damages in the StorageTek dispute.

On August 8, 2003, a class action lawsuit was filed against Quantum in the Superior Court of the State of California for the County of San Francisco. Hitachi Maxell, Ltd., Maxell Corporation of America, Fuji Photo Film Co., Ltd., and Fuji Photo Film U.S.A., Inc. are named in the lawsuit as codefendants. The plaintiff, Franz Inc., alleges violation of California antitrust law, violation of California unfair competition law, and unjust enrichment. Franz Inc. charges, among other things, that the defendants entered into agreements and conspired to monopolize the market and fix prices for data storage tape compatible with DLT tape drives. Quantum denies the allegations of the complaint and intends to defend vigorously the claims asserted by Franz. Franz seeks an order that the lawsuit be maintained as a class action and that defendants be enjoined from continuing the violations alleged in the complaint. Franz also seeks compensatory damages, treble damages, statutory damages, attorneys' fees, costs, and interest. Given the early stages and inherent uncertainty of the litigation, Quantum currently cannot estimate the extent of the potential damages in the litigation.

On December 30, 2003, a lawsuit was filed against Quantum and Maxtor Corporation in the U.S. District Court in the Northern District of California. The plaintiff, Matsushita Kotobuki Electronics Industries, Ltd. ("MKE"), alleges breach of contract, breach of fiduciary relationship, fraud, violation of California unfair business practices law, and unjust enrichment. MKE charges, among other things, that certain Quantum intellectual property transferred to Maxtor in connection with the purchase by Maxtor of Quantum's hard disk drive business belongs to MKE. MKE seeks a declaratory judgment that it is the sole owner of the specified intellectual property, as well as unspecified damages, attorneys' fees, costs, and interest. In addition, MKE seeks to recover amounts MKE paid in settlement to Papst. Given the early stages and inherent uncertainty of the litigation, Quantum currently cannot estimate the extent of the potential damages in the litigation. Quantum denies the allegations of the complaint, believes they are without merit and intends to vigorously defend against the claims asserted by MKE.

#### **Note 16: Commitments and Contingencies**

##### Lease Commitments

Quantum leases certain facilities under non-cancelable lease agreements for periods of up to 17 years. Some of the leases have renewal options ranging from one to ten years and contain provisions for maintenance, taxes, or insurance.

Rent expense was \$16.5 million, \$18.2 million, and \$18.1 million for the fiscal years 2004, 2003, and 2002, respectively.

Future minimum lease payments under operating leases are as follows:

<u>For the year ended March 31,</u>	(in thousands)
2005.....	\$13,117
2006.....	9,675
2007.....	5,057
2008.....	4,779
Thereafter .....	<u>7,920</u>
Total future minimum lease payments .....	<u>\$40,548</u>

In August 1997, Quantum entered into a five-year synthetic lease agreement with a group of financial institutions (the “lessor”) for the construction and lease of a campus facility in Colorado Springs, Colorado, comprised of three buildings. The campus was the center of the DLTtape business’ operations until the transfer in fiscal year 2002 of tape drive production to Penang, Malaysia. The Colorado Springs facility now houses only administrative, research and development, procurement resources and testing operations located in one of the three buildings. The lease is accounted for as an operating lease in accordance with SFAS No. 13 *Accounting for Leases*.

In December 2002, Quantum renegotiated this lease, which expires in December 2007. The total minimum lease payments from fiscal year 2005 until the scheduled expiration date in December 2007 are estimated to be approximately \$3.6 million and



approximate the lessor's debt interest service costs. The minimum lease payments will fluctuate depending on short-term interest rates.

The lease is secured by a standby letter of credit issued under Quantum's revolving line of credit and a blanket lien on all of the assets of Quantum. The revolving line of credit expires in March 2006 and at that time Quantum could be required to post cash collateral to secure the lease, unless other financial arrangements are made that are acceptable to the lessor.

The lease commitment requires Quantum to maintain specified financial covenants. If in future quarters Quantum were to fail to comply with these financial covenants and was unable to obtain a waiver, or amend the lease, for such non-compliance, the lessor could terminate the lease. This could result in Quantum having to purchase and/or cause a third party to purchase the facilities promptly and potentially at a substantial discount to their current appraised value. There is a cross default provision between this facility and the credit line facility (refer to Note 11 "Credit Agreements, Short-Term Debt and Convertible Subordinated Debt") such that a default on one facility constitutes a default on the other facility.

At the end of the lease term, Quantum has the following options and obligations:

- (1) Quantum may renew the lease if the lessor accepts a renewal at its discretion;
- (2) Quantum may purchase the facility for approximately \$50 million (the "stipulated sales price"); or
- (3) If Quantum has paid all sums owing under the lease and is not otherwise in default under the lease or the credit line facility at the end of the stated lease term, Quantum may find a third party to purchase the facility. In such event, Quantum has guaranteed any shortfall between the net proceeds from the sale of the property to the third party and the stipulated sales price, up to a maximum amount payable equal to 87.7% of the stipulated sales price, or \$43.9 million.

At any time during the lease term, Quantum may purchase (or cause a third party to purchase) the facility for the stipulated sales price. If Quantum defaults under the lease, its only option is to purchase the facility for the stipulated sales price.

#### Quantum shares contingently issuable in connection with the acquisition of SANlight

Under the agreements to acquire SANlight Quantum may be required to issue additional shares of common stock up to a maximum of 0.3 million. The issuance of these additional shares is contingent upon the achievement of certain milestones.

#### Commitments to purchase inventory

Quantum outsourced tape drive manufacturing to a contract manufacturer, Jabil, during the third quarter of fiscal year 2003. The Storage Systems business has increased its use of contract manufacturers for certain manufacturing functions during the same period. Under these arrangements, the contract manufacturer procures inventory to manufacture products based upon a forecast of customer demand provided by Quantum. Quantum is responsible for the financial impact on the contract manufacturer of any reduction or product mix shift in the forecast relative to materials that the contract manufacturer had already purchased under a prior forecast. Such a variance in forecasted demand could require a cash payment for finished goods in excess of current customer demand or for costs of excess or obsolete inventory.

At March 31, 2004, Quantum had issued non-cancelable purchase orders for \$41.2 million to purchase finished goods from its contract manufacturers, and had not incurred any significant liability for finished goods in excess of current customer demand or for the costs of excess or obsolete inventory.

#### Contingencies

Tax allocations under a tax sharing and indemnity agreement with Maxtor are the subject of a dispute. This agreement between Quantum and Maxtor entered into in connection with the disposition of HDD, provided for the allocation of certain liabilities related to taxes and the indemnification by Maxtor of Quantum with respect to certain liabilities relating to taxes and attributable to the conduct of business prior to the disposition of HDD. Maxtor and Quantum presently disagree as to the amounts owed under this agreement. The parties are in negotiations to resolve this matter, and no litigation has been initiated to date. However, there can be no assurance that Quantum will be successful in asserting its position. If disputes under this agreement cannot be resolved favorably, Quantum may incur significant liabilities and costs to litigate and/or settle these disputes, which could have a material and adverse effect on its results of operations and financial condition.

#### **Note 17: Business Segment and Geographic Information**

Quantum's reportable segments are DLT and Storage Systems. These reportable segments have distinct products with different production processes. DLT consists of tape drives and media. Storage Systems consists of tape automation systems and service,

and includes disk based backup products. Quantum directly markets its products to computer manufacturers and through a broad range of distributors, resellers and systems integrators.

The accounting policies of the reportable segments are the same as those described in the summary of significant accounting policies. Quantum evaluates segment performance based on operating income (loss) excluding special charges and other infrequent or unusual items.

Quantum does not allocate interest and other income, interest expense, or taxes to operating segments. Additionally, Quantum does not allocate all assets by operating segment, only those assets included in the table below:

(in thousands)	For the year ended March 31,								
	2004			2003			2002		
	DLT	Storage Systems	Total	DLT	Storage Systems	Total	DLT	Storage Systems	Total
Total Revenue	\$ 558,389	\$ 275,634	\$ 834,023	\$ 680,032	\$ 227,112	\$ 907,144	\$ 837,548	\$ 233,298	\$ 1,070,846
Inter-segment revenue	(25,639)	-	(25,639)	(36,335)	-	(36,335)	(41,171)	-	(41,171)
Revenue from external customers	532,750	275,634	808,384	643,697	227,112	870,809	796,377	233,298	1,029,675
Cost of revenue	344,647	212,078	556,725	437,481	166,165	603,646	497,426	154,644	652,070
Gross margin	188,103	63,556	251,659	206,216	60,947	267,163	298,951	78,654	377,605
Research and development	69,228	34,243	103,471	75,309	36,617	111,926	83,080	28,371	111,451
Sales and marketing	37,916	59,928	97,844	45,295	55,159	100,454	61,966	48,767	110,733
General and administrative	35,008	19,816	54,824	44,756	26,510	71,266	66,421	47,120	113,541
Total operating expenses	142,152	113,987	256,139	165,360	118,286	283,646	211,467	124,258	335,725
Operating income (loss)	\$ 45,951	\$ (50,431)	\$ (4,480)	\$ 40,856	\$ (57,339)	\$ (16,483)	\$ 87,484	\$ (45,604)	\$ 41,880
Goodwill impairment			-			58,689			-
Special Charges			15,212			24,200			72,856
Purchased in-process research and development			-			7,802			13,200
Reported loss from operations			\$ (19,692)			\$ (107,174)			\$ (44,176)

(In thousands)	As of								
	March 31, 2004			March 31, 2003			March 31, 2002		
	DLT	Storage Systems	Total	DLT	Storage Systems	Total	DLT	Storage Systems	Total
Accounts receivable, net	\$ 73,648	\$ 43,749	\$ 117,397	\$ 91,415	\$ 42,345	\$ 133,760	\$ 94,351	\$ 55,073	\$ 149,424
Inventories	\$ 15,651	\$ 32,692	\$ 48,343	\$ 22,131	\$ 39,604	\$ 61,735	\$ 71,410	\$ 27,391	\$ 98,801
Service inventories	\$ 33,636	\$ 17,622	\$ 51,258	\$ 35,760	\$ 13,344	\$ 49,104	\$ 37,096	\$ 11,191	\$ 48,287
Property, plant and equipment, net	\$ 28,996	\$ 11,381	\$ 40,377	\$ 42,010	\$ 17,082	\$ 59,092	\$ 57,942	\$ 18,463	\$ 76,405
Goodwill and intangibles, net	\$ 38,738	\$ 67,826	\$ 106,564	\$ 39,861	\$ 80,499	\$ 120,360	\$ -	\$ 200,122	\$ 200,122

## Product Information

Revenue for reportable segments is comprised of the following:

(in thousands)	For the year ended March 31,		
	2004	2003	2002
Tape drives	\$ 350,298	\$ 336,005	\$ 445,381
Tape media	76,966	157,374	182,851
Tape royalties	131,125	186,653	209,316
DLT	\$ 558,389	\$ 680,032	\$ 837,548
Storage Systems	275,634	227,112	233,298
Inter-group elimination*	(25,639)	(36,335)	(41,171)
	\$ 808,384	\$ 870,809	\$ 1,029,675

\* Represents inter-group sales of tape drives for incorporation into tape automation systems, for which the sales are included in storage solutions revenue.

## Geographic and Customer Information

Revenue and long-lived assets (property, plant and equipment and goodwill and intangible assets) by region was as follows (revenue is attributed to regions based on the location of customers):

(in thousands)	For the year ended March 31,					
	2004		2003		2002	
	Revenue	Long-Lived Assets	Revenue	Long-Lived Assets	Revenue	Long-Lived Assets
United States	\$ 488,268	\$ 139,387	\$ 527,523	\$ 162,218	\$ 608,188	\$ 212,158
Europe	173,757	7,072	202,758	9,348	260,083	52,218
Asia Pacific	141,443	482	139,124	7,886	160,039	12,151
Latin America	4,916	-	1,404	-	1,365	-
	<u>\$ 808,384</u>	<u>\$ 146,941</u>	<u>\$ 870,809</u>	<u>\$ 179,452</u>	<u>\$ 1,029,675</u>	<u>\$ 276,527</u>

During fiscal year 2004, two customers accounted for 10% or more of Quantum's revenue, representing \$208.5 million and \$116.7 million of Quantum's revenue. During the fiscal years 2003 and 2002, only one customer accounted for more than 10% or more of Quantum's revenue. Revenue from this customer represented \$193.0 million and \$292.5 million of Quantum's revenue in fiscal years 2003 and 2002, respectively.

#### **Note 18: Unaudited Quarterly Financial Data**

(in thousands, except per-share data)	For the year ended March 31, 2004			
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Revenue	\$ 202,215	\$ 194,875	\$ 205,383	\$ 205,911
Gross Margin	\$ 63,513	\$ 58,157	\$ 65,061	\$ 64,928
Loss from continuing operations	\$ (9,346)	\$ (38,108)	\$ (6,476)	\$ (9,785)
Net loss	\$ (9,346)	\$ (38,108)	\$ (5,433)	\$ (9,135)
Loss per share from continuing operations:				
Basic	\$ (0.05)	\$ (0.22)	\$ (0.04)	\$ (0.05)
Diluted	\$ (0.05)	\$ (0.22)	\$ (0.04)	\$ (0.05)

  

	For the year ended March 31, 2003			
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Revenue	\$ 202,450	\$ 204,453	\$ 228,770	\$ 235,136
Gross Margin	\$ 62,589	\$ 59,610	\$ 72,163	\$ 72,801
Loss from continuing operations	\$ (27,332)	\$ (92,069)	\$ (5,922)	\$ (6,765)
Net loss	\$ (130,883)	\$ (111,444)	\$ (15,529)	\$ (6,439)
Loss per share from continuing operations:				
Basic	\$ (0.17)	\$ (0.59)	\$ (0.04)	\$ (0.04)
Diluted	\$ (0.17)	\$ (0.59)	\$ (0.04)	\$ (0.04)

#### Fiscal year 2004

The net loss for each quarter of fiscal year 2004 includes the following charge for amortization of intangible assets:

- \$4.8 million in the first quarter
- \$4.8 million in the second quarter
- \$4.4 million in the third quarter
- \$4.4 million in the fourth quarter

The net loss for the second quarter of fiscal year 2004 includes the following:

- \$21.2 million valuation charge against net deferred tax assets
- \$2.4 million valuation charge against manufacturing facility
- \$2.5 million charge for loss on debt extinguishment

The net loss for the third and the fourth quarter of fiscal year 2004 includes special charges of \$4.6 million and \$7.0 million, respectively, mainly for severance and facility charges associated with employee headcount reductions.

#### Fiscal year 2003

The results of continuing operations for the first quarter of fiscal year 2003 included a \$17.1 million charge for equity investment write-downs. The net loss for the first quarter of fiscal year 2003 included a charge of \$94.3 million due to the adoption of SFAS

No. 142 *Goodwill and Other Intangible Assets*. In the second quarter of fiscal year 2003, Quantum recorded a goodwill impairment charge of \$58.7 million due to a re-evaluation of Storage Systems in light of deterioration in the market values of comparable companies, and to a lesser extent, a reduction in anticipated future cash flows. The results of continuing operations for the second and third quarters of fiscal year 2003 included special charges of \$14.1 million and \$9.4 million, respectively, mainly for severance and facility charges associated with employee reductions. The amounts in the fourth quarter of fiscal year 2003 reflect \$1.8 million additional cost of revenue due to immaterial inventory adjustments related to prior periods.

**Note 19: Related-Party Transactions**

Quantum holds loan receivables from officers of \$0.2 million as of March 31, 2004. The loans are classified in other current assets or other long-term assets, depending on repayment terms, and bear interest at rates ranging from 6% to 8% per annum.

The loans have provisions for forgiveness based on continued employment and are generally forgiven on a straight-line basis over two years. The loan forgiveness is being recorded as compensation expense over the forgiveness period. In fiscal years 2004, 2003 and 2002, \$0.5 million, \$0.5 million and \$0.8 million was forgiven, respectively.

We leased one of our facilities from one of our stockholders as a result of our acquisition of Benchmark. The lease requires minimum annual rent of \$0.8 million through August 2006.

**Note 20: Discontinued Operations**

Disposition of the NAS Business

Quantum was previously engaged in the business of developing, manufacturing, and selling network attached storage solutions for the desktop and workgroups. The NAS products consisted primarily of server appliances that incorporate hard disk drives and an operating system designed to meet the requirements of entry, workgroup, and enterprise computing environments, where multiple computer users access shared data files over a local area network.

On October 7, 2002, Quantum entered into an agreement with a privately held third party to sell certain assets and assign certain contract rights related to its NAS business. The NAS assets that were sold included inventories for resale to customers, service inventories, fixed assets and intellectual property. The proceeds from the sale included approximately \$4.7 million in cash, \$3.9 million in restricted equity securities of the buyer with an option to acquire additional equity securities, a secured promissory note for \$2.4 million issued by the buyer and the assumption by the buyer of \$1.6 million of warranty liability in connection with the prior installed base of NAS products. The sale was completed on October 28, 2002.

The following table summarizes the results of the NAS business:

(in thousands)	For the year ended March 31,		
	2004	2003	2002
Revenue	\$ -	\$ 19,899	\$ 58,117
Gross Profit	\$ 1,064	\$ (3,075)	\$ 8,285
Operating Expenses	\$ (629)	\$ 45,707	\$ 59,415
Income (Loss) from operations	\$ 1,693	\$ (48,782)	\$ (51,130)
Income (Loss) before income taxes	\$ 1,693	\$ (48,633)	\$ (51,189)
Income tax benefit	\$ -	\$ (10,724)	\$ (17,719)
Income (Loss) from discontinued operations	\$ 1,693	\$ (37,909)	\$ (33,470)

The income from operations in fiscal year 2004 consists of a reversal of an accrual for warranty expense on NAS products sold by Quantum with the lapse of the warranty period and a reversal of remaining severance benefits accruals associated with certain employees impacted by the disposition of the NAS business, which would have been payable by Quantum had the employees been terminated by the acquirer of the NAS business within a set time from the acquisition date.

The loss from operations in fiscal year 2003 includes an impairment charge of \$16.4 million and special charges of \$11.7 million. In the second quarter of fiscal year 2003, Quantum determined that the sale of the NAS business was probable and wrote down the assets held for sale to fair value less cost to sell. The fair value of the assets held for sale was determined to be the proceeds from the sale. The resulting impairment charge related mainly to completed technology arising from the acquisitions of Meridian Data Inc. and certain assets of Connex. In the fiscal year 2003, Quantum recorded \$11.7 million of special charges related to the consolidation of sales and marketing activities, including severance charges and vacant facilities charges associated with the sale of the NAS business.

In fiscal year 2002, the loss from operations included \$3.3 million of purchased in-process research and development related to the acquisition of Connex in August 2001. The loss also included \$4.5 million of special charges associated mainly with writing off deferred costs related to the abandonment of the planned initial public offering for the subsidiary that operated Quantum's NAS business, as well as severance charges related to restructurings.

The following table summarizes the current assets and current liabilities of discontinued operations (there were no balances at March 31, 2004 as a result of the disposition):

(in thousands)	March 31, 2002
<hr/>	
Current assets of discontinued operations:	
Inventories	\$ 2,837
Service inventories	2,016
Property and equipment, net	2,123
Goodwill, net	25,340
Intangible assets, net	26,904
	<hr/>
	<u>\$ 59,220</u>
Current liabilities of discontinued operations:	
Accrued warranty	\$ 1,034
Deferred income taxes	8,581
	<hr/>
	<u>\$ 9,615</u>

#### Disposition of the HDD group

On March 30, 2001, Quantum's stockholders approved the disposition of the HDD group to Maxtor. On April 2, 2001, each authorized share of HDD common stock was exchanged for 1.52 shares of Maxtor common stock.

The HDD group produced two primary product lines, desktop hard disk drives and high-end hard disk drives. HDD had two separate business units that supported these two product lines. The desktop business unit designed, developed and marketed desktop hard disk drives designed to meet the storage requirements of entry-level to high-end desktop personal computers in home and business environments. The high-end business unit designed, developed and marketed high-end hard disk drives designed to meet the storage requirements of network servers, workstations and storage subsystems.

In fiscal year 2002, Quantum recorded a non-cash gain of \$125.0 million on the disposition of the HDD group to Maxtor. This gain, net of tax, is comprised of the proceeds recorded for the exchange of HDD shares for Maxtor shares, less the disposal of the assets and liabilities in conjunction with the disposition of the HDD group to Maxtor, and stock compensation charges for the conversion of unvested DSS options to DSS restricted stock for employees who transferred to Maxtor.

The following table sets forth the components of the gain on disposition of the HDD group (in thousands except exchange ratio and closing price):

Outstanding HDD shares at March 30, 2001 .....	80,085
Exchange ratio of Maxtor shares for HDD shares .....	<u>1.52</u>
Maxtor shares received .....	121,729
Maxtor closing price on March 30, 2001 .....	<u>\$ 7.00</u>
Proceeds from disposition of HDD group .....	\$ 852,100
Net assets disposed of .....	(619,757)
Stock compensation .....	(47,371)
Deferred income taxes .....	<u>(60,000)</u>
Gain on disposition of HDD group, net of income taxes .....	<u>\$ 124,972</u>

Tax allocations under a tax sharing and indemnity agreement with Maxtor are the subject of a dispute. This agreement between Quantum and Maxtor entered into in connection with the disposition of the HDD group to Maxtor provided for the allocation of certain liabilities related to taxes between Quantum and Maxtor and the indemnification by Maxtor of Quantum with respect to

certain liabilities relating to taxes and attributable to the HDD group's conduct of business prior to the disposition of the HDD group. Maxtor and Quantum presently disagree as to the amounts owed under this agreement. The parties are in negotiations to resolve this matter, and no litigation has been initiated to date. However, there can be no assurance that Quantum will be successful in asserting its position. If disputes under this agreement cannot be resolved favorably, Quantum may incur significant liabilities and costs to litigate or settle these disputes, which could have a material adverse effect on its results of operations and financial condition.

**Note 21: Investments in Other Entities**

Investments in equity securities of other entities are recorded in other long-term assets. Investments in those entities in which Quantum owns less than 20%, and is unable to exert significant influence, are carried at cost less write-downs for declines in value that are judged to be other-than-temporary. Investments in entities in which Quantum owns more than 20%, and/or is able to exert significant influence, are accounted for under the equity method. Due to the economic downturn, Quantum recorded impairment losses of \$17.1 million and \$7.4 million in fiscal years 2003 and 2002, respectively, on certain of these investments. As at March 31, 2004, Quantum had total investments in other entities of \$3.9 million.

**Note 22: Savings and Investment Plan**

Substantially all of the regular domestic employees are eligible to make contributions to Quantum's 401(k) savings and investment plan. Quantum matches a percentage of the employees' contributions and may also make additional discretionary contributions to the plan. Employer contributions were \$2.9 million, \$9.2 million, and \$11.0 million in fiscal years 2004, 2003, and 2002 respectively.

**Note 23: Recent Accounting Pronouncements**

Accounting for Revenue Arrangements with Multiple Deliverables

In November 2002, the Emerging Issues Task Force (EITF) reached a consensus on EITF 00-21 *Accounting for Revenue Arrangements with Multiple Deliverables*. EITF 00-21 establishes criteria for whether revenue on a deliverable can be recognized separately from other deliverables in a multiple deliverable arrangement. The criteria consider whether the delivered item has stand-alone value to the customer, whether the fair value of the delivered item can be reliably determined and the rights of returns for the delivered item. EITF 00-21 is effective for revenue agreements entered into in fiscal quarters beginning after June 15, 2003 with early adoption permitted. The adoption of this standard did not have a material impact on Quantum's financial position, cash flows or results of operations.

Derivative Instruments and Hedging Activities

In April 2003, the Financial Accounting Standards Board (FASB) issued SFAS No. 149 *Amendment of Statement 133 on Derivative Instruments and Hedging Activities*, which amends SFAS 133 for certain decisions made by the FASB Derivatives Implementation Group. In particular, SFAS 149: (1) clarifies under what circumstances a contract with an initial net investment meets the characteristic of a derivative, (2) clarifies when a derivative contains a financing component, (3) amends the definition of an underlying to conform it to language used in FASB Interpretation No. 45 "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others," and (4) amends certain other existing pronouncements. This Statement is effective for contracts entered into or modified after June 30, 2003, and for hedging relationships designated after June 30, 2003. In addition, most provisions of SFAS 149 are to be applied prospectively. The adoption of SFAS 149 did not have a material impact on Quantum's financial position, cash flows or results of operations.

Accounting for Certain Financial Instruments with Characteristics of Both Liabilities and Equity

In May 2003, the FASB issued SFAS No. 150 *Accounting for Certain Financial Instruments with Characteristics of Both Liabilities and Equity*. SFAS 150 changes the accounting for certain financial instruments that under previous guidance issuers could account for as equity. It requires that those instruments be classified as liabilities in balance sheets. The guidance in SFAS 150 is generally effective for all financial instruments entered into or modified after May 31, 2003, and otherwise is effective on July 1, 2003. The adoption of SFAS 150 did not have a material impact on Quantum's financial position, cash flows or results of operations.

Staff Accounting Bulletin 104, Revenue Recognition

In December 2003, the Securities and Exchange Commission (SEC) issued Staff Accounting Bulletin No. 104 (SAB 104), Revenue Recognition. SAB 104 supercedes SAB 101, Revenue Recognition in Financial Statements. The primary purpose of SAB 104 is to rescind accounting guidance contained in SAB 101 related to multiple element revenue arrangements, superceded as a result of the issuance of EITF 00-21. Additionally, SAB 104 rescinds the SEC's Revenue Recognition in Financial Statements Frequently Asked Questions and Answers (the FAQ) issued with SAB 101 that had been codified in SEC Topic 13, Revenue Recognition. Selected portions of the FAQ have been incorporated into SAB 104. While the wording of SAB 104 has changed to reflect the issuance of EITF 00-21, the revenue recognition principles of SAB 101 remain largely unchanged by the issuance of SAB 104. The issuance of SAB 104 did not have a material impact on Quantum's financial position, results of operations or cash flows.

#### Consolidation of Variable Interest Entities

In January 2003, the Financial Accounting Standards Board issued FASB Interpretation (FIN) No. 46, *Consolidation of Variable Interest Entities*. FIN No. 46 requires that if a business enterprise has a controlling interest in a variable interest entity (also known as a special purpose entity), the assets, liabilities and results of operations of the variable interest entity should be included in the Consolidated Financial Statements of the business enterprise. FIN No. 46 applies immediately to variable interest entities created after January 31, 2003, and to variable interest entities in which an enterprise obtains an interest after that date. It applies in the first fiscal year or interim period ending after March 15, 2004, to variable interest entities in which an enterprise holds a variable interest that it acquired before February 1, 2003. The adoption of FIN46 did not have a material impact on Quantum's financial position, cash flows or results of operations.

## REPORT OF ERNST & YOUNG LLP, INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders  
Quantum Corporation

We have audited the accompanying consolidated balance sheets of Quantum Corporation (the "Company") as of March 31, 2004 and 2003, and the related consolidated statements of operations, stockholders' equity and cash flows for each of the three years in the period ended March 31, 2004. Our audits also included the financial statement schedule listed in the index at Item 15a. These financial statements and schedule are the responsibility of Quantum's management. Our responsibility is to express an opinion on these financial statements and schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Quantum Corporation at March 31, 2004 and 2003, and the consolidated results of its operations and its cash flows for each of the three years in the period ended March 31, 2004, in conformity with U.S. generally accepted accounting principles. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

As discussed in Notes 2, 3 and 4 to the Consolidated Financial Statements, in fiscal year 2003 Quantum Corporation changed its method of accounting for goodwill and other purchased intangible assets.

/s/ Ernst & Young LLP

Palo Alto, California  
April 29, 2004



QUANTUM CORPORATION

SCHEDULE II

CONSOLIDATED VALUATION AND QUALIFYING ACCOUNTS

	Balance at beginning of <u>period</u>	Additions charged to <u>expense</u> (in thousands)	Deductions (i)	Balance at end of <u>period</u>
Allowance for doubtful accounts				
Year ended:				
March 31, 2002 .....	\$3,227	\$4,788	\$(1,782)	\$6,233
March 31, 2003 .....	\$6,233	\$4,406	\$(1,702)	\$8,927
March 31, 2004 .....	\$8,927	\$1,018	\$ 43	\$9,988

(i) Uncollectible accounts written off, net of recoveries.

## **GAAP to Non-GAAP Reconciliation of Consolidated Statements of Operations**

The following six pages present reconciliations of the consolidated statements of operations between GAAP and Non-GAAP for each quarter of fiscal year 2004 and for the full fiscal year.

### **Use of Non-GAAP Financial Measures**

The non-GAAP financial measures that we use exclude the impact of numerous items, charges and expenses, including: acquisition-related intangible asset amortization, special charges, discontinued activities and operations, certain non-operating gains and losses, deferred tax asset writedowns, and related adjustments to provision for income taxes on Quantum's operating results. These non-GAAP financial measures are not prepared in accordance with generally accepted accounting principles and may be different from non-GAAP financial measures used by other companies. Non-GAAP financial measures should not be considered as a substitute for, or superior to, measures of financial performance prepared in accordance with GAAP. We believe that the items excluded from non-GAAP financial measures are important components to consider in evaluating Quantum's overall financial and operating performance.

We rely on non-GAAP financial measures in assessing what we believe are our core operating performance that we evaluate in making operating decisions, including staffing, future management priorities and how we will direct future operating expenses. Quantum's business changed significantly with the disposition of the Hard Disk Drive business and total revenue and margins have declined significantly over the past three years, and because of this we have incurred significant charges associated with these changes and to right-size our company toward expected revenue levels. We exclude the financial impact of this and other items in reviewing what we believe are Quantum's core operating results. In this regard, we believe that non-GAAP financial measures provide meaningful supplemental information regarding Quantum's core operational performance.

In addition, these non-GAAP financial measures facilitate management's internal comparisons to Quantum's historical operating results and comparisons to competitors' operating results. We report these non-GAAP financial measures because we believe that they are useful to investors by providing visibility to supplemental information used by management in its financial and operational decision-making. In addition, we have historically reported similar non-GAAP financial measures to Quantum's investors and believe that the inclusion of comparative numbers provides consistency in the company's financial reporting at this time. Investors are encouraged to review the reconciliation of the non-GAAP financial measures to their most directly comparable GAAP financial measures as provided with the financial statements.

# GAAP TO NON-GAAP RECONCILIATION OF CONSOLIDATED STATEMENTS OF OPERATIONS

	Three Months Ended			
	June 30, 2003		June 30, 2003	
	GAAP	Adjustments	Notes	Non-GAAP
Product revenue	\$ 167,187			\$ 167,187
Royalty revenue	35,028			35,028
Total revenue	202,215			202,215
Cost of revenue	138,702	(2,974)	A	135,728
Gross margin	63,513	2,974		66,487
Operating expenses:				
Research and development	26,931	(426)	A	26,505
Sales and marketing	24,171	(1,314)	A	22,857
General and administrative	14,191	(126)	A	14,065
Special charges	476	-		476
	65,769	(1,866)		63,903
Income (loss) from operations	(2,256)	4,840		2,584
Interest income and other, net	2,133			2,133
Interest expense	(6,155)			(6,155)
Income (loss) before income taxes	(6,278)	4,840		(1,438)
Income tax provision (benefit)	3,068			3,068
Net loss	\$ (9,346)	\$ 4,840		\$ (4,506)
Net loss per share - diluted	\$ (0.05)	\$ 0.02		\$ (0.03)

Special charges of \$0.5 million in the first quarter of fiscal year 2004 were not adjusted in GAAP to NonGAAP reconciliation as the amount was deemed immaterial.

# GAAP TO NON-GAAP RECONCILIATION OF CONSOLIDATED STATEMENTS OF OPERATIONS

	Three Months Ended			
	September 28, 2003		September 28, 2003	
	GAAP	Adjustments	Notes	Non-GAAP
Product revenue	\$ 162,642			\$ 162,642
Royalty revenue	32,233			32,233
Total revenue	194,875			194,875
Cost of revenue	136,718	(2,974)	A	133,744
Gross margin	58,157	2,974		61,131
Operating expenses:				
Research and development	26,196	(426)	A	25,770
Sales and marketing	24,801	(1,314)	A	23,487
General and administrative	12,931	(126)	A	12,805
Special charges	3,100	(3,100)		-
	67,028	(4,966)		62,062
Income (loss) from operations	(8,871)	7,940		(931)
Interest income and other, net	2,913			2,913
Interest expense	(5,399)			(5,399)
Loss on debt extinguishment	(2,565)	2,565		-
Income (loss) before income taxes	(13,922)	10,505		(3,417)
Income tax provision (benefit)	24,186	(21,262)	B	2,924
Net loss	\$ (38,108)	\$ 31,767		\$ (6,341)
Net loss per share - diluted	\$ (0.22)	\$ 0.18		\$ (0.04)

# GAAP TO NON-GAAP RECONCILIATION OF CONSOLIDATED STATEMENTS OF OPERATIONS

Three Months Ended

	December 28, 2003			December 28, 2003	
	GAAP	Adjustments	Notes	Non-GAAP	
Product revenue	\$ 171,900			\$	171,900
Royalty revenue	33,483				33,483
Total revenue	205,383				205,383
Cost of revenue	140,322	(2,974)	A		137,348
Gross margin	65,061	2,974			68,035
Operating expenses:					
Research and development	24,373	(430)	A		23,943
Sales and marketing	24,163	(874)	A		23,289
General and administrative	13,391	(125)	A		13,266
Special charges	4,584	(4,584)			-
	66,511	(6,013)			60,498
Income (loss) from operations	(1,450)	8,987			7,537
Interest income and other, net	527				527
Interest expense	(2,893)				(2,893)
Income (loss) before income taxes	(3,816)	8,987			5,171
Income tax provision (benefit)	2,660				2,660
Income (loss) from continuing operations	(6,476)	8,987			2,511
Discontinued operations:					
Results of NAS discontinued operations, net of income taxes	1,043	(1,043)			-
Income from discontinued operations	1,043	(1,043)			-
Net income (loss)	\$ (5,433)	\$ 7,944		\$	2,511
Net income (loss) per share - diluted	\$ (0.03)	\$ 0.04		\$	0.01

# GAAP TO NON-GAAP RECONCILIATION OF CONSOLIDATED STATEMENTS OF OPERATIONS

Three Months Ended

	March 31, 2004			March 31, 2004
	GAAP	Adjustments	Notes	Non-GAAP
Product revenue	\$ 175,530			\$ 175,530
Royalty revenue	30,381			30,381
Total revenue	205,911			205,911
Cost of revenue	140,983	(2,974)	A	138,009
Gross margin	64,928	2,974		67,902
Operating expenses:				
Research and development	25,971	(420)	A	25,551
Sales and marketing	24,709	(874)	A	23,835
General and administrative	14,311	(126)	A	14,185
Special charges	7,052	(7,052)		-
Purchased in-process research and development	-	-		-
	72,043	(8,472)		63,571
Income (loss) from operations	(7,115)	11,446		4,331
Interest income and other, net	3,344			3,344
Interest expense	(3,170)			(3,170)
Income (loss) before income taxes	(6,941)	11,446		4,505
Income tax provision (benefit)	2,844	-		2,844
Income (loss) from continuing operations	(9,785)	11,446		1,661
Discontinued operations:				
Results of NAS discontinued operations, net of income taxes	650	(650)		-
Income from discontinued operations	650	(650)		-
Net income (loss)	\$ (9,135)	\$ 10,796		\$ 1,661
Net income (loss) per share - diluted	\$ (0.05)	\$ 0.06		\$ 0.01

# GAAP TO NON-GAAP RECONCILIATION OF CONSOLIDATED STATEMENTS OF OPERATIONS

	Twelve Months Ended			
	March 31, 2004		March 31, 2004	
	GAAP	Adjustments	Notes	Non-GAAP
Product revenue	\$ 677,259			\$ 677,259
Royalty revenue	131,125			131,125
Total revenue	808,384			808,384
Cost of revenue	556,725	(11,896)	A	544,829
Gross margin	251,659	11,896		263,555
Operating expenses:				
Research and development	103,471	(1,702)	A	101,769
Sales and marketing	97,844	(4,376)	A	93,468
General and administrative	54,824	(503)	A	54,321
Special charges	15,212	(14,736)		476
	271,351	(21,317)		250,034
Income (loss) from operations	(19,692)	33,213		13,521
Interest income and other, net	8,917			8,917
Interest expense	(17,617)			(17,617)
Loss on debt extinguishment	(2,565)	2,565		-
Income (loss) before income taxes	(30,957)	35,778		4,821
Income tax provision (benefit)	32,758	(21,262)	B	11,496
Income (loss) from continuing operations	(63,715)	57,040		(6,675)
Discontinued operations:				
Results of NAS discontinued operations, net of income taxes	1,693	(1,693)		-
Loss from discontinued operations	1,693	(1,693)		-
Net income (loss)	\$ (62,022)	\$ 55,347		\$ (6,675)
Net income (loss) per share - diluted	\$ (0.35)	\$ 0.31		\$ (0.04)

## GAAP TO NON-GAAP RECONCILIATION OF CONSOLIDATED STATEMENTS OF OPERATIONS

### Notes

- A. Amortization of intangible assets.
- B. Valuation charge against net deferred tax assets.



## ITEM 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

Not applicable.

### ITEM 9A. Controls and Procedures

- (a) *Evaluation of disclosure controls and procedures.* Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, as of the end of the period covered by this report (the "Evaluation Date"). Based on this evaluation, our principal executive officer and principal financial officer concluded as of the Evaluation Date that our disclosure controls and procedures were effective such that the information relating to Quantum, including our consolidated subsidiaries, required to be disclosed in our Securities and Exchange Commission ("SEC") reports (i) is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, and (ii) is accumulated and communicated to Quantum's management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.
- (b) *Changes in internal controls.* There were no significant changes in the Company's internal controls or in other factors that could significantly affect these controls subsequent to the date of their evaluation. There were no significant deficiencies or material weaknesses, and therefore there were no corrective actions taken.

#### Non-Audit Services of Independent Auditors

Sections 201 and 202 of the Sarbanes-Oxley Act of 2002, signed into law on July 30, 2002, require that all audit services and non-audit services by Quantum's independent auditors, Ernst & Young LLP, must be pre-approved by the Company's Audit Committee. Furthermore, the Act prohibits an auditor from performing certain non-audit services for an audit client regardless of the Audit Committee's approval, subject to certain exceptions issued by the Public Company Accounting Oversight Board.

All services performed by Ernst & Young LLP in the fiscal year 2004 were approved by the Audit Committee of the Company, consistent with Quantum's internal policy.

## PART III

### ITEM 10. Directors and Executive Officers of the Registrant

The information required by this item with respect to Quantum's directors, audit committee and audit committee financial expert is incorporated by reference to the information set forth in Quantum's proxy statement for the 2004 Annual Meeting of Stockholders to be filed with the Commission within 120 days after the end of Quantum's fiscal year ended March 31, 2004. For information pertaining to executive officers of Quantum, refer to the "Executive Officers of Quantum Corporation" section of Part I, Item 1 of this Annual Report on Form 10-K.

We have adopted a code of ethics that applies to our principal executive officer and all members of our finance department, including the principal financial officer and principal accounting officer. This code of ethics is posted on our Website. The Internet address for our Website is <http://www.quantum.com>, and the code of ethics may be found by clicking "About Us" from the home page, selecting "Investor Relations" and then choosing "Corporate Governance."

We intend to satisfy the disclosure requirement under Item 10 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, at the address and location specified above.

We have adopted Corporate Governance Principles, which are available on our website at <http://www.quantum.com>, where they may be found by clicking "About Us" from the home page, selecting "Investor Relations" and then choosing "Corporate Governance." Copies of our Corporate Governance Principles are available free upon request by a stockholder. The charters of our Audit Committee, Leadership and Compensation Committee and Corporate Governance and Nominating Committee are also available on our website at <http://www.quantum.com>, where they may be found by clicking "About Us" from the home page, selecting "Investor Relations" and then choosing "Corporate Governance." Copies of these committee charters are available free upon request by a stockholder.

### ITEM 11. Executive Compensation

The information required by this item is incorporated by reference to the information set forth in Quantum's proxy statement for the 2004 Annual Meeting of Stockholders to be filed with the Commission within 120 days after the end of Quantum's fiscal year ended March 31, 2004.

### ITEM 12. Security Ownership of Certain Beneficial Owners and Management

The following discloses Quantum's equity compensation plan information as required by SEC Release 33-8048:

	Year ended March 31, 2004		
	Number of shares to be issued upon exercise of outstanding options (5)	Weighted- average exercise price of outstanding options (2)	Number of shares remaining available for future issuance (2) (5)
Stock Plans approved by stockholders (1) (4) .....	27,152	\$ 6.27	39,879
Stock Plans not approved by stockholders (3) .....	<u>6,703</u>	\$ 6.89	<u>10,724</u>
	<u>33,855</u>		<u>50,603</u>

- (1) The 1993 Long-Term Incentive Plan provides for an annual increase to the number of shares available under the Plan equal to 4% of the total number of shares of Quantum Corporation common stock outstanding as at the end of the respective fiscal year.
- (2) Does not include purchase rights accruing under the Employee Stock Purchase Plan for offerings beginning after January 23, 2004, the number and exercise price of which are not determinable until the expiration of such offering periods.
- (3) The Supplemental Stock Option Plan ("SSOP") was terminated effective April 1, 2003, from which time no new stock options or stock purchase rights will be granted under this Plan. Outstanding stock options or stock purchase rights granted under the SSOP prior to April 1, 2003, shall remain outstanding and continue to be governed by the terms and conditions of the SSOP, which will remain in effect with respect to these outstanding stock options or stock purchase rights.
- (4) The Employee Stock Purchase Plan provides for an annual increase (beginning on April 1, 2002) to the number of shares available under the Plan equal to the lesser of (a) 5,000,000 shares, (b) 2% of the shares outstanding on the date of the increase or (c) a lesser amount, as determined by the Board. The annual increase under the Plan continues until April 1, 2005.
- (5) In thousands.

The Board adopted the Supplemental Stock Option Plan in fiscal year 2000 and approved amendments to the SSOP in May 2001. The Company's stockholders did not approve the SSOP. The SSOP was terminated effective April 1, 2003. Accordingly, no new awards will be granted under the SSOP after that date. All outstanding awards will continue to be governed by the terms of the SSOP. The SSOP provided for the grant of non-statutory stock options and stock purchase rights to our employees and consultants. However, our officers and members of our Board of Directors were not eligible for awards under the SSOP. The administrator of the SSOP (either the Board of Directors or a committee appointed by the Board) determined the terms and conditions of all options and stock purchase rights granted, including the exercise price and vesting schedule. In the event of our change in control (including a merger with or into another corporation or the sale of substantially all of our assets), each outstanding option and stock purchase right shall become fully exercisable if not assumed or substituted for by the successor corporation. Prior to its termination, a total of 12.6 million of our shares of common stock were reserved for issuance under the SSOP.

The remaining information required by this item is incorporated by reference from Quantum's proxy statement for the 2004 Annual Meeting of Stockholders to be filed with the Commission within 120 days after the end of Quantum's fiscal year ended March 31, 2004.

#### **ITEM 13. Certain Relationships and Related Transactions**

The information required by this item is incorporated by reference to the information set forth in Quantum's proxy statement for the 2004 Annual Meeting of Stockholders to be filed with the Commission within 120 days after the end of Quantum's fiscal year ended March 31, 2004.

With the exception of the information incorporated in Items 10, 11, 13 and 14 of this Annual Report on Form 10-K, Quantum's definitive Proxy Statement for Quantum's 2004 Annual Meeting of Stockholders is not deemed "filed" as part of this Annual Report on Form 10-K.

## ITEM 14. Principal Accounting Fees and Services

The information required by this item is incorporated by reference to the information set forth in Quantum's proxy statement for the 2004 Annual Meeting of Stockholders to be filed with the Commission within 120 days after the end of Quantum's fiscal year ended March 31, 2004.

## PART IV

## ITEM 15. Exhibits, Financial Statement Schedules and Reports on Form 8-K

Upon written request, Quantum will provide, without charge, a copy of Quantum's Annual Report on Form 10-K, including the Consolidated Financial Statements, financial statement schedules and any exhibits for Quantum's most recent fiscal year. All requests should be sent to:

Investor Relations  
Quantum Corporation  
1650 Technology Drive Suite 800  
San Jose, California 95110  
408-944-4450

(a) The following documents are filed as a part of this Report:

1. **Financial Statements**—The Consolidated Financials Statements of Quantum Corporation are listed in the Index to Consolidated Financial Statements.
2. **Financial Statement Schedules**—The consolidated valuation and qualifying accounts (Schedule II) financial statement schedule of Quantum Corporation is listed in the Index to Consolidated Financial Statements. All other schedules have been omitted because the information required to be set forth therein is not applicable or is shown in the Consolidated Financial Statements or the notes hereto.
3. **Exhibits**

<b><u>Exhibit Number</u></b>	<b><u>Exhibit</u></b>
3.1(1)	Amended and Restated Certificate of Incorporation of Registrant
3.2(2)	Amended and Restated By-laws of Registrant, as amended
3.3 (3)	Amendment to Amended and Restated By-laws of Registrant, effective April 23, 2003
3.4 (4)	Certificate of Designation of Rights, Preferences and Privileges of Series B Junior Participating Preferred Stock
4.1(5)	Amended and Restated Preferred Shares Rights Agreement between the Registrant and Harris Trust and Savings Bank
4.2(6)	First Amendment to the Amended and Restated Preferred Shares Rights Agreement and Certification Of Compliance With Section 27 Thereof, dated as of October 28, 2002
4.3(6)	Stockholder Agreement, dated as of October 28, 2002, by and between Registrant and Private Capital Management
10.1(3)	Form of Indemnification Agreement between Registrant and the Named Executive Officers and Directors
10.2(3)	Form of Executive Change of Control Agreement between Registrant and the Named Executive Officers (other than the Chief Executive Officer)
10.3(3)	Form of Chief Executive Officer Change of Control Agreement between Registrant and the Chief Executive

Officer

- 10.4(3) Form of Director Change of Control Agreement between Registrant and the Directors
- 10.5(7) 1993 Long-Term Incentive Plan
- 10.6(6) Amendment No. 1 to 1993 Long-Term Incentive Plan
- 10.7(7) 1993 Long-Term Incentive Plan Form of Stock Option Agreement
- 10.8(8) Nonemployee Director Equity Incentive Plan
- 10.9 Nonemployee Director Equity Incentive Plan -- Form of Restricted Stock Agreement
- 10.10(1) Employee Stock Purchase Plan
- 10.11(9) Amendment No. 1 to the Employee Stock Purchase Plan, dated May 1, 2002
- 10.12 Letter Agreement, dated December 16, 2003, between Registrant and George Kreigeler
- 10.13 Key Leadership Performance Bonus Plan
- 10.14 Form of Award Letter for Key Leadership Performance Bonus Plan
- 10.15(6) Separation Agreement, dated as of September 3, 2002, between Registrant and Michael A. Brown
- 10.16(6) Employment Agreement, dated as of September 3, 2002, between Registrant and Michael A. Brown
- 10.17(10) Separation Agreement, dated as of July 23, 2003, between Registrant and Barbara H. Nelson
- 10.18(10) Employment Agreement, dated as of September 25, 2003, between Registrant and Jerald L. Maurer
- 10.19(4) Indenture, dated as of July 30, 2003, between Registrant and U.S. Bank National Association, related to the Registrant's convertible debt securities
- 10.20(4) Resale Registration Rights Agreement, dated July 30, 2003, between Registrant, Lehman Brothers Inc., Morgan Stanley & Co. Incorporated and McDonald Investments Inc.
- 10.21(11) Credit Agreement, dated as of December 17, 2002, by and among Registrant, each lender, and Keybank National Association, as Administrative Agent and Issuing Lender
- 10.22(10) First Amendment, dated as of January 31, 2003, to Credit Agreement, dated as of December 17, 2002, by and among Registrant, each Lender, and Keybank National Association, as Administrative Agent, Issuing Lender and Lender
- 10.23(10) Second Amendment, dated as of July 21, 2003, to Credit Agreement, dated as of December 17, 2002, by and among Registrant, each Lender, and Keybank National Association, as Administrative Agent, Issuing Lender and Lender
- 10.24 Third Amendment, dated as of March 30, 2004, to Credit Agreement, dated as of December 17, 2002, by and among Registrant, each Lender, and Keybank National Association, as Administrative Agent, Issuing Lender and Lender
- 10.25(11) Master Lease, Deed of Trust with Absolute Assignment of Leases and Rents, Security Agreement and Fixture Filing, dated as of December 17, 2002, between Selco Service Corporation, as Lessor, and Registrant, as Lessee
- 10.26(17) First Amendment, dated January 31, 2003, to Master Lease, Deed of Trust with Absolute Assignment of Leases and Rents, Security Agreement and Fixture Filing, dated as of December 17, 2002, between Selco Service Corporation, as Lessor, and Registrant, as Lessee
- 10.27(17) Second Amendment, dated July 21, 2003, to Master Lease, Deed of Trust with Absolute Assignment of Leases

	and Rents, Security Agreement and Fixture Filing, dated as of December 17, 2002, between Selco Service Corporation, as Lessor, and Registrant, as Lessee
10.28	Third Amendment, dated March 30, 2004, to Master Lease, Deed of Trust with Absolute Assignment of Leases and Rents, Security Agreement and Fixture Filing, dated as of December 17, 2002, between Selco Service Corporation, as Lessor, and Registrant, as Lessee
10.29(11)	Participation Agreement, dated as of December 17, 2002, by and among Registrant, as Lessee, Selco Service Corporation, as Lessor, Comerica Bank-California, Fleet National Bank and Keybank National Association, as Participants, and Keybank National Association, as Agent for the Participants
10.30(10)	First Amendment, dated as of January 31, 2003, to Participation Agreement, dated as of December 17, 2002, by and among Registrant, as Lessee, Selco Service Corporation, as Lessor, Comerica Bank-California, Fleet National Bank and Keybank National Association, as Participants, and Keybank National Association, as Agent for the Participants
10.31(10)	Second Amendment, dated as of July 21, 2003, to Participation Agreement, dated as of December 17, 2002, by and among Registrant, as Lessee, Selco Service Corporation, as Lessor, Comerica Bank-California, Fleet National Bank and Keybank National Association, as Participants, and Keybank National Association, as Agent for the Participants
10.32	Third Amendment, dated as of March 30, 2004, to Participation Agreement, dated as of December 17, 2002, by and among Registrant, as Lessee, Selco Service Corporation, as Lessor, Comerica Bank-California, Fleet National Bank and Keybank National Association, as Participants, and Keybank National Association, as Agent for the Participants
10.33(12)	Industrial Lease, dated as of July 17, 1998, between The Irvine Company as lessor, and ATL Products, Inc. as lessee
10.34(13)	Amended and Restated Agreement and Plan of Merger and Reorganization dated as of October 3, 2000 by and among Registrant, Maxtor Corporation, Insula Corporation and Hawaii Corporation (excluding exhibits)
10.35(6)	Asset Purchase Agreement, dated as of August 29, 2002, by and between Quantum Peripherals (M) Sdn. Bhd. and Jabil Circuit Sdn. Bhd.
10.36(11)	Master Supply Agreement, dated as of December 10, 2002, between Registrant and Jabil Circuit, Inc.
10.37(14)	Amendment, dated as of April 1, 2003, to Master Supply and Intellectual Property License Agreement, dated December 10, 2002, between Registrant and Jabil Circuit, Inc.
10.38***	Amendment No. 2, dated as of December 23, 2003, to Master Supply and Intellectual Property License Agreement, dated December 10, 2002, between Registrant and Jabil Circuit, Inc.
10.39(11)	Repair Services Agreement, dated as of December 10, 2002, between Registrant and Jabil Circuit, Inc.
10.40(11)	Transition Services Agreement, dated as of December 10, 2002, between Registrant and Jabil Circuit, Inc.
10.41(6)	Agreement and Plan of Merger, dated as of September 5, 2002, by and among Registrant, Benchmark Storage Innovations, Inc. and Jesse Aweida, as Stockholders' Agent
10.42(6)	First Amendment to Agreement and Plan of Merger, dated as of November 1, 2002, by and among Registrant, Benchmark Storage Innovations, Inc. and Jesse Aweida, as Stockholders' Agent
10.43(15)	Asset Purchase Agreement, by and between Registrant and Broadband Storage, Inc., dated as of October 7, 2002, as amended on October 28, 2002
10.44(16)	Agreement and Plan of Merger dated February 4, 2003 by and among the Registrant, the Registrant's wholly-owned subsidiary QSL Acquisition Corporation, SANlight, Inc., Mark Kaleem and Lloyd Alan Poston
12.1	Ratio of Earnings to Fixed Charges.
21	Quantum Subsidiaries

- 23.1 Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm..
- 24 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

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\*\*\*Confidential treatment has been requested for omitted portions.

- 1. Incorporated by reference to Registrant's Annual Report on Form 10-K for fiscal year ended March 31, 2001 filed with the Securities and Exchange Commission on June 29, 2001.
- 2. Incorporated by reference to Registrant's Annual Report on Form 10-K for fiscal year ended March 31, 2000 filed with the Securities and Exchange Commission on June 28, 2000.
- 3. Incorporated by reference to Registrant's Annual Report on Form 10-K for fiscal year ended March 31, 2003 filed with the Securities and Exchange Commission on June 30, 2003.
- 4. Incorporated by reference to Registrant's Registration Statement on Form S-3 filed with the Securities and Exchange Commission on October 9, 2003.
- 5. Incorporated by reference to Registrant's Registration Statement on Form S-4, Amendment No.2, filed with the Securities and Exchange Commission on June 10, 1999.
- 6. Incorporated by reference to Registrant's Form 10-Q for the quarterly period ended September 29, 2002 filed with the Securities and Exchange Commission on November 13, 2002.
- 7. Incorporated by reference to Registrant's Schedule TO filed with the Securities and Exchange Commission on June 4, 2001.
- 8. Incorporated by reference to Registrant's Schedule 14A filed with the Securities and Exchange Commission on July 21, 2003.
- 9. Incorporated by reference to Registrant's Annual Report on Form 10-K for fiscal year ended March 31, 2002 filed with the Securities and Exchange Commission on July 1, 2002.
- 10. Incorporated by reference to Registrant's Form 10-Q for the quarterly period ended September 28, 2003 filed with the Securities and Exchange Commission on November 12, 2003.
- 11. Incorporated by reference to Registrant's Form 10-Q for the quarterly period ended December 29, 2002 filed with the Securities and Exchange Commission on February 12, 2003.
- 12. Incorporated by reference to Registrant's Form 10-Q for the quarterly period ended December 27, 1998 filed with the Securities and Exchange Commission on February 9, 1999.
- 13. Incorporated by reference to Registrant's Form 10-Q for the quarterly period ended December 31, 2000 filed with the Securities and Exchange Commission on February 14, 2001.
- 14. Incorporated by reference to Registrant's Form 10-Q/A for the quarterly period ended December 28, 2003 filed with the Securities and Exchange Commission on February 20, 2004.
- 15. Incorporated by reference to Registrant's Form 8-K filed with the Securities and Exchange Commission on November 12, 2002.
- 16. Incorporated by reference to Registrant's Registration Statement on Form S-3 filed with the Securities and Exchange Commission on March 7, 2003.
- 17. Incorporated by reference to Registrant's Form 10-Q for the quarterly period ended September 28, 2003 filed with the Securities and Exchange Commission on November 12, 2003 (filed as Attachment 1 to Exhibits 10.6 and 10.8 to such Form 10-Q).

(b) Reports on Form 8-K:

Registrant filed the following Current Report on Form 8-K during the three months ended March 31, 2004:

On February 2, 2004, Registrant filed a Current Report on Form 8-K, reporting its earnings results for the quarter ended December 28, 2003.

On May 3, 2004, Registrant filed a Current Report on Form 8-K, reporting its earnings results for the quarter ended March 31, 2004.

(c) Exhibits: See Item 15(a) above.

(d) Financial Statement Schedules: See Item 15(a) above.



## SIGNATURES

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/ MICHAEL J. LAMBERT

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**Michael J. Lambert**  
**Chief Financial Officer**

Dated: June 14, 2004

## POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Richard E. Belluzzo and Michael J. Lambert, 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 and on June 14, 2004.

<u>Signature</u>	<u>Title</u>
<u>/s/ Richard E. Belluzzo</u> <b>Richard E. Belluzzo</b>	Chairman of the Board and Chief Executive Officer (Principal Executive Officer)
<u>/s/ MICHAEL J. LAMBERT</u> <b>Michael J. Lambert</b>	Executive Vice President, Finance and Chief Financial Officer (Principal Financial and Accounting Officer)
<u>/s/ Michael A. Brown</u> <b>Michael A. Brown</b>	Director
<u>/s/ DAVID A. BROWN</u> <b>David A. Brown</b>	Director
<u>/s/ ALAN L. EARHART</u> <b>Alan L. Earhart</b>	Director
<u>/s/ EDWARD M. ESBER, JR</u> <b>Edward M. Esber, Jr</b>	Director
<u>/s/ KEVIN J. KENNEDY</u> <b>Kevin J. Kennedy</b>	Director
<u>/s/ EDWARD J. SANDERSON, Jr.</u> <b>Edward J. Sanderson, Jr.</b>	Director
<u>/s/ GREGORY W. SLAYTON</u> <b>Gregory W. Slayton</b>	Director
<u>/s/ STEVEN C. WHEELRIGHT</u> <b>Steven C. Wheelright</b>	Director

EXHIBIT 31.1  
CERTIFICATION PURSUANT TO SECTION 302(a)  
OF THE SARBANES-OXLEY ACT OF 2002

I, Richard Belluzzo, certify that:

- 1) I have reviewed this annual report on Form 10-K of Quantum Corporation;
- 2) Based on my knowledge, this annual 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 annual report;
- 3) Based on my knowledge, the financial statements, and other financial information included in this annual 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 annual report;
- 4) The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e)4 and 15d-15(e)4) 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 annual report is being prepared;
  - b) 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 annual report based on such evaluation; and
  - c) disclosed in this annual report any change in the registrant's internal control over financial reporting that occurred during the registrant's fourth fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting;
- 5) The registrant's other certifying officers 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 controls over financial reporting.

Date: June 14, 2004

/s/ Richard E. Belluzzo

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Richard E. Belluzzo  
Chief Executive Officer

EXHIBIT 31.2  
CERTIFICATION PURSUANT TO SECTION 302(a)  
OF THE SARBANES-OXLEY ACT OF 2002

I, Michael J. Lambert, certify that:

- 1) I have reviewed this annual report on Form 10-K of Quantum Corporation;
- 2) Based on my knowledge, this annual 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 annual report;
- 3) Based on my knowledge, the financial statements, and other financial information included in this annual 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 annual report;
- 4) The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) 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 annual report is being prepared;
  - b) 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 annual report based on such evaluation; and
  - c) disclosed in this annual report any change in the registrant's internal control over financial reporting that occurred during the registrant's fourth fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting;
- 5) The registrant's other certifying officers 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: June 14, 2004

/s/ Michael J. Lambert

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Michael J. Lambert  
Executive Vice President, Finance and  
Chief Financial Officer

**Exhibit 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**

I, Richard Belluzzo, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Annual Report of Quantum Corporation, on Form 10-K for the fiscal year ended March 31, 2004 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, and that information contained in such Annual Report on Form 10-K fairly presents in all material respects the financial condition and results of operations of Quantum Corporation.

QUANTUM CORPORATION

/s/ RICHARD E. BELLUZZO

**Richard E. Belluzzo**  
**Chief Executive Officer**

**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**

I, Michael Lambert, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Annual Report of Quantum Corporation, on Form 10-K for the fiscal year ended March 31, 2004 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, and that information contained in such Annual Report on Form 10-K fairly presents in all material respects the financial condition and results of operations of Quantum Corporation.

QUANTUM CORPORATION

/s/ MICHAEL J. LAMBERT

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Michael J. Lambert  
Chief Financial Officer