LSI CORP
Form 10-K
March 02, 2009

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

Form 10-K

(Mark One)

þ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the Fiscal Year Ended December 31, 2008

OR

o **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the transition period from to .

Commission File No. 1-10317
LSI CORPORATION
(Exact name of registrant as specified in its charter)

DELAWARE	**94-2712976**
(State or other jurisdiction of incorporation or organization)	*(IRS Employer Identification No.)*

1621 Barber Lane
Milpitas, California 95035
(Address of principal executive offices) (Zip Code)

Registrant s telephone number, including area code:
(408) 433-8000

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

Title of Each Class	**Name of Each Exchange on Which Registered**
Common Stock, $0.01 par value	New York Stock Exchange

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

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes þ No o

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes o No þ

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 þ No o

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. o

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company . See definition of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act (check one):

Large Accelerated Filer **þ** Accelerated Filer **o** Non-accelerated Filer **o** Smaller reporting company **o**
(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes o No þ

The aggregate market value of the voting and non-voting common stock held by non-affiliates of the registrant as of June 29, 2008 was approximately $4.1 billion, based on the reported last sale price on the New York Stock Exchange of such equity on the last business day of the fiscal quarter ending on such date.

As of February 20, 2009, 648,135,650 shares of common stock were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Certain information required by Part III of this report is incorporated by reference from the registrant s proxy statement to be filed pursuant to Regulation 14A with respect to the registrant s 2009 annual meeting of stockholders.

LSI Corporation
Form 10-K
For the Year Ended December 31, 2008

FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. The words estimate, plan, intend,

expect, anticipate, believe and similar words are intended to identify forward-looking statements. Although we believe our expectations are based on reasonable assumptions, our actual results could differ materially from those projected in the forward-looking statements. We have described in Part I, Item 1A- Risk Factors a number of factors that could cause our actual results to differ from our projections or estimates. Except where otherwise indicated, the statements made in this report are made as of the date we filed this report with the Securities and Exchange Commission and should not be relied upon as of any subsequent date. We expressly disclaim any obligation to update the information this report, except as may otherwise be required by law.

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PART I

Item 1. *Business*

General

We design, develop and market complex, high-performance semiconductors and storage systems. We provide silicon-to-system solutions that are used at the core of products that create, store, consume and transport digital information. We offer a broad portfolio of capabilities including custom and standard product integrated circuits used in hard disk drives, high-speed communications systems, computer servers, storage systems and personal computers. We also offer external storage systems and host bus adapter boards and software applications for attaching storage devices to computer servers and for storage area networks.

Integrated circuits, also called semiconductors or chips, are made using semiconductor wafers imprinted with a network of electronic components. They are designed to perform various functions such as processing electronic signals, controlling electronic system functions and processing and storing data.

Our business is currently focused on providing integrated circuits for storage and networking applications and on providing storage systems and related boards and software. Since the beginning of 2007, we have completed the following actions as part of our efforts to focus on those areas:

On March 13, 2007, we completed the acquisition of SiliconStor, Inc., a provider of semiconductor solutions for enterprise storage networks. SiliconStor s products support the serial attached-SCSI, or SAS, and serial advanced technology attachment, or SATA, standards for connecting hard disks to computers and enabled our Storage semiconductor business to offer a more complete line of products.

On April 2, 2007, we acquired Agere Systems Inc., a provider of integrated circuit solutions for a variety of communications and computing applications. Agere s customers included manufacturers of hard disk drives, mobile phones, advanced communications and networking equipment and personal computers. Agere also generated revenues from the licensing of intellectual property. We believe that the Agere acquisition allowed our Storage semiconductor business to offer a broader product line and gave it additional resources, enabling it to be a stronger competitor. The acquisition also resulted in the addition of new products and resources for our Networking semiconductor business. Agere s intellectual property licensing capabilities also offered us the ability to generate more revenue from our pre-existing patents than we had generated as a stand-alone company. Following the Agere acquisition, we discontinued a number of development projects and have been reducing headcount in areas with overlap in order to achieve significant cost synergies from the acquisition.

Because our Consumer business, which provided semiconductors for consumer products such as DVD recorders, no longer had the scale necessary to be a strong competitor, we sold that business to Magnum Semiconductor, Inc., completing the sale on July 27, 2007.

We saw risk in Agere s Mobility business, which principally provided integrated circuits for mobile phones, because of the transition from one generation of technology, 2G products based on the Global Systems for Mobile Communications, or GSM, standard, to the next, 3G products based on the wideband Code Division Multiple Access, or W-CDMA, standard, and because of its limited customer base. We chose to sell that business, completing the sale to Infineon Technologies AG on October 24, 2007.

Between mid-2007 and mid-2008, we exited our semiconductor and storage systems assembly and test operations and transitioned those activities to third party contract manufacturers. We did this so that we can focus our resources and attention on our efforts to design leading-edge semiconductor and storage solutions, so that we will have a more variable cost structure and so that we will avoid the capital expenses needed for facility upgrades. We sold our semiconductor assembly and test facility in Thailand and discontinued operations at our Singapore semiconductor assembly and test facility and our Wichita, Kansas storage systems assembly and test facility.

On October 3, 2007, we acquired Tarari, Inc., a maker of silicon and software that provided content and application awareness in packet and message processing, enabling advanced security and network control

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for service provider and enterprise networks. We believe these capabilities will become increasingly important as network operators seek additional billing and security capabilities.

On April 25, 2008, we acquired the assets of Infineon s hard disk drive semiconductor business to enhance our competitive position in desktop and enterprise hard disk drives.

We operate in two segments the Semiconductor segment and the Storage Systems segment. We market our products primarily to original equipment manufacturers, or OEMs, that sell products to our target end customers. In 2008, the Semiconductor segment accounted for approximately 67.1% of our revenue and the Storage Systems segment accounted for approximately 32.9% of our revenue. You can find additional financial information about our segments and geographic financial information in Note 9 to our financial statements in Item 8. See Item 1A Risk Factors for information about risks we face as a result of our operations outside the United States.

Our Semiconductor segment designs, develops and markets highly complex integrated circuits for storage and networking applications. These solutions include both custom solutions and standard products. Custom solutions are designed for a specific application defined by the customer. Standard products are developed for market applications that we define and are sold to multiple customers. Our Storage Systems segment designs and sells enterprise storage systems. Our high-performance, highly scalable open storage systems and storage solutions are distributed through OEMs. The Storage Systems segment also offers host bus adapters; redundant array of independent disks, or RAID, adapters; software and related products and services.

Shortly after the Agere acquisition, we changed our name to LSI Corporation from LSI Logic Corporation. LSI Logic Corporation was incorporated in California on November 6, 1980, and was reincorporated in Delaware on June 11, 1987.

We maintain an Internet website at www.lsi.com. We make available free of charge on our website our annual reports on Form 10-K, our quarterly reports on Form 10-Q, our current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) of the Securities Exchange Act of 1934 as soon as reasonably practicable after we electronically file such material with, or furnish it to, the U.S. Securities and Exchange Commission. You can read any materials that we file with the Commission at the Commission s Public Reference Room at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You can obtain information on the operation of the Public Reference Room by calling the Commission at (800) 732-0330. Information on our website is not incorporated by reference into this report.

Products

SEMICONDUCTOR SEGMENT

Storage Products

Hard Disk and Tape Drive Electronics. We sell integrated circuits for hard disk and tape drive solutions, which are used to store and retrieve data in personal computers, corporate network servers, archive/back-up devices and consumer electronics products such as digital video recorders, game consoles and digital media players. A disk drive contains physical media, one or more platters that store data, a motor that spins the media, drive heads that read data from and write data to the media and electronics that process the data and control the disk drive. Tape drives store data on magnetic tape and provide a high capacity, cost effective tiered data storage back-up solution. In 2008, we began developing integrated circuits for use in solid state storage devices, which store data in flash memory instead of on a hard disk.

Our TrueStore® family of storage electronics products includes systems-on-a-chip, read channels, pre-amplifiers, serial physical interfaces and hard disk controllers as well as custom firmware. These are the critical chips required to read, write and protect data. We offer products that can be used in a variety of hard disk applications, including hard drives intended for notebook computers, desktop computers and enterprise computers, and in tape drives.

A storage system-on-a-chip, or SoC, is an integrated circuit that combines the functionality of a read channel, serial interface, memory and a hard disk controller in a small, high-performance, low-power and cost-effective package.

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Read channels convert analog signals that are generated by reading the stored data on the physical media into digital signals. Analog refers to a transmission technique employing a continuous signal that varies in amplitude, frequency or phase of the transmission. Digital refers to a method of transmitting, storing and processing data that uses distinct electronic or optical pulses to represent the binary digits 0 and 1. We also sell pre-amplifiers, or preamps, which are used to amplify the initial signal to and from the drive disk heads so the signal can be processed by the read channel. We provide similar technology for tape drives. Our hard disk controllers are used to control signal processing and communications functions within the disk drive.

Storage Interface Products. We also offer solutions that make possible data transmission between a host computer and storage peripheral devices such as magnetic and optical disk drives and disk and tape-based storage systems. These products include:

Storage Standard Products. Our product line includes SAS, SATA and RAID-On-Chip, or RoC, integrated circuits combined with our Fusion-MPT™ firmware and drivers to form intelligent storage interface solutions primarily for server and storage system motherboard applications. Additionally, our product line includes SCSI, SAS and SATA bus expander integrated circuits, Fibre Channel integrated circuits, SAS switches, and disk drive bridging or interposer circuits used primarily in storage systems. We sell our integrated circuit solutions both in an integrated circuit plus software form or as a complete solution including the host bus adapter board itself.

Storage Custom Solutions. We also offer custom solutions to customers who develop Fibre Channel and Fibre Channel over Ethernet storage area network, or SAN, switches and host bus adapters, storage systems, hard disk drives and tape peripherals. By leveraging our extensive experience in providing solutions for these applications, we have developed a full portfolio of high-speed interface intellectual property that is combined with our customers intellectual property to form custom solutions that provide a connection to the network, the SAN, memory systems and host buses. Using these pre-verified interfaces, our customers can reduce development risk and achieve quicker time to market. Our intellectual property offerings include high performance SerDes cores supporting Fibre Channel, SAS, SATA, 10-Gigabit Ethernet, Gigabit Ethernet, Infiniband, SAS, Serial RapidIO and PCI-Express industry standards and a family of high-performance Fibre Channel, Ethernet, RapidIO, PCI-E, SAS and SATA protocol controllers.

Networking Products

We offer comprehensive solutions that allow networking service providers to deliver a variety of highly reliable communications services to homes, businesses and mobile users over Internet Protocol, or IP, networks. IP networks are packet based. In an IP network, packets of data that are part of the same telephone conversation or video program can be routed over different paths. Traditional telephone networks are circuit-based where all data packets follow the same dedicated path or circuit. Historically, the dedicated paths in circuit-based networks have provided greater reliability than packet-based networks, although at the cost of flexibility.

Our networking solutions are designed to enable IP networks to provide reliability similar to that of circuit-based networks and incorporate quality of service features that allow more critical data to receive priority over less critical data. For example, packets containing data about a television picture, where a delayed packet can mean a noticeable flaw in the picture, can be delivered before packets containing web-page data being downloaded to a personal computer, where a slight delay is less likely to be noticed.

Our networking portfolio includes solutions for carrier-managed gateways that would be used in residential, small office, home office and small-to-medium business applications. The portfolio also includes solutions for multi-service wired and wireless access systems found in carrier networks. Multi-service systems can handle traffic such as data and

video in addition to voice. Our networking solutions include chips such as our network processors, digital signal processors, content-inspection processors, traffic shaping devices and physical layer devices as well as software, evaluation systems and reference designs. Our development efforts are focused on multicore processor SoCs to deliver solutions for wireline and wireless access, media gateway, service provider and enterprise networks.

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Network Processors

Network processors are typically used in switching and routing systems to classify, prioritize and forward packets as they move through a carrier s network. We offer network processors with the ability to handle a range of data throughputs, from 200 megabits per second up to 6 gigabits per second. Megabits and gigabits are units of measurement for data. A megabit is equal to approximately one million bits and a gigabit is equal to approximately 1,000 megabits. For example, our APP2200 family provides a lower cost solution intended for systems located between the customer s premises and the carrier s local central office, where data throughput demands are lower, but the need to prioritize the packets is still critical for all services to be delivered successfully. Our APP650 is a higher throughput solution designed for use in systems that are closer to the core of a carrier s IP network, where data throughput demands are higher.

Digital Signal Processors

Digital signal processors, or DSPs, transform analog signals into digitally-encoded bitstreams and perform advanced algorithms on these bitstreams. Our DSPs perform audio, video and speech signal processing, compression and transcoding and can be used in applications including Voice-over-IP, or VoIP, business and enterprise gateways, video delivery, media gateways and wired and wireless access network equipment.

Content Inspection Processors

We offer a family of content-inspection processors, which are available as integrated circuits, boards and software acceleration components designed for network equipment, appliance and server vendors. Our Tarari® content inspection processors perform deep packet inspection at wire speeds, ranging from 100 megabits per second to over 10 gigabits per second. These products offload and accelerate applications such as anti-virus, anti-spam, intrusion prevention/detection systems, compliance, content-based routing and XML processing.

Network Traffic Aggregation and Framing Solutions

In addition to the networking products described above, we offer chips with supporting software that are designed for equipment used in metropolitan and wide area backbone telecommunications networks. That equipment can be used in both wired and wireless networks.

Broadband Aggregation Devices. Broadband is a general term that refers to high-speed data transmission. Our broadband access integrated circuits, or mappers, support data transport between central offices and enterprise sites by aggregation and termination. Aggregation refers to the combining of many low-speed, or tributary, data signals from enterprises into higher speed, or trunk, data signals for transmission to a central office. Termination refers to the separation of trunk data signals into lower-speed, tributary data signals.

Our products support data transport for T-carrier data transport in North America. T-carrier is a digital transmission service from a common carrier. We support similar services worldwide. These services are referred to as J-carrier in Japan and E-carrier in Europe. T-carrier services such as T1 and T3 lines are widely used to create point-to-point networks for use by enterprises. T1 and T3 lines refer to different levels of T-carrier service that transmit data at 1.544 megabits per second and 44.736 megabits per second, respectively.

SONET/SDH Network Devices. Synchronous optical networks, which are typically referred to as SONET, and synchronous digital hierarchy standard networks, or SDH, carry data, voice and video traffic through a network by combining lines carrying traffic at slower speeds with lines carrying traffic at higher speeds. This process is known as multiplexing, and involves directing traffic from the individual lines into designated time slots in the higher speed

lines, and directing those lines into still higher speed lines. The SONET/SDH equipment that handles the directing of traffic into slower speed and faster speed lines is the add-drop multiplexer. Add-drop multiplexers handle the addition and removal of traffic from a SONET/SDH communication transmission. We offer single-chip integrated circuit solutions called framers, for add-drop multiplexing of data and voice traffic. In addition, our framers are used in high-speed routers within optical networks. A router is an interface, or link, between two networks.

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Personal Connectivity Solutions

We sell high speed input/output products primarily to manufacturers of computers, peripheral equipment and communications equipment. Input/output refers to the transfer of data within and between computers; peripheral equipment, such as printers, scanners and digital cameras; and data networks. Our products support established connectivity and transmission standards known as Gigabit Ethernet, IEEE-1394, and Universal Serial Bus or USB.

In addition, we sell integrated circuits and associated software for modem products, primarily to leading manufacturers of personal computers, notebook computers, point-of-sale terminals, facsimile machines, multi-function printers, cable and satellite set-top boxes and other electronic equipment.

Other Networking Products

We also sell integrated circuits that are custom developed for our customers. These integrated circuits incorporate our intellectual property or combine our intellectual property with the intellectual property of our customers or other third parties to create a customized solution for these customers. For some customers, we design and manufacture the integrated circuit while the key intellectual property belongs solely to our customers.

We believe that our systems-level knowledge and integrated circuit design methodologies allow us to turn our customers design concepts into systems solutions quickly and effectively. Our intellectual property gives our customers the flexibility to customize their products to meet their individual cost and performance objectives.

STORAGE SYSTEMS SEGMENT

We offer a broad line of open, modular storage products comprised of complete systems and sub-assemblies configured from modular components, such as our storage controller modules, disk drive enclosure modules, related management software and advanced data protection software for creating local and remote copies of critical data. The modularity of our products provides our original equipment manufacturer, or OEM, customers with the flexibility to integrate our sub-assemblies with third-party components, such as disk drives, or software to form their own storage system products. Our modular product approach allows OEM customers to create highly customized storage systems that can then be integrated with value-added software and services and delivered as a complete, differentiated data storage solution to enterprises.

We design and develop storage systems, sub-assemblies and storage management software that operate within all major open operating systems, including Windows, UNIX and UNIX variants and Linux environments. We test and certify our products, both independently and jointly with our customers, with those of other hardware, networking and storage software vendors to ensure a high level of interoperability and performance. Our products are targeted at a wide variety of data storage applications, including Internet-based applications such as online transaction processing and e-commerce, data warehousing, video editing and post-production and high-performance computing.

We offer entry level and mid-range storage systems. In 2008, we introduced a new mid-range storage system platform, the Engenio 7900, which delivers enhanced performance, reliability and scalability. We also recently introduced our LSI StoreAge™ SVM suite of hardware and software products that provide virtual storage capabilities in a heterogeneous storage environment enabling customers to achieve better utilization of SAN assets.

In addition, we offer a wide spectrum of direct-attach redundant array of independent disks, or RAID, solutions as part of our MegaRAID® product family. Our MegaRAID products include single-chip RAID-on-motherboard solutions, a broad family of PCI-X and PCI Express RAID controller boards featuring SATA and SAS interfaces, and our software-based RAID products for entry level RAID data protection. All of these solutions utilize MegaRAID s fully

featured RAID software and management utilities for robust storage configuration and deployment.

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Marketing and Distribution

Semiconductor Marketing and Distribution

The semiconductor industry is highly competitive and is characterized by rapidly changing technology, short product cycles and emerging standards. Our marketing strategy requires that we forecast trends in the evolution of products and technology. We must then act upon this knowledge in a timely manner to develop competitively priced products offering superior performance or integration. As part of this strategy, we are actively involved in the formulation and adoption of critical industry standards that influence the design specifications of our products.

Our semiconductor products and design services are sold primarily through our network of direct sales and marketing and field engineering offices located in North America, Europe, Japan and elsewhere in Asia. We also work with independent component and commercial distributors and manufacturers representatives or other channel partners in North America, Europe, Japan and elsewhere in Asia. Some of our distributors possess engineering capabilities, and design and purchase both custom solutions and standard products from us for resale to their customers. Other distributors focus solely on the sale of standard products.

Storage Systems Marketing and Distribution

We sell our storage systems products and MegaRAID products to our OEM customers who sell them worldwide under their own brand identities using their sales and distribution channels. We also distribute our MegaRAID products through a network of resellers and distributors, who resell the products to end users with additional hardware, software and services, or on a standalone basis for use with existing equipment.

The products sold by our OEM partners may be integrated by the OEM with value-added services, hardware and software and delivered as differentiated complete storage solutions to enterprises. We work closely with our OEM customers and tailor these relationships to meet the diverse needs and requirements of end customers worldwide. We also provide our OEM partners with training services to enhance their abilities to sell and support our products. After receiving our training services, most of our OEM partners independently market, sell and support our products, requiring limited ongoing product support from us. We assist some of our OEM partners further by providing additional resources such as tailored, account-specific education, training, technical support and sales and marketing assistance, allowing these partners to leverage our storage products and industry expertise. By selling products through our OEM customers and leveraging their brand marketing and worldwide sales channels, we are able to address more markets, reach a greater number of enterprises, and achieve better leverage of our sales and marketing expenditures.

Our marketing efforts support our OEM customers, as well as distributors and reseller channels, with programs targeted at developing differentiated go-to-market strategies and increasing sales effectiveness. Depending on the nature of our channel customer engagement, our marketing teams offer various levels of assistance in assessing and analyzing the competitive landscape, defining product strategy and roadmaps, developing product positioning and pricing, creating product launch support materials and assisting in closing the sales process. These marketing teams carefully coordinate joint product development and marketing efforts between our customers and us to ensure that we address and effectively target enterprise requirements. We maintain sales and marketing organizations in the United States and internationally in China, France, Germany, Italy, Japan, Singapore, Sweden and the United Kingdom.

Customers

In 2008, Seagate Technology accounted for approximately 17% and International Business Machines Corporation accounted for approximately 16% of our total revenues. No other customer accounted for more than 10% of our total

revenues in 2008. We currently have a highly concentrated customer base as a result of our strategy to focus our marketing and sales efforts on select, large-volume customers. Our top 10 end customers in 2008, based on revenue, accounted for approximately 60.7% of our revenue. The loss of any of our significant customers, any substantial decline in sales to these customers, or any significant change in the timing or volume of purchases by our customers could result in lower revenues and could harm our business, financial condition or results of operations.

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Manufacturing

Semiconductor Manufacturing

The semiconductor manufacturing process begins with wafer fabrication, where a design is transferred to silicon wafers through a series of processes, including photolithography, ion implantation, deposition of numerous films and the etching of these various films and layers. Each circuit on the wafer is tested in the wafer sort operation. The good circuits are identified and the wafer is then separated into individual die. Each good die is then assembled into a package that encapsulates the integrated circuit for protection and allows for electrical connection to a printed circuit board. The final step in the manufacturing process is final test, where the finished devices undergo stringent and comprehensive testing.

Wafer fabrication is very complex and costly, and the industry trend has been towards outsourcing all or a portion of this operation to silicon foundries located throughout the world. Our wafer fabrication is performed by third-party foundries, including Taiwan Semiconductor Manufacturing Corporation, our primary foundry partner, and other foundries such as IBM and Silicon Manufacturing Partners, a joint venture owned by Chartered Semiconductor and LSI.

We also use third-party suppliers, including STATS ChipPAC and Amkor Technology, to perform final assembly and test operations for us.

We believe that using third-party manufacturing services allows us to focus on product development and increases our operational flexibility, by improving our ability to adjust manufacturing capacity in response to customer demand and to introduce new products rapidly. It also reduces our capital requirements as we do not need to spend large amounts to build and upgrade manufacturing facilities, particularly in the area of wafer fabrication, where facilities must be upgraded periodically and each upgrade tends to cost significantly more than the preceding upgrade.

Storage Systems Manufacturing

We use third-party suppliers for standard components, such as disk drives and standard computer processors, which are designed and incorporated into our products. Additionally, we outsource the manufacturing of our product components, such as printed circuit boards, chassis assemblies and enclosures, in order to take advantage of scale, quality and cost benefits afforded by using third-party manufacturing services. We also use third-party suppliers to assemble and test our storage systems products. In 2008, we discontinued assembly and test operations for storage systems and sub-assemblies at our manufacturing facility in Wichita, Kansas, and transitioned the work performed there to third-party suppliers.

The assembly of our storage system products involves integrating components and manufactured sub-assemblies into final products, which are configured and rigorously tested before being delivered to our customers. The highly modularized nature of our storage system products allows for flexible assembly and delivery models, which include build-to-order, configure-to-order, direct shipment, bulk shipment and local fulfillment services. We have implemented these models in an effort to reduce requisite lead times for delivery of our products and to enable channel customers to select from among multiple manufacturing and delivery alternatives, the methods that best complement their operations.

Our host bus adapter board products incorporate a variety of standard industry components and LSI designed components, mounted on printed circuit board assemblies. The manufacturing, assembly and test operations of LSI s host bus adapter boards are all fully outsourced to third-party suppliers to take advantage of the scale, quality and cost benefits that such manufacturing models provide. The host bus adapter boards are produced in configurations ranging

from bulk packaging of high volume units sold to the major server and workstation OEMs, to low volume products for indirect channels featuring retail packaging with software media, documentation and interconnect cables. LSI s host bus adapter boards are shipped from our third-party suppliers to our worldwide inventory hubs, directly to OEM factories, or to distributors who supply them to a variety of indirect channels in the market.

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Backlog

Semiconductor Backlog

In the Semiconductor segment, we generally do not have long-term volume purchase contracts with our customers. Instead, customers place purchase orders that are subject to acceptance by us. The timing of the design activities for which we receive payment and the placement of orders included in our backlog at any particular time is generally within the control of the customer. For example, there could be a significant time lag between the commencement of design work and the receipt of a purchase order for the units of a developed product. Also, customers may from time to time revise delivery quantities or delivery schedules to reflect their changing needs. For these reasons, we do not believe that our backlog as of any particular date is a meaningful indicator of future annual sales.

Storage Systems Backlog

Due to the nature of our business, we generally have relatively low levels of backlog in the Storage Systems segment and our quarterly revenues depend largely on orders booked and shipped within the same quarter. Consequently, we believe that backlog is not a good indicator of future sales. Because lead times for delivery of our products are relatively short, we must build products in advance of orders. This subjects us to certain risks, most notably the possibility that expected sales will not materialize, leading to excess inventory, which we may be unable to sell to our customers.

Competition

Semiconductor Competitors

The semiconductor industry is intensely competitive and characterized by constant technological change, rapid product obsolescence, evolving industry standards and price erosion. Many of our competitors are larger, diversified companies with substantially greater financial resources. Some of our competitors are also customers who have internal semiconductor design and manufacturing capacity. We also compete with smaller and emerging companies whose strategy is to sell products into specialized markets or to provide only a portion of the products and services that we offer.

Our competitors in the Semiconductor segment include Adaptec, Inc., Broadcom Corporation, Freescale, Inc., International Business Machines Corporation, Marvell Technology Group, Ltd., NEC Corporation, NetLogic Microsystems, Inc., NXP Semiconductors, PMC-Sierra, Inc., STMicroelectronics N.V. and Texas Instruments, Inc.

The principal competitive factors in the semiconductor industry include:

- design capabilities;
- differentiating product features;
- product performance characteristics;
- time to market;
- price;
- breadth of product line;

customer support;

logistics and planning systems; and

utilization of emerging industry standards.

While we believe we are competitive on the basis of all the factors listed above, we believe some of our competitors compete more favorably on the basis of price and on delivering products to market more quickly. However, we feel we are particularly strong in offering integrated solutions, broad product lines, customer support and logistics and planning systems. In addition, existing suppliers tend to have an advantage when competing for

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designs, which can make it difficult for us to win designs at new customers, even if we compete favorably on the factors identified above.

The markets into which we sell our semiconductor products are subject to severe price competition. We expect to continue to experience declines in the selling prices of our semiconductor products over the life cycle of each product. In order to offset or partially offset declines in the selling prices of our products, we continually strive to reduce the costs of products through product design changes, manufacturing process changes, yield improvements and procurement of wafers from outsourced manufacturing partners.

Storage Systems Competitors

The market for our storage system products is highly competitive, rapidly evolving and subject to changing technology, customer needs and new product introductions. We compete with products from storage system and component providers such as Adaptec, Inc., AMCC-3ware, Dot Hill Systems Corporation, Infortrend Technology Inc., XIOtech Corporation, and Xyratex Group Limited. We also compete with the internal storage divisions of existing and potential OEM customers, with large well-capitalized storage system companies such as EMC Corporation, Hitachi Data Systems and Network Appliance, Inc. and with newer competitors such as 3Par Inc., Compellent Technologies Inc. and ISILON Systems Inc.

The principal competitive factors for storage system products include:

- features and functionality;
- product performance and price;
- reliability, scalability and data availability;
- interoperability with other server, storage networking and storage system platforms;
- interoperability with industry applications, including database, email and internet content delivery systems;
- support for emerging industry and customer standards;
- levels of training, marketing and customer support;
- level of easily customizable features;
- quality and availability of supporting software;
- quality of system integration; and
- technical services and support.

Our ability to remain competitive will depend largely upon our ongoing performance in the areas of product development and customer support. To be successful in the future, we believe that we must respond promptly and effectively to the challenges of technological change and our competitors innovations by continually innovating and enhancing our product offerings. We must also continue to aggressively recruit and retain employees highly qualified and technically experienced in hardware and software development in order to achieve and maintain industry leadership in product development and support.

Patents, Trademarks and Licenses

We own or have rights to a number of patents, trademarks, copyrights, trade secrets and other intellectual property directly related to and important to our business. As of December 31, 2008, we had approximately 11,000 U.S. patents and patent applications and a number of related foreign patents and patent applications. These patents include patents related to the following technologies:

Integrated circuit and optoelectronic manufacturing processes;

A number of technologies related to storage systems;

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Consumer electronics products such as digital cameras, digital audio players, DVD players, digital televisions and personal computers;

Modems, digital signal processors, wireless communications, network processors and communication protocols; and

Optoelectronic products including lasers, optical modulators, optical receivers and optical amplifiers.

We have patents of all ages ranging from pending applications, which, if awarded, will have a duration of 20 years from their filing dates, through patents soon to expire.

We indemnify our customers for some of the costs and damages of patent infringement in circumstances where our product is the primary factor creating the customer s infringement exposure. We generally exclude coverage where infringement arises out of the combination of our products with products of others.

We protect our products and processes by asserting our intellectual property rights where appropriate and prudent. We also obtain licenses to patents, copyrights and other intellectual property rights used in connection with our business when practicable and appropriate.

Companies in the technology industry are often subject to claims of intellectual property infringement. You can find information about the impact of these types of claims in Item 1A Risk Factors. You can also find information about several legal proceedings against us that involve intellectual property claims in Note 15 to our financial statements in Item 8.

Research and Development

Our industry experiences rapid change and we must continually develop new products to remain competitive. Our research and development expenditures were $673 million, $655 million and $413 million for fiscal 2008, 2007 and 2006, respectively. Our research and development expenditures increased significantly in 2007 as a result of the Agere Systems acquisition. We anticipate that we will continue to make significant research and development expenditures to maintain our competitive position with a continuing flow of innovative products and technology.

Working Capital

Information about our working capital practices is included in Item 7 Management s Discussion and Analysis of Financial Condition and Results of Operation under the heading Financial Condition, Capital Resources and Liquidity and is incorporated herein by reference.

Environmental Regulation

Federal, state and local regulations, in addition to those of other nations, impose various environmental controls on certain chemicals and restricted substances used in semiconductor and storage products and their processing. Our facilities have been designed to comply with these regulations through the implementation of environmental, health and safety management systems. We offer products that comply with the requirements of the European Union Restriction of Hazardous Substances Directive 2002/95/EC (RoHS Directive) that was implemented on July 1, 2006 and other international environmental regulations impacting electronic equipment and components. While to date we have not experienced any material adverse impact on our business from environmental regulations, such regulations might be adopted or amended so as to impose expensive obligations on us in the future. In addition, violations of

environmental regulations including impermissible discharges or use of restricted substances could result in:

- the need for additional capital improvements to comply with such regulations or to restrict discharges or use of restricted substances;
- liability to our employees and/or third parties; and/or
- business interruptions as a consequence of permit suspensions or revocations, the granting of injunctions requested by governmental agencies or private parties, or the unintentional presence of restricted substances in our products.

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Employees

As of December 31, 2008, we had 5,488 full-time employees.

Our future success depends upon the continued service of our key technical and management personnel and upon our ability to continue to attract and retain qualified employees, particularly those highly skilled design, process and test engineers involved in the development of new products and processes. We currently have favorable employee relations, but the competition for technical personnel is intense, and the loss of key employees or the inability to hire such employees when needed could have a material adverse impact on our business and financial condition.

Seasonality

Our business is largely focused on the information technology industry. Due to seasonality in this industry, we typically expect to see stronger revenues in the second half of the year.

Item 1A. *Risk Factors*

Set forth below are risks and uncertainties that, if they were to occur, could materially adversely affect our business or could cause our actual results to differ materially from the results contemplated by the forward-looking statements in this report and other public statements we make.

We depend on a small number of customers. The loss of, or a significant reduction in revenue from, any of these customers would harm our results of operations.

A limited number of customers accounts for a substantial portion of our revenues. In 2008, Seagate and IBM, our two largest customers, represented approximately 17% and 16%, respectively, of our total revenues, and our 10 largest customers accounted for approximately 60.7% of our revenue. If any of our key customers reduced significantly or canceled its orders, our business and operating results could be significantly harmed. Because many of our semiconductor products are designed for specific customers and have long product design and development cycles, it may be difficult for us to replace key customers that reduce or cancel their existing orders for these products.

In addition, if we fail to win new product designs from our major customers, our business and results of operations may be harmed. Further, if our major customers make significant changes in scheduled deliveries, or decide to pursue the internal development of the products we sell to them, our business and results of operations may be harmed.

If we fail to keep pace with technological advances, or if we pursue technologies that do not become commercially accepted, customers may not buy our products and our results of operations may be harmed.

Many of the industry segments in which we operate are characterized by rapid technological change, changes in customer requirements, frequent new product introductions and enhancements, short product cycles and evolving industry standards. We believe that our future success will depend, in part, on our ability to improve on existing technologies and to develop and implement new ones, as well as on our ability to adopt and implement emerging industry standards in a timely manner and to adapt products and processes to technological changes. If we fail to develop new and enhanced products and technologies, if we focus on technologies that do not become widely adopted, or if new technologies that we do not offer and that compete with our technologies become widely accepted, demand for our current and planned products may be reduced.

In addition, the emergence of markets for integrated circuits may be affected by factors beyond our control. For example, we design some products to conform to current specific industry standards. If a competitor offers a product based on a standard before we are able to do so, our customers may buy our competitor s product rather than our product. Our customers may not adopt or continue to follow these standards, which would make our products less desirable to customers, and could negatively affect sales. Also, competing standards may emerge that are preferred by our customers, which could reduce sales and require us to make significant expenditures to develop new

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products. To the extent that we are not able to adapt effectively and expeditiously to new standards, our business may be harmed.

We operate in intensely competitive markets, and our failure to compete effectively would harm our results of operations.

We derive significant revenue from the sale of integrated circuits as well as storage systems. These industries are intensely competitive, and competition may increase as existing competitors enhance their product offerings and as new participants enter the market. Our competitors include large domestic and foreign companies that have substantially greater financial, technical and management resources than us. Several major diversified electronics companies offer products that compete with our products. Other competitors are specialized, rapidly growing companies that sell products into the same markets that we target. Some of our customers may also design and manufacture products internally that compete with our products. We can not provide any assurances that the price and performance of our products will be superior relative to the products of our competitors or will be sufficient to obtain business.

Increased competition may harm our revenues and margins. For example, competitors with greater financial resources may be able to offer lower prices than us, or they may offer additional products, services or other incentives that we may not be able to match. Competitors may be better able than us to respond quickly to new technologies and may undertake more extensive marketing campaigns than we do. They may also make strategic acquisitions or establish cooperative relationships among themselves or with third parties to increase their market share. In addition, competitors may sell commercial quantities of products before we do, establishing a market position that we may not be able to overcome once we introduce similar products in commercial quantities. If we are unable to develop and market competitive products on a timely basis, we will likely fail to maintain or expand our market share and our revenues will likely decline.

Customer orders and ordering patterns can change quickly, making it difficult for us to predict our revenues and making it possible that our actual revenues may vary materially from our expectations, which could harm our results of operations and stock price.

We sell a significant amount of product pursuant to purchase orders that customers may cancel or defer on short notice without incurring a significant penalty. In addition, the period of time between order and product shipment can be very short. If customers reduce the rate at which they place new orders, whether because of changing market conditions for their products or other reasons, or if they cancel or defer previously placed orders, the impact on our revenue can occur quickly and could cause us to experience revenues that are lower than we may have indicated in any forecast of our future revenue that we may have made publicly. For example, as economic conditions deteriorated in the fourth quarter of 2008, our sales declined below the expectations we had publicly announced earlier that quarter because our customers orders declined to a level below that which we had anticipated. Reductions in new order rates as well as cancellations or deferrals of existing orders could also cause us to hold excess inventory, which could adversely affect our results of operations.

A prolonged economic downturn could have a material negative impact on our results of operations and financial condition.

In late 2008, the media reported significant declines in economic activity and reduced availability of credit in the United States and other countries around the world. Prices of equity securities generally also experienced declines. If these declines persist or get worse, they could negatively affect our business in several ways, in addition to resulting in lower demand for our products and causing potential disruptions at customers or suppliers that might encounter financial difficulties.

We have defined benefit pension plans under which we are obligated to make future payments to participants. We have set aside funds to meet our anticipated obligations under these plans. These funds are invested in equity and fixed income securities. Since mid-2008, market prices of these types of securities declined significantly. At December 31, 2008, our projected benefit obligations under our pension plans exceeded the value of the assets of those plans by approximately $450 million. U.S. law provides that we must make contributions to the pension plans

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in 2009 of at least $20 million. We may be required to make additional contributions to the plans in later years if the value of the plan assets does not increase, or continues to decrease, and these amounts could be significantly larger than the required contributions in 2009. We may also choose to make additional, voluntary contributions to the plans.

At December 31, 2008, we had contractual purchase commitments with suppliers, primarily for raw materials and manufacturing services and for some non-production items, of approximately $511 million. If our actual revenues in the future are lower than our current expectations, we may not meet all of our buying commitments. As a result, it is possible that we will have to make penalty-type payments under these contracts, even though we are not obtaining any products that we can sell.

During the year ended December 31, 2008, we recognized goodwill and intangible asset impairment charges of $541.6 million. If economic conditions worsen and our revenues decline below our recent forecasts, we may recognize additional impairment of our assets.

While we believe we currently have sufficient cash and short term investments to fund our operations for the near term, we may find it desirable to obtain additional debt or equity financing or seek to refinance our existing convertible notes in the event of a prolonged or worsening downturn. We believe that financing is currently difficult or impossible for many companies to obtain on acceptable terms or at all. Accordingly, financing may not be available to us at all or on acceptable terms if we determine that it would be desirable to obtain additional financing.

We depend on outside suppliers to manufacture, assemble, package and test our products; accordingly, any failure to secure and maintain sufficient manufacturing capacity or to maintain the quality of our products could harm our business and results of operations.

We depend on third-party foundries to manufacture integrated circuits for us and on outside suppliers to assemble and test our semiconductor products and to assemble our storage systems products. As such, we face the following risks:

- a supplier may be unwilling to devote adequate capacity to the production of our products or may be unable to produce our products;
- a supplier may fail to develop, or may discontinue, manufacturing methods appropriate for our products;
- manufacturing costs may be higher than planned;
- product reliability may decline;
- a manufacturer may not be able to maintain continuing relationships with suppliers; and
- we may have reduced control over delivery schedules, quality, manufacturing yields and costs of products.

The ability of an independent foundry to provide us with integrated circuits is limited by its available capacity and existing obligations. We generally do not enter into contracts to reserve foundry capacity. Availability of foundry capacity has in the past been reduced from time to time due to strong demand and may not be available when needed at reasonable prices. If foundry capacity is limited, it is possible that one of our foundries may allocate capacity to the production of other companies products. This reallocation could impair our ability to obtain sufficient wafers. We may also use a second foundry for a particular product when capacity at the main foundry is limited, but the cost of integrated circuits at the second foundry may be higher, which would reduce our margins.

By relying on outside suppliers to manufacture, assemble and test our products, we may have a reduced ability to control directly product delivery schedules and quality assurance. This lack of control may result in product shortages or quality assurance problems that could delay shipments of products or increase manufacturing, assembly, testing or other costs. In addition, if these outside suppliers are unable to obtain sufficient raw materials in a timely manner, we may experience product shortages or delays in product shipments, which could harm our customer relationships and results of operations.

If any of our manufacturing suppliers experiences capacity constraints, encounters financial difficulties, or experiences any other major disruption of its operations, we may need to qualify an alternate supplier, which may

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take several months and could result in delays in product shipments. These delays could cause our customers to seek alternate suppliers, which could adversely impact our business.

As a result of all of these factors and risks, and although we carefully monitor and plan for capacity and other issues, we can not provide any assurances that we can obtain products from our suppliers on a timely basis or at reasonable prices.

Failure to qualify our semiconductor products or our suppliers manufacturing lines with key customers could harm our business and results of operations.

Some customers will not purchase any products, other than limited numbers of evaluation units, until they qualify the products or the manufacturing line for the product. We may not always be able to satisfy the qualification requirements of these customers. Delays in qualification may cause a customer to discontinue use of non-qualified products and result in a significant loss of revenue.

Any defects in our products could harm our reputation, customer relationships and results of operations.

Our products may contain undetected defects, errors or failures, which may not become apparent until the products are deployed in commercial applications and other equipment. Consequently, customers may discover errors after the products have been deployed. The occurrence of any defects, errors or failures could result in:

- cancellation of orders;
- product returns, repairs or replacements;
- diversion of our resources;
- legal actions by customers or customers end users;
- increased insurance costs; and
- other losses to us or to customers or end users.

Any of these occurrences could also result in the loss of or delay in market acceptance of products and loss of sales, which could negatively affect our business and results of operations. As our products become even more complex in the future, this risk may intensify over time and may result in increased expenses.

As part of our integration efforts with Agere, we intend to transition Agere s operation to our enterprise resource planning system. Any issues that may arise with this transition could interfere with our business and harm our operating results or our ability to produce accurate and timely financial statements.

Agere s business utilizes a different enterprise resource planning system, or ERP, system than the system we have used historically. To streamline operations, we are in the process of converting Agere s business to our ERP system. Converting Agere s business processes, data and applications is a complex and time-consuming task. During this transition period, we are exposed to the possibility that we may not combine information correctly from the two systems, impacting our financial statements or our planning processes, and to the additional cost of maintaining two ERP systems.

Although we are planning the conversion carefully and expect to perform extensive testing before the actual conversion, it is possible that we may not convert all information or processes correctly or that some other problem could arise. Any problems that arise could impair our ability to process customer orders, ship products, provide services and support to our customers, bill and track orders, fulfill contractual obligations, file reports with the Securities and Exchange Commission in a timely manner and otherwise run our business. Even if we do not encounter these adverse effects, the transition to a single ERP system may be much more costly than we anticipated, which would adversely affect our future operating results.

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We may be subject to intellectual property infringement claims and litigation, which could cause us to incur significant expenses or prevent us from selling our products.

As is typical in the semiconductor industry, we are frequently involved in disputes regarding patent and other intellectual property rights. We have in the past received, and we may in the future receive, communications from third parties asserting that our products, processes or technologies infringe on the patent or other intellectual property rights of third parties, and we may also receive claims of potential infringement if we attempt to license intellectual property to others. Intellectual property litigation, regardless of the outcome, may be costly and time consuming, and may divert the attention of management and key personnel from other business issues. Claims of intellectual property infringement also might require us to enter into costly royalty or license agreements. We may not be able to obtain royalty or license agreements on acceptable terms. If any of our products or intellectual property infringes on valid rights held by others, our results of operations or financial position may suffer and we may have to make material changes in production processes or products.

In April 2008, we filed an action with the International Trade Commission seeking the exclusion from the United States of products produced by 23 companies. Subsequently, a number of these companies have filed lawsuits or actions in the International Trade Commission claiming that our products infringe on their intellectual property rights and seeking either damages or an order excluding some of our products from sale in the United States. While we do not believe any of these actions to be material, we cannot give you any assurance that we will not be required to pay a material amount or that we will not have our products excluded from sale in the United States.

If we are unable to protect or assert our intellectual property rights, our business and results of operations may be harmed.

Our future success will depend, in part, upon our ability to protect and assert our intellectual property rights. We rely primarily on patent and other intellectual property laws, as well as nondisclosure agreements and other methods, to protect our proprietary technologies and processes. It is possible that competitors or other unauthorized third parties may obtain, copy, use or disclose proprietary technologies and processes, despite our efforts to protect them.

While we hold a significant number of patents, we can give you no assurance that any additional patents will be issued. Even if new patents are issued, the claims allowed may not be sufficiently broad to protect our technology. In addition, any of our existing patents, and any future patents issued to us, may be challenged, invalidated or circumvented, or changes in law may result in us having less protection than we may have experienced historically. As such, any rights granted under these patents may not provide us with meaningful protection. We may not have foreign patents or pending applications corresponding to our U.S. patents and applications. Even if foreign patents are granted, effective enforcement in foreign countries may not be available.

If our patents do not adequately protect our technology, competitors may be able to offer products similar to our products more easily. Our competitors may also be able to develop similar technology independently or design around our patents. Some or all of our patents have in the past been licensed and likely will in the future be licensed to certain of our competitors through cross-license agreements.

A decline in the revenue that we derive from the licensing of intellectual property could have a significant impact on our net income.

The revenue we generate from the licensing of our intellectual property typically has a higher gross margin compared to the revenue we generate from the sale of other products. Although we derive a relatively small percentage of our total revenue from the licensing of intellectual property, a decline in this licensing revenue would likely have a greater impact on our profitability than a similar decline in revenues from the sale of our other products. Our licensing

revenue tends to come from a limited number of transactions and the failure to complete one or more transactions in a quarter could have a material adverse impact on our profitability.

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We are exposed to legal, business, political and economic risks associated with our international operations.

We derive, and we expect to continue to derive, a substantial portion of our revenue from sales of products shipped to locations outside of the United States. In 2008, approximately 72.5% of our total revenue was derived from sales outside the United States. In addition, we perform a significant amount of our development work outside the United States and most of our products are manufactured outside of the United States. Operations outside of the United States are subject to a number of risks and potential costs that could harm our business and results of operations, including:

political, social and economic instability;

fluctuations in foreign currency exchange rates;

exposure to different legal standards, particularly with respect to intellectual property;

natural disasters, civil unrest, terrorism and public health emergencies;

nationalization of businesses and blocking of cash flows;

trade and travel restrictions;

imposition of governmental controls and restrictions;

burdens of complying with a variety of foreign laws;

import and export license requirements and restrictions;

unexpected changes in regulatory requirements;

foreign technical standards;

difficulties in staffing and managing international operations;

international trade disputes;

difficulties in collecting receivables from foreign entities or delayed revenue recognition; and

potentially adverse tax consequences.

We use indirect channels of product distribution over which we have limited control.

Although we have in the past sold our storage systems products directly to end customers, we have discontinued this practice and now sell only to other companies that may or may not add features or functionality to our products before reselling them to end customers. We also sell some of our semiconductor products through distributors. A deterioration in our relationships with our distributors or resellers, or a decline in their business, could harm our sales. In addition, we may increase our reliance on indirect channels of distribution in the future. We may not successfully maintain or expand these indirect channels of distribution, and our failure to do so could result in the loss of sales opportunities. Furthermore, our reliance on indirect channels of distribution may reduce visibility with respect to future business opportunities, thereby making it more difficult to forecast orders.

We may engage in acquisitions and strategic alliances, which may not be successful and could harm our business and operating results.

We expect to continue to explore strategic acquisitions that build upon or expand our library of intellectual property, human capital and engineering talent, and increase our ability to address the needs of our customers. For example, in 2007, in addition to our merger with Agere, we acquired SiliconStor, a privately held company that provided silicon solutions for enterprise storage networks, and Tarari, a privately-held maker of silicon and software that provided content and application awareness in packet and message processing. Mergers and acquisitions of high-technology companies have inherent risks. No assurance can be given that our previous acquisitions or future acquisitions will be successful and will not harm our business or operating results. In addition, we may make

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investments in companies, products and technologies through strategic alliances and otherwise. If these investments are not successful, our results of operations may suffer.

The semiconductor industry is highly cyclical, which may cause our operating results to fluctuate.

We operate in the highly cyclical semiconductor industry. This industry is characterized by wide fluctuations in product supply and demand. In the past, the semiconductor industry has experienced significant downturns, often in connection with, or in anticipation of, excess manufacturing capacity worldwide, maturing product cycles and declines in general economic conditions. Even if demand for our products remains constant, a lower level of available foundry capacity could increase our costs, which would likely have an adverse impact on our results of operations.

Our failure to attract, retain and motivate key employees could harm our business.

In some of our fields of operation, there are only a limited number of people in the job market who possess the requisite skills. In the past, we have experienced difficulty in identifying and hiring sufficient numbers of qualified engineers in parts of our business as well as in retaining qualified employees. The loss of the services of any key personnel or our inability to hire new personnel with the requisite skills could restrict our ability to develop new products or enhance existing products in a timely manner, to sell products to our customers or to manage our business effectively. In light of recent economic conditions, we have implemented several cost-saving measures which directly affect employee compensation. These measures, or others that we may take in the future, may negatively impact our ability to recruit and retain qualified personnel.

Our operations and our suppliers operations are subject to natural disasters and other events outside of our control that may disrupt our business and harm our operating results.

Our operations and those of our suppliers are subject to natural disasters and other events outside of our control that may disrupt our business and harm our operating results. For example, a widespread outbreak of an illness such as avian influenza, or bird flu, or severe acute respiratory syndrome, or SARS, could harm our operations and those of our suppliers as well as decrease demand from customers. We have operations in Singapore, Thailand and China, countries where outbreaks of bird flu and/or SARS have occurred. Also, we have substantial operations in parts of California that have experienced major earthquakes and in parts of Asia that have experienced both typhoons and earthquakes. If our operations or those of our suppliers are curtailed because of health issues or natural disasters, our business may be disrupted and we may need to seek alternate sources of supply for manufacturing or other services. Alternate sources may not be available, may be more expensive or may result in delays in shipments to customers, which would affect our results of operations. In addition, a curtailment of design operations could result in delays in the development of new products. If our customers businesses are affected by health issues or natural disasters, they might delay or reduce purchases, which could harm our business and results of operations.

We are subject to various environmental laws and regulations that could impose substantial costs on us and may harm our business.

Our business is subject to various environmental laws and regulations. For example, some countries have begun to require companies selling a broad range of electrical equipment to conform to legislation such as the Waste Electrical and Electronic Equipment (WEEE) Directive, the Restriction of the use of certain Hazardous Substances in Electrical & Electronic Equipment (RoHS) Directive, and Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) Regulation in the European Union. Environmental legislation such as these could require us to redesign our products in order to comply with the standards and require the development of compliance administration systems. Redesigned products could be more costly to manufacture or require more costly or less efficient raw materials, making our products more costly or less desirable. In addition, under certain environmental laws, we could

be held responsible, without regard to fault, for costs relating to any contamination at our past facilities and at third party waste disposal sites. We could also be held liable for consequences arising out of human exposure to such substances or other environmental damage. If we cannot develop compliant products on a timely basis or properly administer our compliance programs, our revenues may also decline due to lower sales, which may harm our business.

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Our blank check preferred stock and Delaware law contain provisions that may inhibit potential acquisition bids, which may harm our stock price, discourage merger offers or prevent changes in our management.

Our board has the authority to issue preferred stock and to determine the rights, preferences, privileges and restrictions, including voting rights, of the shares without any further vote or action by our stockholders. If we issue any of these shares of preferred stock in the future, the rights of holders of our common stock may be negatively affected. Although we have no current plans to issue shares of preferred stock, if we issue preferred stock, a change of control of our company could be delayed, deferred or prevented. Furthermore, Section 203 of the Delaware General Corporation Law restricts certain business combinations with any interested stockholder as defined by that statute. These provisions are designed to encourage potential acquirers to negotiate with our board of directors and give our board an opportunity to consider various alternatives to increase stockholder value. These provisions are also intended to discourage certain tactics that may be used in proxy contests. However, the potential issuance of preferred stock or the restrictions in Section 203 of the Delaware General Corporation Law could discourage potential acquisition proposals and could delay or prevent a change in control, which may adversely affect the market price of our stock. These provisions may also have the effect of preventing changes in our management or board of directors.

Class action litigation due to stock price volatility or other factors could cause us to incur substantial costs and divert our management s attention and resources.

In the past, securities class action litigation often has been brought against a company following periods of volatility in the market price of its securities. Companies in the technology industry are particularly vulnerable to this kind of litigation due to the high volatility of their stock prices. Our stock has experienced substantial price volatility in the past. This may be a result of quarterly variations in our results of operations, the published expectations of security analysts and announcements by us and our competitors as well as general economic conditions and our stock price may continue to experience substantial volatility. Accordingly, we may in the future be the target of securities litigation. Any securities litigation could result in substantial costs and could divert the attention and resources of our management.

Item 1B. ***Unresolved Staff Comments***

Not applicable.

Item 2. ***Properties***

We lease office space in two buildings in Milpitas, California for our corporate headquarters, administration and engineering offices. We also own a 600,000 square foot office complex in Allentown, Pennsylvania that we use for administration and engineering offices. We have leased out approximately 69,000 square feet of space in that facility in connection with the sale of our mobility business.

In our Storage Systems business, we own approximately 330,000 square feet of space in Wichita, Kansas which includes engineering, administrative offices and systems training.

We also own approximately 170,000 square feet of sales and engineering office space in Fort Collins, Colorado and approximately 180,000 square feet of sales and engineering office space in Colorado Springs, Colorado. These facilities are used by both our Semiconductor segment and our Storage Systems segment.

We own or lease additional space in the United States and in various other countries, and use that space for sales, marketing, engineering, general corporate and test purposes.

We believe that our existing facilities and equipment are well maintained, in good operating condition, suitable for our operations and are adequate to meet our current requirements.

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Item 3. ***Legal Proceedings***

This information is included in Note 15 (Commitments, Contingencies and Legal Matters) to our financial statements in Item 8 and is incorporated herein by reference.

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

During the fourth quarter of 2008, no matter was submitted to a vote of our security holders.

Executive Officers of LSI

Set forth below is information about our executive officers.

Name	Age	Position
Abhijit Y. Talwalkar	44	President and Chief Executive Officer
Philip W. Bullinger	44	Executive Vice President and General Manager, Engenio Storage Group
Jon R. Gibson	62	Vice President, Human Resources
Bryon Look	55	Executive Vice President, Chief Financial Officer and Chief Administrative Officer
Andrew Micallef	44	Executive Vice President, Worldwide Manufacturing Operations
Jean F. Rankin	50	Executive Vice President, General Counsel and Secretary
D. Jeffrey Richardson	44	Executive Vice President and General Manager, Semiconductor Solutions Group
Flavio Santoni	50	Executive Vice President and General Manager, Engenio Storage Group

Mr. Talwalkar has been our President and Chief Executive Officer and a member of our Board of Directors since May 2005. Prior to joining LSI, Mr. Talwalkar was employed by Intel Corporation, a microprocessor manufacturer. At Intel, he was Corporate Vice President and Co-general Manager of the Digital Enterprise Group from January 2005 until May 2005, Vice President and General Manager of Intel s Enterprise Platform Group from May 2004 to January 2005, and Vice President and General Manager of Intel s Platform Products Group, within Intel s Enterprise Platform Group, from April 2002 through May 2004. Mr. Talwalkar also served as Vice President and Assistant General Manager of Intel s Enterprise Platform Group from June 2001 to March 2002.

Mr. Bullinger has led our Storage Systems business since August 2005, a role he has shared with Mr. Santoni since June 2008. From September 2001 through August 2005, he served as Vice President and General Manager of our RAID Storage Adapters division. He joined LSI in 1998, following LSI s acquisition of Symbios, Inc., a storage company, and served as Director of Product Development until August 2001.

Mr. Gibson has been the leader of our Human Resources organization since November 2001. Between 1984 and 2001, he held a number of managerial positions in our Human Resources organization.

Mr. Look has been Executive Vice President, Chief Financial Officer and Chief Administrative Officer since January 2009. From November 2000 through January 2009, he served as Executive Vice President and Chief Financial Officer. Between March 1997 and November 2000, he was our Vice President, Corporate Development and Strategic

Planning. Prior to joining LSI, he was manager of business development in Hewlett-Packard s corporate development department. During a 21-year career at Hewlett-Packard, Mr. Look held a variety of management positions in finance and research and development.

Mr. Micallef has been in charge of our manufacturing, real estate and supply chain operations since April 2007. Mr. Micallef joined LSI in April 2007 following our acquisition of Agere Systems. At Agere, he held a number of senior management positions in manufacturing and supply chain operations from 2000 through April 2007.

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Ms. Rankin has been our Executive Vice President, General Counsel and Secretary since April 2007. Ms. Rankin joined LSI in 2007 following the acquisition of Agere Systems. At Agere, she had been Executive Vice President, General Counsel and Secretary since 2000.

Mr. Richardson has been the leader of our Semiconductor Solutions Group since January 2009. From April 2007 through January 2009, he led our Network and Storage Products Group, which included our Networking and Storage Interfaces businesses. From September 2005 through April 2007, he was the leader of our Custom Solutions Group, and from June 2005 through September 2005, he led our Corporate Strategy function. From 1992 through June 2005, he held a variety of management positions at Intel, including positions as Vice President of the Digital Enterprise Group and General Manager of the Server Platform Group from February 2005 through June 2005 and General Manager of Intel s Enterprise Platforms and Services Division from June 2001 to January 2005. From January 1999 to June 2001, he was Director of Product Development of Intel s Enterprise Platforms and Services Division.

Mr. Santoni has led our Storage System business together with Mr. Bullinger since June 2008. Prior to assuming this role, he was the head of our Storage Systems sales organization since October 2006. From February 2001 through October 2006, he held a number of senior sales and marketing positions for our Storage Systems business. Before joining LSI in 2001, Mr. Santoni was Executive Vice President and Chief Operating Officer at Sutmyn Storage Corporation and held various senior management positions with Memorex Telex in the United States, United Kingdom and Italy.

Officers are not elected for a fixed term of office but hold office until their successors have been elected. There are no family relationships among the executive officers and directors of LSI.

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PART II

Item 5. ***Market for Registrant s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities***

Our stock trades on the New York Stock Exchange under the symbol LSI. In June 2008, our Chief Executive Officer submitted to the Exchange an annual certification stating that he was not aware of any violations of the Exchange s corporate governance listing standards.

The table below shows the high and low sales prices for our common stock for each quarter during our last two full fiscal years, as reported in the consolidated transaction reporting system.

	2008		2007	
	High	Low	High	Low
First Quarter	$ 5.57	$ 3.79	$ 10.67	$ 8.78
Second Quarter	$ 7.53	$ 4.73	$ 10.68	$ 7.40
Third Quarter	$ 7.87	$ 5.12	$ 8.37	$ 5.99
Fourth Quarter	$ 5.70	$ 2.36	$ 7.80	$ 5.06

At February 20, 2009, there were 354,006 holders of record of our common stock. We believe that we have a greater number of additional stockholders who own their shares through brokerage firms and other nominees.

We have never paid cash dividends on our common stock. It is presently our policy to reinvest our earnings, and we do not currently anticipate paying any cash dividends to stockholders in the foreseeable future.

PERFORMANCE GRAPH

The following graph compares the cumulative total stockholder return on our common stock to that of the S&P 500 Index and the S&P 500 Semiconductors Index. The graph assumes that a $100 investment was made in our common stock and each of the indices at December 31, 2003, and that dividends, if any, were reinvested in all cases. The stock price performance shown on the graph is not necessarily indicative of future price performance.

	Dec 31, 2003	Dec 31, 2004	Dec 31, 2005	Dec 31, 2006	Dec 31, 2007	Dec 31, 2008
LSI Corporation	$ 100	$ 61.78	$ 90.19	$ 101.47	$ 59.86	$ 37.09
S&P 500 Index	$ 100	$ 110.88	$ 116.33	$ 134.70	$ 142.10	$ 89.53
S&P 500 Semiconductors Index	$ 100	$ 79.11	$ 88.73	$ 80.82	$ 90.50	$ 49.11

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Item 6. ***Selected Financial Data***

Five-Year Consolidated Summary

	Year Ended December 31,				
	2008	**2007**	**2006**	**2005**	**2004**
	(In thousands, except per share amounts)				
Revenues	$ 2,677,077	$ 2,603,643	$ 1,982,148	$ 1,919,250	$ 1,700,164
Cost of revenues	1,608,108	1,699,785	1,158,983	1,150,042	1,039,804
Gross profit	1,068,969	903,858	823,165	769,208	660,360
Research and development	672,511	655,224	413,432	399,685	427,805
Selling, general and administrative	406,875	381,409	255,569	238,265	245,460
Restructuring of operations and other items, net	43,717	148,121	(8,427)	119,052	423,444
Goodwill and intangible impairment charges	541,586	2,021,463			
Acquired in-process research and development		188,872	4,284		
(Loss)/income from operations	(595,720)	(2,491,231)	158,307	12,206	(436,349)
Interest expense	(34,943)	(31,020)	(24,263)	(25,283)	(25,320)
Interest income and other, net	36,110	46,762	51,277	34,000	22,170
(Loss)/income before income taxes and minority interest	(594,553)	(2,475,489)	185,321	20,923	(439,499)
Provision for income taxes	27,700	11,326	15,682	26,540	24,000
(Loss)/income before minority interest	(622,253)	(2,486,815)	169,639	(5,617)	(463,499)
Minority interest in net income of subsidiary		4	1	6	32
Net (loss)/income	$ (622,253)	$ (2,486,819)	$ 169,638	$ (5,623)	$ (463,531)
Basic net (loss)/income per share	$ (0.96)	$ (3.87)	$ 0.43	$ (0.01)	$ (1.21)
Diluted net (loss)/income per share	$ (0.96)	$ (3.87)	$ 0.42	$ (0.01)	$ (1.21)
Year-end status:					
Total assets	$ 3,344,194	$ 4,396,390	$ 2,852,144	$ 2,796,066	$ 2,874,001
Long-term obligations	$ 1,105,739	$ 1,148,689	$ 429,400	$ 699,050	$ 859,545
Stockholders equity	$ 1,440,922	$ 2,484,996	$ 1,895,738	$ 1,627,950	$ 1,618,046

Starting in 2007, we included amortization of intangibles in cost of revenues. For the years ended December 31, 2006, 2005 and 2004, amortization of intangibles of $32.1 million, $62.5 million and $75.1 million, respectively, which was previously reported as a separate component of operating expenses, has been reclassified to cost of revenues for consistency.

On April 2, 2007, we acquired Agere Systems Inc. through the merger of Agere and a subsidiary of ours. The merger was accounted for as a purchase. Accordingly, the results of operations of Agere and estimated fair value of assets acquired and liabilities assumed were included in our consolidated financial statements from April 2, 2007.

During the years ended December 31, 2008 and 2007, we recognized goodwill and intangible asset impairment charges of $541.6 million and $2,021.5 million, respectively, in the Semiconductor segment.

On January 1, 2006, we adopted the fair value recognition provisions of Financial Accounting Standards Board, or FASB, Statement of Financial Accounting Standards, or SFAS, No. 123(R), or FAS 123R, Share-Based Payment, using the modified prospective transition method. In accordance with the modified prospective transition

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method, we began recognizing compensation expense for all share-based awards granted on or after January 1, 2006, plus unvested awards granted prior to January 1, 2006. Under this method of implementation, no restatement of prior periods has been made.

Item 7. ***Management s Discussion and Analysis of Financial Condition and Results of Operations***

This management s discussion and analysis should be read in conjunction with the other sections of this Form 10-K, including Part 1, Item 1: Business ; Part II, Item 1A: Risk Factors ; Part II, Item 6: Selected Financial Data ; and Part II, Item 8: Financial Statements and Supplementary Data.

Where more than one significant factor contributed to changes in results from year to year, we have quantified these factors throughout Management s Discussion and Analysis of Financial Condition and Results of Operations where practicable and material to understanding a material change included in the discussion.

OVERVIEW

We design, develop and market complex, high-performance semiconductors and storage systems. We provide silicon-to-system solutions that are used at the core of products that create, store, consume and transport digital information. We offer a broad portfolio of capabilities including custom and standard product integrated circuits used in hard disk drives, high-speed communication systems, computer servers, storage systems and personal computers. We also offer external storage systems and host bus adapter boards and software applications for attaching storage devices to computer servers and for storage area networks.

We operate in two segments the Semiconductor segment and the Storage Systems segment. For the Semiconductor segment, we sell our integrated circuits for storage applications to makers of hard disk drives and computer servers. We sell our integrated circuits for networking applications principally to makers of devices used in computer and communications networks and, to a lesser extent, to makers of personal computers. For the Storage Systems segment, we sell our storage systems, host adapter boards and software applications for attaching storage devices to computer servers and for storage area networks to original equipment manufacturers, or OEMs, who resell those products to end customers under their own brand name. We also generate revenue by licensing other entities to use our intellectual property primarily in the Semiconductor segment.

Our revenues depend on market demand for these types of products and our ability to compete in highly competitive markets. We face competition not only from makers of products similar to ours, but also from competing technologies. For example, we see the development of solid state drives, based on flash memory rather than the spinning platters used in hard disk drives, as a long-term potential competitor to certain types of hard disk drives, and have begun focusing development efforts in that area.

Recently, the U.S. and global economies have experienced a significant downturn driven by a financial and credit crisis that could continue to challenge such economies for some period of time. In the fourth quarter of 2008, our revenues declined significantly as compared to our revenues in the third quarter due to the global economic downturn. As our outlook continued to deteriorate into January 2009, we took a number of actions to reduce our expenses, including a