

LSI LOGIC CORP  
Form 10-K  
March 15, 2004

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**  
Washington, D.C. 20549  
**FORM 10-K**

(Mark One)

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

For the Fiscal Year Ended December 31, 2003

OR

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

For the transition period from \_\_\_\_\_ to \_\_\_\_\_ .

Commission File No. 0-11674

**LSI LOGIC CORPORATION**

(Exact name of registrant as specified in its charter)

**DELAWARE**  
(State or other jurisdiction of incorporation or organization)

**94-2712976**  
(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  
Preferred Share Purchase Rights  
New York Stock Exchange  
New York Stock Exchange

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

**NONE**  
(Title of class)

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes  No

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

## Edgar Filing: LSI LOGIC CORP - Form 10-K

Indicate by checkmark whether the Registrant is an accelerated filer (as defined in Rule 12b-2 of the Act).

Yes  No

The aggregate market value of the voting and non-voting common stock held by non-affiliates of the Registrant, based upon the closing price of the Common Stock on June 27, 2003, as reported on the New York Stock Exchange, was approximately \$2,537,575,005. Shares of Common Stock held by each executive officer and director and by each person who owns more than 5% of the outstanding Common Stock have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of March 11, 2004, the Registrant had 381,904,398 shares of Common Stock outstanding.

### **DOCUMENTS INCORPORATED BY REFERENCE**

Parts of the following document are incorporated by reference into Part III of this Form 10-K Report: Proxy Statement for Registrant's 2004 Annual Meeting of Stockholders to be held on May 6, 2004.

---

## 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. Actual results could differ materially from those projected in the forward-looking statements as a result of a number of risks and uncertainties, including the risk factors set forth below and elsewhere in this Report. See *Risk Factors* in Part I, Item 1 and *Factors that may Affect Future Results* in *Management's Discussion and Analysis of Financial Condition and Results of Operations* in Part II, Item 7 below. Statements made herein are as of the date of the filing of this Form 10-K with the Securities and Exchange Commission and should not be relied upon as of any subsequent date. We expressly disclaim any obligation to update information presented herein, except as may otherwise be required by law.

## PART I

### Item 1. *Business*

#### General

LSI Logic Corporation (together with its subsidiaries collectively referred to as *LSI Logic*, *LSI* or the *Company* and referred to as *we*, *us* and *our*) is a leader in the design, development, manufacture and marketing of complex, high-performance integrated circuits and storage systems. We are focused on four markets: communications, consumer products, storage components and storage systems. Our integrated circuits are used in a wide range of communication devices, including devices used for wireless and broadband data networking applications. We also provide other types of integrated circuit products and board-level products for use in consumer applications, high-performance storage controllers and systems for storage area networks.

We operate in two segments - the Semiconductor segment and the Storage Systems segment - in which we offer products and services for a variety of electronic systems applications. Our products are marketed primarily to original equipment manufacturers (*OEMs*) that sell products targeted for applications in our major markets.

For the year ended December 31, 2003, revenues from the Semiconductor segment were \$1,270 million (75% of total consolidated revenues) and the loss from operations was \$296 million. In the Semiconductor segment, we use advanced process technologies and comprehensive design methodologies to design, develop, manufacture and market highly complex integrated circuits (*ICs*). These system-on-a-chip solutions include both application specific integrated circuits, commonly referred to as *ASICs*, and standard products. Semiconductor segment product offerings also include redundant array of independent disks (*RAID*), host bus adapters and related products and services. *ASICs* are designed for specific applications defined by the customer, whereas standard products are for market applications that we define. See also *Management's Discussion and Analysis of Financial Condition and Results of Operations* in Item 7 of Part II.

We have developed methods of designing integrated circuits based on a library of building blocks of industry-standard electronic functions, interfaces and protocols. Among these is our *CoreWare®* design methodology. Our advanced submicron manufacturing process technologies allow our customers to combine one or more *CoreWare* library elements with memory and their own proprietary logic to integrate a highly complex, system-level solution on a single chip. We have developed and use complementary metal oxide semiconductor (*CMOS*) process technologies to manufacture our integrated circuits.

For the year ended December 31, 2003, revenues from the Storage Systems segment were \$423 million (25% of total consolidated revenues) and the income from operations was \$23 million. In the Storage Systems segment, our enterprise storage systems are designed, manufactured and sold by our wholly owned subsidiary - *LSI Logic Storage Systems, Inc.* (*Storage Systems* or *Storage Systems segment*). Our high-performance, highly scalable open storage area network systems and storage solutions

are available through leading OEMs and a specialized network of resellers. Products and solutions distributed through these channels may exclude LSI Logic Storage Systems brand identification. When included, LSI Logic Storage Systems brand identity may appear alone or in tandem with OEM brand identification.

In November 2003, the Company announced its intention to separate the Storage Systems segment and create an independent storage systems company. On February 19, 2004, LSI Logic Storage Systems, Inc. filed a registration statement on Form S-1 with the Securities and Exchange Commission for the initial public offering of its common stock.

LSI Logic Corporation was incorporated in California on November 6, 1980, and was reincorporated in Delaware on June 11, 1987. Our principal offices are located at 1621 Barber Lane, Milpitas, California 95035, and our telephone number at that location is (408) 433-8000. Our home page on the Internet is [www.lsillogic.com](http://www.lsillogic.com). The contents of this website are not incorporated in or otherwise to be regarded as part of this annual report on Form 10-K. Copies of this and other annual reports, quarterly reports on Form 10-Q, current reports on Form 8-K and all amendments to these reports are available free of charge on our website as soon as reasonably practicable after such documents are filed electronically with the Securities and Exchange Commission. Any materials that the Company files with the SEC can be read and copied at the SEC's Public Reference Room at 450 Fifth Street, N.W. Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330.

## **Business Strategy**

### Semiconductor Business Strategy

Our objective is to continue our industry leadership in the design, development, manufacture and marketing of highly integrated, complex integrated circuits and other electronic components and system-level products that provide our customers with silicon-based system-level solutions. To achieve this objective, our business strategy includes the following key elements:

- *Target Growth Markets and Selected Customers.* We concentrate our sales and marketing efforts on leading OEM customers in targeted growth markets, including communications, consumer products and storage components applications. Our engineering expertise is focused on developing technologies that will meet the needs of leading-edge customers in order to succeed in these market areas.

- *Emphasize CoreWare Methodology and System-on-a-Chip Capability.* Our CoreWare® design methodology enables the integration of one or more pre-designed circuit elements with customer-specified elements and memory to create system capabilities on a single chip. This results in higher product functionality, higher performance, greater differentiation and faster time to market. We also have used this design methodology to develop proprietary standard products.

We leverage our in-depth system-level expertise, extensive CoreWare IP library, innovative technology, understanding of customer requirements and philosophy of providing predictable Right First Time, On Time silicon solutions to serve customers with highly specific needs in the communications, consumer and storage markets worldwide.

We have expanded our technology product offerings to include the RapidChip product. The RapidChip platform ASIC fills the void between the field programmable gate arrays ( FPGAs ) and standard-cell ASIC product spaces by combining the best attributes of both. RapidChip combines the high-density, high-performance benefits of standard-cell ASICs with the fast time-to-market and customization benefits of FPGAs. This is done by addressing areas in the construction of complex custom ICs that have the greatest impact on a design schedule.

- *Promote Highly Integrated Design and Manufacturing Technology.* We use proprietary and leading third-party electronic design automation, or EDA, software design tools. Our design tool

environment is highly integrated with our manufacturing process requirements so that it will accurately simulate product performance. This integration reduces design time and project cost. We continually evaluate and, as appropriate, develop expertise with third-party EDA tools from leading and emerging suppliers of such products.

- *Provide Flexibility in Design Engineering.* We engage with customers of our semiconductor products under various arrangements whereby the extent of the engineering support we provide will be determined in accordance with the customer's requirements. For example, a customer may primarily use its own engineers for substantial development of its product design and retain our support for silicon-specific engineering work. We also enter into engineering design projects, including those on a turn-key basis.

- *Maintain High-Quality and Cost-Effective Manufacturing.* Our manufacturing strategy is a combination of our own manufacturing facilities and outsourcing arrangements with third-party foundries. We perform substantially all of our packaging, assembly and final test operations through subcontractors in Asia.

- *Leverage Alliances with Key Partners.* We are continually seeking to establish relationships with key partners in a diverse range of semiconductor technologies to promote new products, services, operating standards and manufacturing capabilities and to avail ourselves of cost efficiencies that may be obtained through collaborative development.

- *Forge Successful Partnerships with Leading Distribution Partners.* Our partner program is designed to effectively market the Company's host bus adapter product families utilizing distribution and reseller partnerships. Such partnerships enable us to provide an extended population of customers with the full range of product offerings, services and support needed to ensure their success.

- *Develop and Drive Industry Standards to Achieve Market Advantage.* We are a leader in developing and promoting important industry standard architectures, functions, protocols and interfaces. We believe that this strategy will enable us to quickly launch new standard-based products, allowing our customers to achieve time-to-market and other competitive advantages.

- *Operate Worldwide.* We market our products and engage with our customers on a worldwide basis through direct sales, marketing and field technical staff and through independent sales representatives and distributors. Our network of design centers located in major markets allows us to provide customers with highly experienced engineers, to interact with customer engineering management and system architects, to develop designs for new products and to provide continuing after-sale customer support.

#### Storage Systems Business Strategy

Our objective is to be the leading provider to server and storage OEMs and value added resellers (VARs) of modular disk storage systems and sub-assemblies. We intend to enhance our market position by:

- *Continuing to innovate and extend our product offering.* We intend to lead the market in adopting and implementing new storage system technologies, interfaces, features and customer requirements. In addition, we intend to define, design and develop products that enable our channel customers to offer a broad storage system product line, which incorporates their own intellectual property, to address multiple markets. In this manner, we intend to continue to expand our product offerings further into the entry-level, mid-range and high-end markets.

- *Adding feature functionality to meet expanding enterprise requirements.* Implementation and management of storage systems within the enterprise is increasingly complex. To address this increasing complexity, we plan to develop additional premium software management and hardware system features to enhance reliability, data availability and serviceability of our products. We also intend to expand our LogicStor certified application implementation guides, which are designed to help our customers rapidly implement our products for specific business applications.

- *Enhancing interoperability among our products, our customers' products and other leading enterprise products.* We provide significant value to our channel customers and enterprises by testing and certifying our products with the products of other leading enterprise information technology vendors to ensure broad interoperability and compatibility. We intend to work closely with our channel customers and enterprises to extend and enhance the capabilities of our storage sub-assemblies and storage management software. We also seek to enhance our position in the storage industry by actively participating in a variety of organizations focused on developing standards for emerging technologies and facilitating industry-wide interoperability.

- *Obtaining new channel customers.* Our channel customers sell storage solutions based on or incorporating our products and technology through their direct sales forces and other channels. We will continue to seek new customers, including in international markets, and thereby expand the total marketing and sales resources focused on our products. In this manner, we intend to increase the market addressable by our products.

- *Expanding our joint marketing and sales efforts with existing and new channel customers.* We seek to add value to our customers' sales, marketing and support initiatives through the provision of extensive training, customized go-to-market campaigns, product positioning, marketing materials, competitive analysis and product support infrastructure. We maintain 13 Experience Centers worldwide, which allow our channel customers to demonstrate to enterprise users the performance and benefits of storage deployments incorporating our products. We plan to open additional centers to reach a broader customer base in the future.

- *Promoting our brand.* We believe that a strong association of our brand with innovation and integrity is valuable in achieving increased scale, market leadership and OEM acceptance within our industry. Furthermore, we believe that brand recognition and reputation will become more important as OEMs increasingly outsource their storage system offerings and their customers focus on the performance and reliability of the storage systems or sub-assemblies integrated into OEM storage solutions. We intend to continue to promote our brand and build brand equity to establish and bolster our position in the disk storage systems and related storage management software markets.

## **Technology, Products and Services**

### ASIC Technology

We have been continuously supplying ASIC products for over 20 years. We leverage our system level expertise and technology providing silicon solutions primarily in communications, consumer and storage markets worldwide.

Our CoreWare design methodology offers a comprehensive design approach for creating a system-on-a-chip efficiently, predictably and rapidly. Our CoreWare libraries include high-level intellectual property building blocks created around industry standards. Our CoreWare cells are connected electronically with other memory and logic elements to form an entire system on a single chip.

Our continued emphasis on cell-based product lines reflects the market preference for use of this methodology to develop advanced integrated circuits. Customers obtain greater flexibility in the design of system-level products using our cell-based technology than they do with other technologies.

We have expanded our technology product offerings to include the RapidChip product in addition to our cell-based product lines. Our new RapidChip products address a growing market need for a flexible, cost-effective and fast time-to-market solution with performance comparable to cell-based ASICs and at a cost significantly lower than FPGAs. RapidChip is an innovative semiconductor platform set to reshape the way complex chips are designed and manufactured. A key feature of RapidChip is the customer-friendly interface that dramatically simplifies the underlying complexity of the design tools and flows associated

with system-on-a-chip design. Rule sets automatically manage architectural design, verification and physical design. As a result, design schedules for high-performance chips can be more predictable.

LSI Logic works with customers to pre-define RapidSlices™ applicable to the communications, consumer products, storage market areas and other markets to provide the basis for rapid personalization of the RapidChip to help meet the customer product objectives. A slice is a pre-manufactured chip in which all silicon-based layers have been built, leaving the top metal layers to be completed with the customer's unique intellectual property.

We shipped our first RapidChip platform products in the fourth quarter of 2003. We have recorded numerous design wins to date with existing and new customers. We believe the RapidChip platform product fills a growing gap between the traditional ASIC and FPGA solutions, complementing our ASIC product offerings.

Typically, the ASIC design process involves participation by both LSI Logic and customer engineers. We engage our customers early in their new system product development process and accept large design assignments where we share development costs with the customer. We provide advice on the product design strategies to optimize product performance and suitability for the targeted application. In addition, our capabilities include support in the areas of architecture and system-level design simulation, verification and synthesis used in the development of complex integrated circuits.

Our software design tool environment supports and automatically performs key elements of the design process from circuit concept to physical layout of the circuit design. The design tool environment features a combination of internally developed proprietary software and third-party tools that are highly integrated with our manufacturing process requirements. The design environment includes expanded interface capabilities with a range of third-party tools from leading EDA vendors and features hardware/software co-verification capability. We provide a suite of MIPS cores and ARM processors, in addition to industry-standard bus interface cores such as USB, IEEE 1394, and PCI.

After completion of the ASIC engineering design effort, we produce and test prototype circuits for shipment to the customer. We then begin volume production of integrated circuits that have been developed through one or more of the arrangements described above in accordance with the customer's quantity and delivery requirements.

#### Semiconductor Products

In our semiconductor components business, we design, manufacture and supply ASICs, standard products, host adapter boards and RAID host adapter board software to customers competing in global communications, consumer and storage markets.

ASICs are semiconductors that are designed for unique, customer-specified applications. Standard products are developed for market applications we define and are targeted to be sold to multiple customers. Both ASIC and standard products are sold to customers for incorporation into system-level products and may incorporate our intellectual property building blocks. Our ASICs, RapidChip and standard products are predominantly designed and manufactured using our proprietary process technologies.

#### Communications

LSI Logic offers highly integrated, high-performance, system-on-a-chip silicon solutions for use in the design of communications equipment. We focus on delivering custom ASIC and RapidChip solutions to customers who develop systems for the Enterprise, Metropolitan, and Wide Area Network sectors.

Leading edge switches and routers require multi-gigabit throughput capability. LSI Logic's HyperPHY® SerDes (Serializer-Deserializer) technology enables chip-to-chip and back-plane connectivity at speeds in excess of 3Gbits/second. We also provide our customers with CoreWare

intellectual property in support of key industry standard interconnect technologies including Rapid IO, HyperTransport, SPI-4, 5, SFI-4, 5, NPSI and 10/100/1G/10G Ethernet.

In addition to customer logic, our solutions incorporate embedded ARM, MIPS, digital signal processors ( DSPs ) as well as memory structures and mixed-signal cores. We provide each customer with the opportunity to deliver unique value in a custom silicon device.

#### Consumer Products

For the consumer market, we offer a broad array of products, including both standard products and custom solutions.

*Consumer standard products.* We design, develop, manufacture and market semiconductor devices, software and reference designs for digital video and audio applications, enabling new digital video and audio applications. We are focused on providing solutions for rapidly growing applications such as DVD players, digital set-top boxes, broadcast encoders, video editing systems, as well as emerging applications such as DVD recorders, home servers, and personal video recorders.

*Consumer custom solutions.* We also offer systems-on-a-chip for consumer applications. We focus on consumer market segments employing our intellectual property portfolio, design methodology and turn-key product offerings (including manufacturing, assembly and test) to provide a customized solution. Our main focus is in the video game console markets. Other market opportunities include digital cameras and camcorders, portable digital audio and video, personal digital assistant multimedia products and other emerging multimedia applications where an effective standard solution is not currently available. In addition, we provide standard products, device and applications software and reference designs for DSL modems, Home Gateways and embedded DSL applications. We are focused on the network-centric modem market for which we provide a complete reference platform. We also provide a variety of home connectivity solutions, both wired and wireless, based on this platform.

#### Storage Components

Our ASIC and standard product solutions offered to customers in worldwide storage component markets make possible data transmission and storage between a host computer and peripheral devices such as magnetic and optical disk drives, scanners, printers and disk and tape-based storage systems. We offer Fibre Channel and SCSI standard products, including host adapter ICs for motherboard and adapter applications, SCSI expander ICs, storage adapter boards and LSI's Fusion-MPT™ software drivers for these product families. We are also an industry leader in the on-going development of new storage interface standards and products, including Serial-Attached SCSI ( SAS ).

In addition, we offer the industry's widest spectrum of direct-attach RAID solutions, spanning from integrated RAID in our Fusion-MPT based-storage IC and adapter products and our IDEal software-based RAID products to our MegaRAID® product family. Our MegaRAID products include integrated single-chip RAID on motherboard solutions and a broad family of PCI, PCI Express and iSCSI RAID controller boards featuring ATA, Serial ATA ( SATA ) and SCSI interfaces, along with fully featured software and utilities for robust storage configuration and management.

We also offer solutions using our ASIC and RapidChip technology to customers who develop Fibre Channel storage area network ( SAN ) switches and host adapters, storage systems, hard disk drive and tape peripherals. Through leveraging our extensive experience in providing solutions for these applications, LSI Logic has developed a full portfolio of high-speed interface CoreWare that is employed on the ASIC or RapidChip platform providing a connection to the network, the SAN, memory and host buses. Using these pre-verified interfaces, our customers reduce development risk and achieve quicker time to market. Our CoreWare offerings include the GigaBlaze® high performance SerDes Core supporting Fibre Channel, SATA, Gigabit Ethernet, Infiniband, SAS, serial RIO and PCI-Express industry standards and a family of high-performance Fibre Channel, RIO, PCI-E, SAS and SATA protocol controllers.



### Storage Systems Products

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 and related management software, to address the needs of our customers. The modularity of our products provides channel customers with the flexibility either to integrate our sub-assemblies with third-party components, such as disk drives, and software to form their own storage system products. Our modular product approach allows channel customers to create highly customized storage systems, which 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 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 software storage 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.

### **Marketing and Distribution**

#### Semiconductor Marketing and Distribution

The highly competitive semiconductor industry is characterized by rapidly changing technology, short product cycles and emerging standards. Our marketing strategy requires that we accurately forecast trends in the evolution of product and technology development. We must then act upon this knowledge in a timely manner to develop competitively priced products offering superior performance. As part of this strategy, we are active in the formulation and adoption of critical industry standards that influence the design specifications of our products. Offering products with superior price and performance characteristics is essential to satisfy the rapidly changing needs of our customers in the dynamic communications, consumer and storage markets.

Our semiconductor products and design services are primarily sold through our network of direct sales and marketing and field engineering offices located in North America, Europe, Japan and elsewhere in Asia. Our sites are interconnected by means of advanced computer networking systems that allow for the continuous, uninterrupted exchange of information that is vital for the proper execution of our sales and marketing activities. International sales are subject to risks common to export activities, including governmental regulations, geopolitical risks, tariff increases and other trade barriers and currency fluctuations.

We rely primarily on direct sales and marketing, but 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 ASICs and standard products from us for resale to their customers. Other distributors focus solely on the sale of standard products. Our agreements with distributors generally grant limited rights to return standard product inventory and we defer revenue for such inventory until the distributor sells the product to a third party.

#### Storage Systems Marketing and Distribution

Our products are sold worldwide through our channel customers and, to a smaller degree, to a limited installed base of end-users. We closely develop and manage our channel customer relationships to meet the diverse needs and requirements of enterprises. By selling products through our channel customers, we are able to address more markets, reach a greater number of enterprises, reduce our overall sales and marketing

expenditures and amortize our research and development costs across a larger base of product sales volumes.

Our marketing efforts are designed to support our channel customers 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 roadmap, developing product positioning and pricing, creating product launch support materials and assisting in closing sales processes. 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 at our headquarters in Milpitas, and also in regional offices in Atlanta, Georgia; Dallas, Texas; Chicago, Illinois; Houston, Texas; Los Angeles, California; New York, New York; Parsippany, New Jersey; Reston, Virginia and Wichita, Kansas. We also market our products internationally in China, France, Germany, Japan and the United Kingdom.

## **Customers**

In 2003, Sony and IBM accounted for approximately 13% and 15% of our consolidated revenues, respectively. No other customer accounted for greater than 10% of consolidated revenues. We have a highly concentrated customer base and we are dependent on a limited number of customers for a substantial portion of revenues as a result of our strategy to focus our marketing and selling efforts on select, large-volume customers. 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 and results of operation.

### Semiconductor Customers

We seek to leverage our expertise in the fields of communications, consumer and storage components by marketing our products and services to market leaders. Our strategic-account focus is on large, well-known companies that produce high-volume products incorporating our semiconductor products. We recognize that this strategy may result in increased dependence on a limited number of customers for a substantial portion of our revenues. It is possible that we will not achieve significant sales volumes from one or more of the customers we have selected. While this could result in lower revenues and higher unit costs owing to an under-utilization of our resources, we believe this strategy provides us with the greatest opportunity to drive further growth in sales and unit volumes.

### Storage Systems Customers

Our customers can be characterized into two major go-to-market categories:

*OEM Partners.* These channel customers independently resell or distribute OEM-branded or LSI Logic Storage Systems co-branded products, which may be integrated with value-added services, hardware and software and delivered as differentiated complete storage solutions to enterprises. OEM Partners receive basic training services to enhance their abilities to sell and support our products. After receiving our basic training services, OEM Partners independently market, sell and support our products, requiring limited ongoing product support from us.

*OEM+ Partners.* In addition to providing our OEM+ Partners with products and basic services as describe above, we also assist our OEM+ Partners with additional resources that may provide tailored, account-specific education, training and sales and marketing assistance, allowing our OEM+ Partners to leverage our storage products and industry expertise.

## **Manufacturing**

### Semiconductor Manufacturing

Our semiconductor manufacturing operations convert a product design from the development stages into integrated circuits. Manufacturing begins with wafer fabrication, where the 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 using different standards and advanced assembly technologies. This package encapsulates the circuit for protection and allows for electrical connection to the printed circuit board. The final step in the manufacturing process is final test, where the finished devices undergo stringent and comprehensive testing using computer systems.

The wafer fabrication operation is very complex and costly, and the industry trend has been towards outsourcing a portion of or all of this operation to silicon foundries located throughout the world. The Company's strategy is a combination of internal and external fabrication. The majority of the Company's wafers are fabricated internally in Gresham, Oregon, which is equipped to manufacture wafers utilizing 0.35-micron and smaller technologies. The factory in Gresham is ISO-9002 and ISO-14000 certified, which are important internationally recognized standards for quality and environmental stewardship.

We outsource additional portions of our wafer volume to a variety of wafer foundries primarily in Taiwan, Malaysia and China. For the more advanced technologies, (0.13-micron and smaller), we have entered into joint development arrangements with foundry partners. These agreements provide us access to leading edge technology and additional wafer capacity.

In November 2003, the Company sold its Tsukuba, Japan wafer fabrication facility to ROHM Company Ltd. ( Rohm ), and we now purchase wafers from Rohm as a foundry provider for products using 0.35-micron and larger technologies.

Our final assembly and test operations are performed by independent subcontractors in the Philippines, Malaysia, South Korea, Taiwan, Hong Kong, Thailand and China. The Company has a long history of outsourcing these operations and offers a wide range of high performance packaging solutions for system-on-a-chip designs, including flip chip technology.

Development of advanced manufacturing technologies in the semiconductor industry frequently requires that critical selections be made as to those vendors from which essential equipment (including future enhancements) and after-sales services and support will be purchased. Some of our equipment selections require that we procure certain specific types of materials or components specifically designed to our specifications. Therefore, when we implement specific technology choices, we may become dependent upon certain sole-source vendors. Accordingly, our capability to switch to other technologies and vendors may be substantially restricted and a switch may involve significant expense and could delay our technology advancements and decrease manufacturing capabilities.

### 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 the majority of our product components, such as printed circuit boards, in order to take advantage of quality and cost benefits afforded by using third-party manufacturing services. We believe that using outsourced manufacturing services allows us to focus on product development and increases operational flexibility, both in terms of adjusting manufacturing capacity in response to customer demand and rapidly introducing new products.

The assembly of our storage system products involves integrating supplied 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 provide channel customers with multiple manufacturing and delivery alternatives that best complement their operations.

- *United States Assembly.* Our wholly-owned United States manufacturing facility in Wichita, Kansas, assembles and tests complete storage systems and sub-assemblies configured from modular components, such as our storage controller modules and disk drive enclosure modules. ISO-9001 certification at our Kansas manufacturing facility has been maintained since April 1992. This facility has been certified ISO-9001:2000 compliant as of October 2001. Product quality is achieved through extensive employee training, exhaustive and automated testing and sample auditing. Quality control and measurement is extended through the subcomponent supplier and component manufacturer base with continuous reporting and ongoing qualification programs.

- *European Assembly.* We outsource manufacturing in Cork, Ireland, to a Flextronics International Ltd. facility. ISO-9001: 2000 certification at the Cork assembly facility has been maintained since December 2001. This facility is capable of the assembly and testing of complete storage systems and sub-assemblies configured from modular components, such as our storage controller modules and disk drive enclosure modules. The site in Ireland was established to provide operational flexibility in meeting surges in demand, address growing European demand and to serve as a backup site in the event of natural or human-made disasters that could disrupt the operations of our Wichita facility.

## **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 delivery 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, our backlog as of any particular date may not be a meaningful indicator of future annual sales.

### Storage Systems Backlog

Due to the nature of our business, we maintain relatively low levels of backlog in the Storage Systems segment. Consequently, we believe that backlog is not a good indicator of future sales, and our quarterly revenues depend largely on orders booked and shipped in that quarter. Because lead times for delivery of our products are relatively short, we must build 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 these 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 a portion of the products and services that we offer.

## Edgar Filing: LSI LOGIC CORP - Form 10-K

Our major competitors in the Semiconductor segment include large companies such as Agere Systems, Inc., IBM Corporation, Philips Electronics, N.V., ST Microelectronics, Texas Instruments, Inc. and Toshiba Corporation. Other competitors in strategic markets include Adaptec, Inc., Broadcom Corporation, Cirrus Logic, Inc., Marvell Technology Group, Mediatek Corp. and NEC Corporation.

The principal competitive factors in the semiconductor industry include:

- design capabilities;
- differentiating product features;
- product performance characteristics;
- time to market;
- price;
- manufacturing processes; and
- utilization of emerging industry standards.

We believe that we presently compete favorably with respect to these factors. It is possible, however, that our competitors will develop other design solutions that could have a material adverse impact on our competitive position. Our competitors may also decide from time to time to aggressively lower prices of products that compete with us in order to sell related products or achieve strategic goals. Due to their customized nature, ASICs are not as susceptible to price fluctuations as standard products. However, strategic pricing by competitors can place strong pricing pressure on our products in certain transactions, resulting in lower selling prices and lower gross profit margins for those transactions.

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 continue to reduce the costs of products through product design changes, manufacturing process changes, yield improvements and procurement of wafers from outsourced manufacturing partners. We do not believe that we can continually achieve cost reductions that fully offset the price declines of our products. Therefore, gross profit margin percentages will generally decline for existing products over their life cycles.

We are increasingly emphasizing our CoreWare design methodology and system-on-a-chip capability. Competitive factors that are important to the success of this strategy include:

- selection, quantity and quality of our CoreWare library elements;
- our ability to offer our customers system-level expertise; and
- quality of software to support system-level integration.

Although there are other companies that offer similar types of products and related services, we believe that we currently compete favorably with those companies. However, competition in this area is increasing, and there is no assurance that our CoreWare methodology approach and product offerings will continue to receive market acceptance. Customers in our targeted markets frequently require system-level solutions. Our ability to deliver complete solutions may also require that we succeed in obtaining licenses to necessary software and integrating this software with our semiconductors.

### 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 large well-capitalized storage system companies such as EMC, Hitachi Data Systems and Network Appliance, as well as with other storage system and component providers, such as Adaptec, Dot Hill, Infortrend, XIOTech, Xyratex and the internal storage divisions of existing and potential channel customers. We also compete with internally developed products and, indirectly, through our channel customers, with third-party products being sold by major server vendors such as Dell, Hewlett-Packard and Sun Microsystems. The competitive factors affecting the market for our storage system products include:

- features and functionality;
- product performance and price;
- reliability, scalability and data availability;
- interoperability with other networking devices;
- 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.

We believe that we compete effectively with our competitors on the basis of these factors. Our ability to remain competitive will depend to a great extent 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 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 industry leadership in product development and support.

### **Patents, Trademarks and Licenses**

We maintain a patent program, and believe that our patents and other intellectual property rights have value to our business. We have filed a number of patent applications and currently hold more than 2,600 issued United States ( U.S. ) patents and additional issued foreign patents, expiring from 2004 to 2023, relating to certain of our products and technologies in both the Semiconductor and the Storage Systems segments. In both segments, we also maintain trademarks for certain of our products and services and claim copyright protection for certain proprietary software and documentation. Patents, trademarks and other forms of protection for our intellectual property are important, but we believe our future success principally depends upon the technical competence and creative skills of our employees.

We continue to expand our portfolio of patents and trademarks. We offer a staged incentive to engineers to identify, document and submit invention disclosures. We have developed an internal review procedure to maintain a high level of disclosure quality and to establish priorities and plans for filings both in the United States and abroad. The review process is based solely on engineering and management judgment, with no assurance that a specific filing will issue or, if issued, will deliver any lasting value to us. There is no assurance that the rights granted under any patent will provide competitive advantages to us or will be adequate to safeguard and maintain our proprietary rights. Moreover, the laws of certain countries in which our products are or may be manufactured or sold may not protect our products and intellectual property rights to the same extent as the U.S. legal system.

As is typical in the high technology industry, from time to time, we have received communications from other parties asserting that certain of our products, processes, technologies or information infringe

upon their patent rights, copyrights, trademark rights or other intellectual property rights. We regularly evaluate such assertions. In light of industry practice, we believe that, with respect to existing or future claims, any licenses or other rights that may be necessary can generally be obtained on commercially reasonable terms. Nevertheless, there is no assurance that licenses will be obtained on acceptable terms or that a claim will not result in litigation or other administrative proceedings.

In the Semiconductor segment, we protect our trade secrets and other proprietary information through agreements with our customers, suppliers, employees and consultants, and through other security measures. We have entered into certain cross-license agreements that generally provide for the non-exclusive licensing of rights to design, manufacture and sell products and, in some cases, for cross-licensing of future improvements developed by either party.

In the Storage Systems segment, we own a portfolio of patents and patent applications concerning a variety of storage technologies. We also maintain trademarks for certain of our products and services and claim copyright protection for certain proprietary software and documentation. Similar to the Semiconductor segment, we protect our trade secrets and other proprietary information through agreements and other security measures, and have implemented internal procedures to identify patentable inventions and pursue protection in selected jurisdictions.

Please see Item 3, Legal Proceedings for information regarding pending patent litigation against the Company. Please also refer to the additional risk factors set forth in the Risk Factors section and Note 13 of the Notes to the Consolidated Financial Statements ( Notes ) for additional information.

### Research and Development

Our industry is characterized by rapid changes in products, design tools and process technologies. We must continue to improve our existing products, design-tool environment and process technologies, and to develop new ones in a cost-effective manner to meet changing customer requirements and emerging industry standards. If we are not able to successfully introduce new products, design tools and process technologies or to achieve volume production of products at acceptable yields using new manufacturing processes, there could be a material adverse impact on our operating results and financial condition.

We operate the majority of our research and development facilities in Arizona, California, Colorado, Georgia, Kansas, Maryland, Minnesota, Oregon, Texas, Washington, Canada, Germany and the United Kingdom. The following table shows our expenditures on research and development activities for each of the last three fiscal years (in thousands).

YEAR	AMOUNT	PERCENT OF REVENUE
2003	\$ 432,695	26%
2002	\$ 457,351	25%
2001	\$ 503,108	28%

Research and development activities expenses primarily consist of materials expenses, salaries and related costs of employees engaged in ongoing research, design and development activities and subcontracting costs.

### Working Capital

Information regarding our working capital practices is incorporated herein by reference from Item 7 of Part II hereof under the heading Management's Discussion and Analysis of Financial Condition and Results of Operations Financial Condition, Capital Resources and Liquidity.

### **Financial Information about Segments and Geographic Areas**

This information is included in Note 12 ( Segment and Geographic Information ) of the Notes, which information is incorporated herein by reference from Item 8 of Part II.

For a discussion of various risks attendant to foreign operations, see (1) Risk Factors in this Item 1, in particular We are exposed to fluctuations in foreign currency exchange rates, We procure parts and raw materials from limited domestic and foreign sources, and Our global operations expose the Company to numerous international business risks, and (2) the section in Item 7A of Part II entitled Foreign Currency Exchange Risk. This information is incorporated herein by reference.

### **Environmental Regulation**

Federal, state and local regulations, in addition to those of other nations, impose various environmental controls on the use and discharge of certain chemicals and gases used in semiconductor and storage product processing. Our facilities have been designed to comply with these regulations through the implementation of environmental management systems. We believe that our activities conform to current environmental regulations. However, increasing public attention has been focused on the environmental impact of electronics and semiconductor manufacturing operations. While to date we have not experienced any material adverse impact on our business from environmental regulations, we cannot provide assurance that such regulations will not be amended so as to impose expensive obligations on us in the future. In addition, violations of environmental regulations or impermissible discharges of hazardous substances could result in the necessity for the following actions:

- additional capital improvements to comply with such regulations or to restrict discharges;
- liability to our employees and/or third parties; and/or
- business interruptions as a consequence of permit suspensions or revocations or as a consequence of the granting of injunctions requested by governmental agencies or private parties.

### **Employees**

As of December 31, 2003, we had 4,722 full-time employees, of which 905 were employees of our Storage Systems segment.

In February 2003, the Company downsized operations, which resulted in the reduction in work force of 210 employees. In April 2003, in an effort to streamline operations and better align operating expenses with projected revenues, the Company announced a restructuring of our operations that included, among other things, the reduction in work force of 325 employees. In September 2003, the Company decided to discontinue certain development programs and to refocus sales and marketing efforts for certain product lines in the Semiconductor segment, which caused the reduction in work force by 97 employees primarily involved in research and development. In November 2003, we sold our Tsukuba, Japan manufacturing facility to Rohm Company Ltd. As a result of this sale, the Company's work force was reduced by 169 employees.

Our future success depends upon the continued service of our key technical and management personnel and on our ability to continue to attract and retain qualified employees, particularly those highly skilled design, process and test engineers involved in the manufacture of existing products and 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

The Company's business is largely focused on the information technology and consumer products markets. Due to seasonality in these markets, the Company typically expects to see stronger growth in the last two quarters of the year.

## RISK FACTORS

*Keep these risk factors in mind when you read forward-looking statements elsewhere in this Form 10-K and in the documents incorporated herein by reference. These are statements that relate to our expectations for future events and time periods. Generally, the words, anticipate, expect, intend and similar expressions identify forward-looking statements. Forward-looking statements involve risks and uncertainties, and actual results could differ materially from those anticipated in the forward-looking statements.*

**A general economic weakness may further reduce our revenues.** The semiconductor industry is cyclical in nature and is characterized by wide fluctuations in product supply and demand. Since 2001, our financial condition and results of operations have been significantly adversely affected by the weakness in the U.S. economy. While we are unable to quantify the effect that the weakened U.S. economy has had on our financial condition and results of operations, we note, for example, that our revenue declined from approximately \$2.7 billion in 2000 to approximately \$1.8 billion in 2001, and from approximately \$1.8 billion in 2002 to approximately \$1.7 billion in 2003. In addition, we had net income of approximately \$237 million in 2000 compared with net loss of approximately \$992 million in 2001, and our net loss increased from approximately \$292 million in 2002 to approximately \$309 million in 2003. Our results of operations are becoming increasingly dependent on the global economy. Any geopolitical factors such as additional terrorist activities, armed conflict or global health conditions may adversely affect the global economy, which may affect our recovery in 2004 and adversely impact our operating results and financial condition. In addition, goodwill and other long-lived assets could be impacted by a further decline in revenues because an impairment is measured based upon estimates of future cash flows. These estimates include assumptions about future conditions within our company and industry.

**LSI Logic Storage Systems, Inc., which consists of our Storage Systems segment, represents a significant portion of our business, and an initial public offering, sale or spin-off of the Storage Systems segment, may cause our operating results to suffer and may cause net revenues and income to decline.**

LSI Logic Storage Systems, Inc. represents a significant portion of our business, and it is currently reported as a separate segment in our consolidated financial statements. For the fiscal years ended 2003, 2002 and 2001, the Storage Systems segment represented 25%, 18% and 12% of our revenues, respectively. In addition, the Storage Systems segment has recently been profitable, while the Semiconductor segment has not. For the year ended 2003, the Storage Systems segment accounted for an income from operations of \$23 million, in contrast to a loss from operations of \$296 million for the Semiconductor segment.

If we engage in another transaction that results in Storage Systems no longer being a subsidiary of the Company, the Storage Systems segment's financial results, including its net revenues and net income, will no longer be included in the Company's consolidated financial statements. Consequently, our financial results may be harmed as a result of a spin-off of the currently-profitable Storage Systems business, which may cause our stock price to decline. Accordingly, the historical consolidated financial information for the Company may not necessarily reflect the financial position, results of operations and cash flows after Storage Systems ceases to be a subsidiary. In addition, after the possible spin-off, each company would be more vulnerable to the cyclical nature of each of their respective industries as a result of their focus on only one industry segment.

**The separation and possible IPO, sale or spin-off of LSI Logic Storage System, Inc., from the Company is a substantial undertaking that may disrupt the Company's ongoing business and may increase expenses, which may affect the Company's results of operations or financial condition.**

The planning and implementation of the separation of LSI Logic Storage Systems from the Company, and the possible initial public offering of the subsidiary's common stock to the public and the potential and spin-off of the subsidiary to the Company's stockholders will require the substantial dedication of management resources. Furthermore, we expect to incur significant expenses in future periods related to the separation. We have not yet made any adjustments to our historical financial information to reflect the significant changes that may occur in our cost structure, funding and operations as a result of the separation. In addition, the efforts required to separate LSI Logic Storage Systems from us may disrupt our ongoing business activities, may result in employee distraction and may harm LSI Logic Storage Systems' and our ability to attract, retain and motivate key employees. If any of the foregoing occurs, our results of operations or financial condition would suffer.

***We operate in highly competitive markets.*** The Semiconductor and Storage Systems segments in which we conduct business are characterized by rapid technological change, short product cycles and evolving industry standards. We believe our future success depends, in part, on our ability to improve on existing technologies and to develop and implement new ones in order to continue to reduce semiconductor chip size and improve product performance and manufacturing yields. We must also be able to adopt and implement emerging industry standards in a timely manner and to adapt products and processes to technological changes. If we are not able to implement new process technologies successfully or to achieve volume production of new products at acceptable yields, our operating results and financial condition may be adversely impacted.

Our competitors include many large domestic and foreign companies that have substantially greater financial, technical and management resources than we do. Several major diversified electronics companies offer ASIC products and/or other standard products that are competitive with our product lines. Other competitors are specialized, rapidly growing companies that sell products into the same markets that we target. Some of our large customers may develop internal design and production capabilities to manufacture their own products, thereby displacing our products. There is no assurance that the price and performance of our products will be superior relative to the products of our competitors. As a result, we may experience a loss of competitive position that could result in lower prices, fewer customer orders, reduced revenues, reduced gross profit margins and loss of market share.

***Our new products may not achieve market acceptance.*** We introduce many new products each year. We must continue to develop and introduce new products that compete effectively on the basis of price and performance and that satisfy customer requirements. We continue to emphasize engineering development and acquisition of CoreWare building blocks and integration of our CoreWare libraries into our design capabilities. Our cores and standard products are intended to be based upon industry standard functions, interfaces and protocols so that they are useful in a wide variety of systems applications. Development of new products and cores often requires long-term forecasting of market trends, development and implementation of new or changing technologies and a substantial capital commitment. We cannot provide assurance that the cores or standard products that we select for investment of our financial and engineering resources will be developed or acquired in a timely manner or will enjoy market acceptance.

***We operate highly complex and costly manufacturing facilities.*** Our wafer fabrication site located in Gresham, Oregon is a highly complex, state-of-the-art facility. In addition, we own our Storage Systems manufacturing facility in Wichita, Kansas. The manufacture and introduction of our products is a complicated process. We continually strive to implement the latest process technologies and manufacture products in a clean and tightly controlled environment. We confront challenges in the manufacturing process that require us to:

- maintain a competitive manufacturing cost structure;
- implement the latest process technologies required to manufacture new products;
- exercise stringent quality control measures to ensure high yields;

- effectively manage the subcontractors engaged in the wafer fabrication, test and assembly of products; and

- update equipment and facilities as required for leading edge production capabilities.

**We outsource a substantial portion of wafers manufactured.** The Company has consolidated its internal semiconductor manufacturing in Gresham, Oregon. The Company has developed outsourcing arrangements for the manufacture of some of its products based on process technology that is unique to the supplier. There is no assurance that the third party manufacturer will be able to produce and deliver wafers that meet the Company's specifications or that it will be able to provide successfully the process technology it has committed. If the third party is not able to deliver products and process technology on a timely and reliable basis, the Company's results of operations could be adversely affected.

**We have significant capital requirements to maintain and grow our business.** We continue to make significant investments in our facilities and capital equipment, and, as a result, our fixed costs for manufacturing remain high. We also seek to obtain access to advanced manufacturing capacities through strategic supplier alliances with wafer foundries. In general, we seek to optimally allocate the manufacture of our products between our facilities and those of our foundry suppliers. Nonetheless, a high level of capital expenditures in our facilities results in relatively high fixed costs. If demand for our products does not absorb the available capacity, the fixed costs and operating expenses related to our production capacity could have a material adverse impact on our operating results and financial condition.

We finance our capital expenditure needs from operating cash flows, bank financing and capital market financing. As of December 31, 2003, we had convertible notes outstanding of approximately \$840 million. Also as of December 31, 2003, we have two operating leases financed by several commercial banks. We may need to seek additional equity or debt financing from time to time and cannot be certain that additional financing will be available on favorable terms. Moreover, any future equity or equity-linked financing may dilute the equity ownership of existing stockholders.

**We are exposed to fluctuations in foreign currency exchange rates.** We have some exposure to fluctuations in foreign currency exchange rates. We have international subsidiaries and distributors that operate and sell our products globally. We routinely hedge these exposures in an effort to minimize the impact of currency fluctuations. However, we may still be adversely affected by changes in foreign currency exchange rates or declining economic conditions in these countries.

**We procure parts and raw materials from limited domestic and foreign sources.** We do not maintain an extensive inventory of parts and materials for manufacturing. We purchase a portion of our requirements for parts and raw materials from a limited number of sources, primarily from suppliers in Japan and their U.S. subsidiaries, and we obtain other material inputs on a local basis. There is no assurance that, if we have difficulty in obtaining parts or materials in the future, alternative suppliers will be available, or that these suppliers will provide parts and materials in a timely manner or on favorable terms. As a result, we may be adversely affected by delays in product shipments. If we cannot obtain adequate materials for manufacture of our products, there could be a material adverse impact on our operating results and financial condition.

**We are dependent on a limited number of customers.** We have a highly concentrated customer base and we are increasingly dependent on a limited number of customers for a substantial portion of revenues as a result of our strategy to focus our marketing and selling efforts on select, large-volume customers. Sony and IBM represented 13% and 15%, respectively, of our total consolidated revenues for the year ended December 31, 2003.

Our operating results and financial condition could be significantly affected if:

- we do not win new product designs from major existing customers;

- major customers reduce or cancel their existing business with us;
- major customers make significant changes in scheduled deliveries; or
- there are declines in the prices of products that we sell to these customers.

***We utilize indirect channels of distribution over which we have limited control.*** We derive a material percentage of product revenues from independent reseller and distributor channels. Our financial results could be adversely affected if our relationship with these resellers or distributors were to deteriorate or if the financial condition of these resellers or distributors were to decline. Given the current economic environment, the risk of distributors going out of business is significantly increased. In addition, as our business grows, we may have an increased reliance on indirect channels of distribution. There can be no assurance that we will be successful in maintaining or expanding these indirect channels of distribution. This could result in the loss of certain sales opportunities. Furthermore, the partial reliance on indirect channels of distribution may reduce our visibility with respect to future business, thereby making it more difficult to accurately forecast orders.

***Our operations are affected by cyclical fluctuations.*** The Semiconductor and Storage Systems segments in which we compete are subject to cyclical fluctuations in demand. The Semiconductor industry has in the past experienced periods of rapid expansion of production capacity followed by periods of significant downturn. Even when the demand for our products remains constant, the availability of additional excess production capacity in the industry creates competitive pressure that can degrade pricing levels, which can reduce revenues. Furthermore, customers who benefit from shorter lead times may defer some purchases to future periods, which could affect our demand and revenues in the short term. As a result, we may experience downturns or fluctuations in demand in the future and experience adverse effects on our operating results and financial condition.

***We engage in acquisitions and alliances giving rise to economic and technological risks.*** We are continually exploring strategic acquisitions that build upon our existing library of intellectual property, human capital and engineering talent, and increase our leadership position in the markets where we operate. We did not complete any material acquisitions or alliances in 2003. We completed two acquisitions in 2002 and two acquisitions in 2001. Mergers and acquisitions of high-technology companies bear inherent risks. No assurance can be given that our previous or future acquisitions will be successful and will not materially adversely affect our business, operating results or financial condition. We must manage any growth effectively. Failure to manage growth effectively and to integrate acquisitions could adversely affect our operating results and financial condition.

In addition, we intend to continue to make investments in companies, products and technologies through strategic alliances. Investment activities often involve risks, including the need to acquire timely access to needed capital for investments related to alliances and to invest in companies and technologies that contribute to the growth of our business.

***The price of our securities may be subject to wide fluctuations.*** Our stock has experienced substantial price volatility, particularly as a result of quarterly variations in results, the published expectations of analysts and announcements by our competitors and us. In addition, the stock market has experienced price and volume fluctuations that have affected the market price of many technology companies and that have often been unrelated to the operating performance of such companies. The price of our securities may also be affected by general global, economic and market conditions. While we cannot predict the individual effect that these and other factors may have on the price of our securities, these factors, either individually or in the aggregate, could result in significant variations in price during any given period of time. These fluctuations in our stock price also impact the price of our outstanding convertible securities and the likelihood of the convertible securities being converted into cash or equity. If our stock price is below the conversion price of our convertible bonds on the date of maturity, they may not convert into equity and we may be required to redeem the convertible securities for cash. However, in the event they do not convert to equity, we believe that our current cash position and expected future operating cash flows will be adequate to meet these obligations as they mature.

***We may rely on capital and bank markets to provide liquidity.*** In order to finance strategic acquisitions, capital assets needed in our manufacturing facilities and other general corporate needs, we may rely on capital and bank markets to provide liquidity. Historically, we have been able to access capital and bank markets, but this does not necessarily guarantee that we will be able to access these markets in the future or at terms that are acceptable to us. The availability of capital in these markets is affected by several factors, including geopolitical risk, the interest rate environment and the condition of the economy as a whole. In addition, our own operating performance, capital structure and expected future performance impact our ability to raise capital. We believe that our current cash, cash equivalents, short-term investments and future cash provided by operations will be sufficient to fund our needs in the foreseeable future. This includes repaying our existing convertible debt when due. However, if our operating performance falls below expectations, we may need additional funds.

***We design and develop highly complex cell-based ASICs.*** As technology advances to 0.13 micron and smaller geometries, there are increases in the complexity, time and expense associated with the design, development and manufacture of ASICs. We must incur substantial research and development costs to confirm the technical feasibility and commercial viability of any ASIC products that in the end may not be successful. Therefore, the Company cannot guarantee that any new ASIC products will result in market acceptance.

***Our global operations expose the Company to numerous international business risks.*** We have substantial business activities in Asia and Europe. Both manufacturing and sales of our products may be adversely impacted by changes in political and economic conditions abroad. A change in the current tax laws, tariff structures, export laws, regulatory requirements or trade policies in either the United States or foreign countries could adversely impact our ability to manufacture or sell our products in foreign markets. Moreover, a significant decrease in sales by our customers to end users in either Asia or Europe could result in a decline in orders.

We subcontract wafer manufacturing, test and assembly functions to independent companies located in Asia. A reduction in the number or capacity of qualified subcontractors or a substantial increase in pricing could cause longer lead times, delays in the delivery of products to customers or increased costs.

***The high technology industry in which we operate is prone to intellectual property litigation.*** Our success is dependent in part on our technology and other proprietary rights, and we believe that there is value in the protection afforded by our patents, patent applications and trademarks. The Company has a program whereby it actively protects its intellectual property by acquiring patent and other intellectual property rights. However, the industry is characterized by rapidly changing technology and our future success depends primarily on the technical competence and creative skills of our personnel.

As is typical in the high technology industry, from time to time we have received communications from other parties asserting that certain of our products, processes, technologies or information infringe upon their patent rights, copyrights, trademark rights or other intellectual property rights. We regularly evaluate such assertions. In light of industry practice, we believe, with respect to existing or future claims that any licenses or other rights that may be necessary can generally be obtained on commercially reasonable terms. Nevertheless, there is no assurance that licenses will be obtained on acceptable terms or that a claim will not result in litigation or other administrative proceedings. Resolution of whether the Company's product or intellectual property has infringed on valid rights held by others could have a material adverse effect on the Company's financial position or results of operations and may require material changes in production processes and products.

The Company is currently involved in several patent litigation matters. See "Legal Matters" in Note 13 ("Commitments and Contingencies") of the Notes.

***Our manufacturing facilities may not achieve desired margins.*** Anticipated production rates of our Gresham manufacturing facility depend upon the reliable operation and effective integration of a variety of hardware and software components. There is no assurance that all of these components will be fully

functional or successfully integrated on time or that the facility will achieve the forecasted yield targets. The capital expenditures required to bring the facility to full operating capacity may be greater than we anticipate and result in lower margins.

***Our manufacturing facilities are subject to disruption.*** Operations at any of our primary manufacturing facilities, or at any of our wafer fabrication, test and assembly subcontractors, may be disrupted for reasons beyond our control, including work stoppages, fire, earthquake, tornado, floods or other natural disasters, which could have a material adverse effect on the Company's financial position or results of operation.

***We must attract and retain key employees in a highly competitive environment.*** Our employees are vital to our success and our key management, engineering and other employees are difficult to replace. We do not generally have employment contracts with our key employees. Despite the economic slowdown of the last few years, competition for certain key technical and engineering personnel remains intense. Our continued growth and future operating results will depend upon our ability to attract, hire and retain significant numbers of qualified employees.

## **Item 2. Properties**

The Company's 594,000 square foot Milpitas, California facilities are leased and contain the Company's corporate executive headquarters, administration and engineering offices. Storage Systems shares 15,000 square feet of the Milpitas, facility with the Company. The Company maintains 101,000 square feet of leased facilities in Fremont, California, housing engineering offices, logistics and warehouses and 95,800 square feet of leased facilities in San Jose, California, housing engineering offices (of which the Company subleases 39,000 square feet).

The Company owns the land and buildings housing its 588,000 square foot manufacturing facilities for the Semiconductor segment in Gresham, Oregon. The Company also owns the land and buildings housing sales and engineering offices in Fort Collins and Colorado Springs, Colorado, and owns the logistics center in Tsuen Wan, Hong Kong. The Company sold the Tsukuba, Japan manufacturing facility in November 2003. The Company closed the Colorado Springs semiconductor manufacturing facility in October 2001 and is in the process of disposing and selling its assets.

In the Storage Systems segment, the Company owns the manufacturing and executive offices site in Wichita, Kansas, which includes 330,000 square feet of space, and in a leased facility in Boulder, Colorado, which consists of 43,725 square feet. The Company also leases 15,000 square feet of additional office facilities in Wichita.

In addition, the Company maintains leased sales and engineering offices, regional office space for its field sales, marketing and design center offices for both its Semiconductor segment and its Storage Systems segment at various locations in North America, Europe, Japan and elsewhere in Asia. The Company also maintains leased executive offices, design centers and sales offices in Bracknell, United Kingdom and Tokyo, Japan. Leased facilities described above are subject to operating leases that expire in 2004 through 2011. (See Note 13 of the Notes.)

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.

## **Item 3. Legal Proceedings**

This information is included in Note 13 ( Commitments and Contingencies ) of the Notes, which information is incorporated herein by reference from Item 8 of Part II hereof.

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

Not applicable.

**Executive Officers of the Company**

The executive officers of the Company, who are elected by and serve at the discretion of the Board of Directors, are as follows. Their ages are as of December 31, 2003.

Name	Age	Position
Wilfred J. Corrigan	65	Chairman and Chief Executive Officer
John D. Errico	60	Executive Vice President, Storage and Communications Components
Donald Esses	52	Executive Vice President, Worldwide Operations
Thomas Georgens	44	Executive Vice President, LSI Logic Storage Systems, Inc.
Jon R. Gibson	56	Vice President, Human Resources
Christopher L. Hamlin	60	Senior Vice President, Chief Technology Officer
Bryon Look	49	Executive Vice President and Chief Financial Officer
W. Richard Marz	60	Executive Vice President, Worldwide Strategic Marketing
David G. Pursel	58	Vice President, General Counsel and Corporate Secretary
Giuseppe Staffaroni	52	Executive Vice President, Consumer Products
Frank A. Tornaghi	49	Executive Vice President, Worldwide Sales
Joseph M. Zelayeta	57	Executive Vice President, ASIC Technology & Methodology

Mr. Corrigan is the principal founder of the Company and has served as its Chairman and Chief Executive Officer since its organization in January 1981. Prior to founding the Company, he was President, Chairman and Chief Executive Officer of Fairchild Camera and Instrument Corporation. Mr. Corrigan is also a member of the Board of Directors of FEI Company, a semiconductor equipment and solutions provider.

John D. Errico was named Executive Vice President, Storage and Communications Components in January 2003. He served as Executive Vice President Storage Components from August 2000 to January 2003 and as Executive Vice President, Storage Components and Colorado Operations from August 1998 to August 2000. Mr. D. Errico joined us in 1984 and has held various senior management and executive positions at our manufacturing facilities in the U.S. and Japan.

Donald Esses was named Executive Vice President, Worldwide Operations in December 2003. He joined the Company in 1983 and has held management positions in process and product engineering. From July 1994 to November 2000, Mr. Esses held the position of Vice President, U.S. Manufacturing. From November 2000 to December 2003, he was Vice President of Supply Chain Management.

Thomas Georgens has served as Executive Vice President of LSI Logic Storage Systems since November 2000. From August 1998, upon the acquisition of Symbios, Inc., by the Company, to November 2000, Mr. Georgens served as the Company's Senior Vice President and General Manager, Storage Systems.

Jon Gibson was named Vice President, Human Resources in November 2001. He joined LSI in September 1984 as Employee Relations Manager. Mr. Gibson was named Director of Human Resources in October 1987. From March 1999 until November 2001, Mr. Gibson served as Senior Director of Human Resources.

Dr. Christopher Hamlin joined the Company in May 2000, as Senior Vice President and Chief Technology Officer. He served as Chief Technology Officer of Ridge Technologies, a data storage company, from September 1997 until that company was acquired by Adaptec Inc., a data storage company,

## Edgar Filing: LSI LOGIC CORP - Form 10-K

in May 1998. From December 1998 until he joined LSI Logic, Dr. Hamlin was Chief Technology Officer and Vice President of New Technologies for Western Digital Corporation, a data storage company.

Bryon Look was named Executive Vice President and Chief Financial Officer in November 2000. Mr. Look joined the Company in March 1997 as Vice President, Corporate Development and Strategic Planning. Prior to joining the Company, he was manager of business development at 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.

W. Richard Marz was named Executive Vice President, Strategic Worldwide Marketing in December 2003. He joined the Company in September 1995 as Senior Vice President, North American Marketing and Sales, and was named Executive Vice President, Geographic Markets in May 1996, a position he held until July 2001. He served as Executive Vice President, ASIC Technology from July 2001 to January 2002 and served as Executive Vice President, Communications and ASIC Technology from January 2003 to December 2003. Mr. Marz is a member of the board of directors of Perceptron, Inc., a measurement and control systems company, where he also serves on the nominating and compensation committees.

David G. Pursel serves as Vice President, General Counsel and Corporate Secretary. He was named to this position in June 2000. Mr. Pursel joined LSI Logic in February 1996 as Associate General Counsel, Chief Intellectual Property Counsel and Assistant Secretary.

Giuseppe Staffaroni was named Executive Vice President, Consumer Products in January 2002. He served as Director of the Wireless business unit from November 1997 to October 1999. Mr. Staffaroni served as Vice President and General Manager of the Broadband Communications Group from October 1999 to November 2000, and he served as Executive Vice President, Broadband Communications Group from November 2000 to February 2002. Mr. Staffaroni joined LSI Logic in 1990 as Director of Engineering in the Company's Milan, Italy, design center.

Frank A. Tornaghi was named Executive Vice President, Worldwide Sales in July 2001. Since joining the Company in 1984, Mr. Tornaghi has held several management positions in sales at LSI Logic and was named a vice president in 1993. He served as Vice President, North America Sales, from May 1993 to July 2001.

Joseph M. Zelayeta was named Executive Vice President ASIC Technology and Methodology in December 2003. He served as Executive Vice President, Worldwide Operations from September 1997 to December 2003. Mr. Zelayeta joined LSI Logic in 1981 and has held various management positions with the Company, including Senior Vice President of U.S. Manufacturing and General Manager Gresham Operations, Vice President of Research and Development and Vice President of U.S. Operations.

There are no family relationships between any executive officers and directors.

### **Corporate Governance**

The Board of Directors (the Board) is the ultimate decision-making body of the Company except with respect to those matters reserved for decision of stockholders. The Board is responsible for selection of the executive management team, providing oversight responsibility and direction to management, and evaluating the performance of this team on behalf of the stockholders. Responsibility for day-to-day management of operations is delegated to the executive management team. The Board has adopted Corporate Governance Guidelines to assist it in the exercise of its responsibilities. These Guidelines are available on the Company's website at [www.lsilogic.com](http://www.lsilogic.com).



## Edgar Filing: LSI LOGIC CORP - Form 10-K

The Board is composed of a majority of independent directors. Currently, seven out of eight directors are independent, as defined by the New York Stock Exchange Listing Standards. The Board has a lead director. The Board has an Audit Committee, a Compensation Committee and a Nominating and Corporate Governance Committee. The Audit, Compensation and Nominating and Corporate Governance Committees consist solely of non-employee, independent directors. All committees operate under charters approved by the Board. These charters are available on the Company's website at [www.lsilogic.com](http://www.lsilogic.com). The Board of Directors appoints the members and chairs of the committees annually.

The Audit Committee reviews the Company's accounting policies and practices, internal controls, financial reporting practices, contingent risks and risk management strategies and plans. The Audit Committee selects and retains the Company's independent accountants to serve the following year to examine the Company's accounts, reviews the independence of the independent accountants as a factor in making these determinations and pre-approves all audit and non-audit services performed by the independent accountants. The Audit Committee meets alone with the Company's management, independent accountants and the director of the Company's Internal Audit Department, and grants them free access to the Audit Committee at any time. All members of the Audit Committee are financially literate, as such qualification is interpreted by the Company's Board in its business judgment. In addition, two members of the Committee are financial experts.

At least annually, the Compensation Committee reviews the goals of the Company's executive officer and director compensation plans, and amends or recommends that the Board amend these goals if the Committee deems it appropriate. The Compensation Committee evaluates and reviews, at least annually, the performance of the Chairman and Chief Executive Officer and other executive officers in light of those goals. Based upon such an evaluation, the Compensation Committee establishes the Company's overall executive compensation strategy, and, in particular, determines the compensation structure for the Chairman and Chief Executive Officer and other executive officers of the Company. The Committee approves any incentive, bonus or similar plans of the Company based upon the recommendations submitted by the Chairman and Chief Executive Officer and the Vice President of Human Resources. The Committee reviews and approves the Company's stock option and other stock incentive award programs and reviews, as needed (with an independent consultant), executive compensation matters and significant issues that relate to executive compensation.

The Nominating and Corporate Governance Committee provides assistance to the Board in recommending to the Board individuals qualified to serve as directors of the Company and on committees of the Board, recommending to the Board the director nominees for the next annual meeting of stockholders, advising the Board with respect to Board composition, procedures and whether to form or dissolve committees, advising the Board with respect to the corporate governance principles applicable to the Company and developing criteria for oversight of the evaluation of the Board and management. The Nominating and Corporate Governance Committee will consider shareholder recommendations for candidates to the Company's Board.

PART II

**Item 5. Market for the 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. The high and low closing sales prices for the stock for each full quarterly period within the two most recent fiscal years as reported on the Exchange are:

	2003		2002	
	High	Low	High	Low
First Quarter	\$6.32	3.97	\$18.58	13.95
Second Quarter	\$7.74	4.44	\$ 17.35	7.89
Third Quarter	\$11.96	7.08	\$ 8.75	6.23
Fourth Quarter	\$10.14	8.30	\$ 8.54	4.14
<b>Year</b>	\$ 11.96	3.97	\$ 18.58	4.14

At March 11, 2004, there were 3,842 owners of record of our common stock.

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

The table set forth in Security Ownership in the Company's Proxy Statement is hereby incorporated by reference into this Part II, Item 5.

## Item 6. Selected Financial Data

## Five-Year Consolidated Summary

	Year Ended December 31,				
	2003	2002	2001	2000	1999
	(In thousands, except per share amounts)				
Revenues	\$ 1,693,070	\$ 1,816,938	\$ 1,784,923	\$ 2,737,667	\$ 2,089,444
Cost of revenues	1,015,865	1,122,696	1,160,432	1,557,232	1,286,844
Additional excess inventory and related charges		45,526	210,564	11,100	
Total cost of revenues	1,015,865	1,168,222	1,370,996	1,568,332	1,286,844
Gross profit	677,205	648,716	413,927	1,169,335	802,600
Research and development	432,695	457,351	503,108	378,936	297,554
Selling, general and administrative	234,156	230,202	307,310	306,962	257,712
Acquired in-process research and development		2,920	96,600	77,438	4,600
Restructuring of operations and other items, net	180,597	67,136	219,639	2,781	(2,063)
Amortization of non-cash deferred stock compensation	26,021	77,303	104,627	41,113	
Amortization of intangibles	76,352	78,617	188,251	72,648	46,625
(Loss)/ income from operations	(272,616)	(264,813)	(1,005,608)	289,457	198,172
Interest expense	(30,703)	(51,977)	(44,578)	(41,573)	(39,988)
Interest income and other, net	18,933	26,386	14,529	51,766	17,640
Gain on sale of equity securities			5,302	80,100	48,393
(Loss)/ income before income taxes, minority interest and cumulative effect of change in accounting principle	(284,386)	(290,404)	(1,030,355)	379,750	224,217
Provision for/ (benefit from) income taxes	24,000	1,750	(39,198)	142,959	65,030
(Loss)/ income before minority interest and cumulative effect of change in accounting principle	(308,386)	(292,154)	(991,157)	236,791	159,187
Minority interest in net income of subsidiary	161	286	798	191	239
(Loss)/ income before cumulative effect of change in accounting principle	(308,547)	(292,440)	(991,955)	236,600	158,948
Cumulative effect of change in accounting principle					(91,774)
Net (loss)/ income	\$ (308,547)	\$ (292,440)	\$ (991,955)	\$ 236,600	\$ 67,174
Basic earnings per share:					
(Loss)/ income before cumulative effect of change in accounting principle	\$ (0.82)	\$ (0.79)	\$ (2.84)	\$ 0.76	\$ 0.54
Cumulative effect of change in accounting principle					(0.31)
Net (loss)/ income per share	\$ (0.82)	\$ (0.79)	\$ (2.84)	\$ 0.76	\$ 0.23

Edgar Filing: LSI LOGIC CORP - Form 10-K

Diluted earnings per share:										
(Loss)/ income before cumulative effect of change in accounting principle	\$	(0.82)	\$	(0.79)	\$	(2.84)	\$	0.70	\$	0.51
Cumulative effect of change in accounting principle										(0.28)
Net (loss)/ income per share	\$	(0.82)	\$	(0.79)	\$	(2.84)	\$	0.70	\$	0.23
Year-end status:										
Total assets	\$	3,447,901	\$	4,012,736	\$	4,525,077	\$	4,092,762	\$	3,131,031
Long-term obligations	\$	1,007,079	\$	1,315,557	\$	1,547,197	\$	970,761	\$	862,762
Stockholders' equity	\$	2,042,450	\$	2,300,355	\$	2,479,885	\$	2,498,137	\$	1,855,832

The Company's fiscal years ended on December 31 for each of the years presented above. During 2003, the Company recorded \$181 million in charges for restructuring of operations and other items, net. (See Note 4 of the Notes.) On January 1, 2003, the Company adopted SFAS No. 146, Accounting for Exit or Disposal Activities. SFAS No. 146 has been applied to restructuring activities initiated after December 31, 2002 and changes the timing of when restructuring charges are recorded to the date when the liabilities are incurred. During 2002, the Company recorded \$46 million in additional excess inventory and related

charges and \$67 million in charges for restructuring of operations and other items, net. The Company adopted SFAS No. 142 Goodwill and Other Intangible Assets on January 1, 2002, as a result of which goodwill is no longer amortized. (See Note 3 of the Notes.) During 2001, the Company recorded \$211 million in additional excess inventory and related charges, a \$97 million in-process research and development ( IPR&D ) charge associated with the acquisitions of C-Cube and AML, which were effective on May 11, 2001 and August 31, 2001, respectively. In addition, the Company recorded charges of \$220 million for restructuring of operations and other items, net. (See Notes 2, 4 and 8 of the Notes.) During 2000, the Company recorded a \$77 million IPR&D charge associated with the acquisitions of ParaVoice, DataPath, IntraServer and the purchases of divisions of NeoMagic and Cacheware. The Company began recording amortization of non-cash deferred stock compensation as a result of the adoption of FASB interpretation ( FIN ) No. 44, Accounting for Certain Transactions Involving Stock Compensation, which was effective for acquisitions after July 1, 2000. During 1999, the Company expensed an unamortized preproduction balance of \$92 million, net of taxes, associated with the manufacturing facility in Gresham, Oregon and has presented it as a cumulative effect of a change in accounting principle in accordance with SOP No. 98-5, Reporting on the Costs of Start-up Activities.

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

**Basis of Presentation**

Our consolidated financial statements include our accounts and the accounts of all of our subsidiaries. Intercompany transactions and balances have been eliminated in consolidation. Where the functional currency of the Company's foreign subsidiaries is the local currency, all assets and liabilities are translated into U.S. dollars at the current rates of exchange as of the balance sheet date and revenues and expenses are translated using weighted average rates prevailing during the period. Accounts and transactions denominated in foreign currencies have been remeasured into functional currencies before translation into U.S. dollars. Foreign currency transaction gains and losses are included as a component of interest income and other. Gains and losses from foreign currency translation are included as a separate component of comprehensive income.

Minority interest in subsidiary represents the minority stockholders' proportionate share of the net assets and the results of operations for one of our majority-owned Japanese subsidiaries. Sales of common stock of our subsidiary and purchases of such shares may result in changes in our proportionate share of the subsidiary's net assets.

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting periods. Actual results could differ materially from these estimates.

Certain items previously reported in specific financial statement captions have been reclassified to conform to the 2003 presentation.

**Overview**

In 2003, we were still recovering from the economic downturn that began in 2001. We reported a net loss for the year ended December 31, 2003 of \$308.5 million or \$0.82 loss per diluted share. During the year, we lowered our cost structure, completed the transition to a balanced manufacturing strategy and continued to invest in next-generation products.

As part of our transition to a balanced manufacturing strategy, we signed a definitive agreement with ROHM Company Ltd. (Rohm), a Japanese company, to sell our wafer manufacturing facility in Tsukuba, Japan in the third quarter of 2003 and during the fourth quarter of 2003, we finalized the sale for 2.82 billion yen (approximately \$25.8 million). We also completed the consolidation of internal manufacturing at our Gresham, Oregon campus, supplemented by strategic foundry relationships.

We shipped our first RapidChip platform ASIC products in the fourth quarter of 2003. We have now recorded platform ASIC design wins with existing and new customers in all major semiconductor geographic regions including North America, Europe, Japan and China. As the global semiconductor market gathers momentum, we anticipate an acceleration of our RapidChip design-win activity, strengthening LSI's leadership position in the growing Platform ASIC space.

Our long-term debt declined in 2003 from \$1.2 billion as of December 31, 2002 to \$0.9 billion as of December 31, 2003. The decline was the result of the issuance of our 2003 \$350 million, 4% Convertible Subordinated Notes due in 2010, and the redemption/repurchase of approximately \$710 million of our 1999 and 2000 Convertible Subordinated Notes due in 2004 and 2005, respectively.

**Separation of our Storage Systems business.** On November 13, 2003, we announced our intention to separate our storage systems operations LSI Logic Storage Systems, Inc (Storage Systems) and create an independent storage systems company. We have entered into agreements to implement this separation

and to address various arrangements between Storage Systems and us. A more comprehensive discussion of the separation agreements is set forth in Note 14 of the Notes. On February 19, 2004, Storage Systems filed a Registration Statement on Form S-1 with the Securities and Exchange Commission. If the initial public offering is completed as currently intended, we plan to receive the net cash proceeds from the offering from Storage Systems in the form of a dividend. We may sell shares of Storage Systems common stock in the public market or in private transactions, which may not include the sale of a controlling interest in Storage Systems.

We currently intend to distribute to our stockholders, by the summer of 2005, all remaining shares of Storage Systems common stock held by us at such time. We will determine the timing, structure and all terms of the distribution taking into account factors such as market conditions. Completion of the distribution would also be contingent upon the receipt of a favorable tax ruling from the Internal Revenue Service and/or a favorable opinion from our tax advisor as to the tax-free nature of the distribution for U.S. federal income tax purposes. We are not obligated to undertake the distribution, and the distribution may not occur by the contemplated time or at all.

**Stock option exchange program.** On August 20, 2002, we filed with the Securities and Exchange Commission an offer to exchange stock options outstanding under the 1991 Equity Incentive Plan and the 1999 Nonstatutory Stock Option Plan for new options. Under the exchange offer, eligible employees had the opportunity to exchange eligible stock options for the promise to grant new options under the 1999 Nonstatutory Stock Option Plan. Our directors and executive officers were not eligible to participate in this program. The exchange offer expired on September 18, 2002, and we accepted options to purchase an aggregate of 16,546,370 shares for exchange. On March 20, 2003, we granted a new option that covered two shares of LSI Logic common stock for every three shares covered by an option that an employee had elected to exchange. The exercise price per share of the new options was equal to the fair market value of our common stock on the grant date. We granted options to purchase 10,691,139 shares at an exercise price of \$5.06 per share. The exchange program did not result in the recording of any compensation expense in the statement of operations.

**Significant acquisitions and other major transactions.** We are continually exploring strategic acquisitions that build upon our existing library of intellectual property, human capital and engineering talent, and increase our leadership position in the markets in which we operate. All of our acquisitions in 2002 and 2001 were accounted for as purchases and accordingly, the estimated fair value of assets acquired and liabilities assumed and the results of operations were included in our Consolidated Financial Statements as of the effective date of each acquisition through the end of the period. The transactions are summarized below. There were no significant differences between our accounting policies and those of the companies acquired. (See Note 2 of the Notes.)

There were no material acquisitions in 2003.

## 2002

On August 29, 2002, we finalized an Asset Purchase Agreement with International Business Machines Corporation ( IBM ). Under the agreement, we acquired certain tangible and intangible assets associated with IBM s Mylex business unit. This acquisition has enhanced product offerings in the expanding entry-level storage systems space within the Storage Systems segment and the PCI-RAID offering in the Semiconductor segment. The details of this acquisition are summarized below (in millions, except per share amounts):

Edgar Filing: LSI LOGIC CORP - Form 10-K

Entity name or type of technology; Segment included in; Description of acquired business	Acquisition date	Total Purchase price	Type of Consideration	Fair Value of tangible net assets/ (liabilities) acquired	Goodwill	Current technology, trademarks and supply agreement	IPR&D	Deferred compensation
Mylex Business Unit of IBM; Storage Systems and Semiconductor segments; entry level storage systems and PCI-RAID products	August 2002	\$50.5	Cash	\$14.1	\$20.5	\$14.0	\$1.9	\$ -
Digital video product technologies; Semiconductor segment	November 2002	6.7	Cash	(0.2)	2.9	1.8	1.0	1.2

**2001**

During 2001, we acquired C-Cube Microsystems Inc. and certain tangible and intangible assets associated with the redundant array of independent disks, or RAID, business of American Megatrends, Inc. Both these acquisitions became a part of our Semiconductor segment (in million, except per share amounts):

Entity name, Segment included in; Description of acquired business	Acquisition date	Total Purchase price	Type of Consideration	Fair Value of tangible net assets/ (liabilities) acquired	Goodwill	Current technology & trademarks	IPR&D	Deferred compensation
RAID Division of AMI; Semiconductor segment; Redundant Array of Independent Disks ( RAID )	August 2001	\$240.5	\$224 cash 0.8 million restricted common shares	\$ (1.4)	\$128.9	\$77.5	\$19.1	\$16.4
C-Cube; Semiconductor segment; Digital video products	May 2001	893.7	40.2 million shares issued at \$18.73 per share, 10.6 million options assumed, 0.8 million warrants assumed	64.3	608.1	94.5	77.5	49.3

In April 2001, we announced a co-development and foundry supply agreement with Taiwan Semiconductor Manufacturing Company Ltd. ( TSMC ). This agreement is part of our strategy to outsource a portion of our manufacturing, that is to procure a larger portion of our wafer requirements from external sources. As a result of our joint development efforts with TSMC we anticipate being able to defer the need to expand our manufacturing capacity for the Gflx technology beyond the time when products designed for that technology would begin volume production. We have also completed the definition of a 90-nanometer system on a chip process platform with TSMC and its other leading edge technology customers. This platform is designed to enable an advanced capability for the deployment of our RapidChip products and high volume standard cell ASICs. These advanced process technologies allow for greater circuit density and increased functionality on a single chip.

Where more than one significant factor contributed to changes in results from year to year, we have quantified such factors throughout the Management's Discussion & Analysis where practicable and useful to the discussion.



**RESULTS OF OPERATIONS****Revenues:**

	Year ended December 31,		
	2003	2002	2001
	(in millions)		
Semiconductor segment	\$ 1,269.7	\$ 1,481.4	\$ 1,573.6
Storage Systems segment	423.4	335.5	211.3
<b>Consolidated</b>	<b>\$ 1,693.1</b>	<b>\$ 1,816.9</b>	<b>\$ 1,784.9</b>

There were no significant inter-segment revenues during the periods presented.

**2003 compared to 2002**

Total consolidated revenues for 2003 decreased \$123.8 million or 7% as compared to 2002. Revenues for the Semiconductor segment decreased \$211.7 million or 14% in 2003 as compared to the previous year. The decline in revenues was primarily attributable to lower demand for our semiconductors sold into certain consumer product applications such as set-top box, DVD playback and video games. Revenues for the communications group also declined, mainly as a result of continued weak demand for semiconductors used in applications for the wide-area-network (WAN) market. The above-noted declines in revenues were partially offset by growth in revenues from semiconductors used in DVD recorders in our consumer products group, and Ultra 320 SCSI and ASICs supplied to the disk-drive industry in our storage components group.

Revenues for the Storage Systems segment increased \$87.9 million or 26% in 2003 from 2002. The increase was due to a significant increase in sales to IBM, from \$120.4 million in 2002 to \$219.4 million in 2003. As a percentage of Storage Systems revenues, revenues from IBM increased to 52% in 2003 from 36% in 2002. The increase in revenues from IBM was primarily due to growth in demand for our high-performance controller products and an entry-level controller product introduced during the year, together with the enclosure products that are generally sold with these controllers. In addition, this increase was due to IBM's purchases of products added to our product line pursuant to the acquisition of IBM's Mylex business unit in August 2002. Growth in the demand for our premium software features also contributed to an increase in revenues. The growth in revenues for 2003 over 2002 was offset in part by a decrease in aggregate revenues of \$10.8 million from StorageTek and the Teradata division of NCR. As a percentage of Storage Systems revenues, sales to these two customers decreased in 2003 as compared to 2002.

We expect total consolidated revenues to decline in the first quarter of 2004 to within a range of \$445 million to \$455 million, primarily due to normal seasonality for semiconductors used in video game products within our consumer products group.

**2002 compared to 2001**

Total consolidated revenues for 2002 increased \$32.0 million or 2% as compared to 2001. Revenues for the Semiconductor segment decreased \$92.2 million or 6% in 2002 as compared to the previous year. Communications revenues dropped significantly in 2002 due to weak demand from our telecommunications customers resulting from overcapacity in end markets. Revenues decreased slightly in the consumer product group as revenues from set top box semiconductors weakened substantially, primarily due to competitive factors, and revenue from video game semiconductors decreased slightly compared to the prior year. The decline in the consumer group was offset in part by increased revenues from DVD and cable modem products due to growth in those markets and the benefit of a full year of revenue from C-Cube, which became a part of our consolidated financial statements with its acquisition in May 2001. Revenues for the storage components group increased year-on-year mainly because of a full year of revenues from RAID products, which became a part of our consolidated financial statements with the acquisition of AMI's RAID business in August 2001.

## Edgar Filing: LSI LOGIC CORP - Form 10-K

Revenues for the Storage Systems segment increased \$124.2 million or 59% in 2002 from 2001. The increase was due to overall increased demand for modular storage products, in particular increased demand from IBM. Revenues from IBM increased to 36% of Storage Systems revenues in 2002 from 21% of revenues in 2001. We believe the growth in revenues with IBM was primarily caused by IBM increasing its sales efforts on modular storage products, including those IBM purchases from us. Revenues in 2002 also increased due to additional revenue as a result of the acquisition of IBM's Mylex business unit in August 2002. Our sales to StorageTek also significantly increased in 2002 as compared to 2001, which was primarily due to the consolidation of our direct sales efforts into a single master distributor agreement with StorageTek during 2002. These increases also resulted from an increase in sales to the Teradata division of NCR.

**Significant Customers.** The following table summarizes the number of our significant customers, each of whom accounted for 10% or more of our revenues, along with the percentage of revenues they individually represent on a consolidated basis and by segment:

	Year ended December 31,		
	2003	2002	2001
<b>Semiconductor segment:</b>			
Number of significant customers	1	1	1
Percentage of segment revenues	18%	22%	21%
<b>Storage Systems segment:</b>			
Number of significant customers	3	3	3
Percentage of segment revenues	52%, 14%, 11%	36%, 20%, 15%	21%, 21%, 13%
<b>Consolidated:</b>			
Number of significant customers	2	1	1
Percentage of consolidated revenues	15%, 13%	18%	18%

**Revenues by geography.** The following table summarizes our revenues by geography:

	Year ended December 31,		
	2003	2002	2001
	(in millions)		
<b>Revenues:</b>			
North America	\$ 863.6	\$ 905.3	\$ 880.8
Asia, including Japan	677.3	748.9	630.7
Europe	152.2	162.7	273.4
<b>Total</b>	<b>\$ 1,693.1</b>	<b>\$ 1,816.9</b>	<b>\$ 1,784.9</b>

In 2003, revenues declined in all geographic regions as compared to 2002. The decline in revenues in North America for 2003 is mainly due to the continued economic downturn in the United States. The decline in revenues in Asia, including Japan, in 2003 compared to 2002 is primarily attributable to lower demand for our semiconductors used in certain consumer product applications such as DVD playback and video games. The decline in revenues for Asia, including Japan, was partially offset by growth in revenues from semiconductors used in DVD recorders in our consumer products group and Ultra 320 SCSI and ASICs supplied to the disk-drive industry in our storage components group.

**Operating costs and expenses.** Key elements of the consolidated statements of operations for the respective segments are as follows:

**Gross profit margin:**

	Year ended December 31,		
	2003	2002	2001
	(in millions)		
Semiconductor segment	\$ 518.2	\$ 523.4	\$ 351.2
Percentage of segment revenues	41%	35%	22%
Storage Systems segment	\$ 159.0	\$ 125.3	\$ 62.7
Percentage of segment revenues	38%	37%	30%
Consolidated	\$ 677.2	\$ 648.7	\$ 413.9
Percentage of revenues	40%	36%	23%

In September 2003, we entered into a definitive agreement to sell the Tsukuba, Japan facility to Rohm, a Japanese company. The sale closed during November 2003 for 2.82 billion yen (approximately \$25.8 million). See Note 4 of the Notes. We have now completed the consolidation of our internal manufacturing at our Gresham, Oregon campus, supplemented by strategic foundry relationships by acquiring wafers from foundries in other locations. Utilizing a diversity of manufacturing locations allows us to better manage our manufacturing needs, including investment in and access to world-class process technology.

**2003 compared to 2002**

The consolidated gross profit margin as a percentage of revenues increased to 40% in 2003 from 36% in 2002. The following factors were primarily attributable to the improvement in gross profit margins in 2003 as compared to 2002:

Lower charges for obsolete and unmarketable inventories in 2003 as compared to 2002 in the Semiconductor segment;

Lower manufacturing variances associated primarily with yield improvements in 2003 related to our 0.18 micron technology;

Lower compensation-related costs for manufacturing in the Semiconductor segment;

Higher sales of previously reserved inventory. In 2003, sales of previously reserved inventory improved gross profit margins by less than one percentage point as compared to sales of previously reserved inventory in 2002. The majority of this improvement in gross profit margin was in the Semiconductor segment;

A favorable change in product mix for the Semiconductor segment during 2003; and

A favorable change in product mix for the Storage Systems segment, offset by higher compensation related costs, due to headcount increases, and higher freight costs incurred during 2003.

The gross profit margin as a percentage of revenues for the Semiconductor segment increased to 41% from 35%. The gross profit margin improved in 2003 as compared to 2002, even though Semiconductor segment revenues were lower in 2003 as compared to 2002. The following factors were primarily attributable to the improvement in the Semiconductor segment's gross profit margins in 2003 as compared to 2002:

Lower charges for obsolete and unmarketable inventories in 2003 as compared to 2002;

Lower manufacturing variances associated primarily with yield improvements in 2003 related to our 0.18 micron technology;

Lower compensation-related costs for manufacturing;

A favorable change in product mix during 2003; and

Higher sales of previously reserved inventory. In 2003, sales of previously reserved inventory improved gross profit margins by less than one percentage point as compared to sales of previously reserved inventory in 2002.

The gross profit margin as a percentage of revenues for the Storage Systems segment increased to 38% in 2003 from 37% in 2002. The slight increase in gross profit margin as a percentage of revenues was primarily a function of product mix. Offsetting this increase were higher compensation-related costs for manufacturing, due to headcount increases, and higher freight costs incurred during 2003.

We expect our consolidated gross profit margin to be in the range of 41% to 43% in the first quarter of 2004, compared to 43% for the fourth quarter of 2003.

#### **2002 compared to 2001**

The consolidated gross profit margin as a percentage of revenues increased to 36% in 2002 from 23% in 2001. The following factors were primarily responsible for the improvement in consolidated gross profit margins in 2002 as compared to 2001:

Lower additional excess inventory and related charges in both the Semiconductor and Storage Systems segments in 2002. Such total consolidated charges in 2002 were \$45.5 million, \$165.1 million lower than the additional excess inventory and related charges of \$210.6 million recorded in 2001;

Lower manufacturing variances, due to improved capacity utilization for the Semiconductor segment during 2002;

Lower compensation-related costs for manufacturing in both the Semiconductor and Storage Systems segments in 2002 as compared to 2001 due to a decrease in average headcount; and

Increased revenues in the Storage Systems segment.

The gross profit margin as a percentage of revenues for the Semiconductor segment increased to 35% from 22%. The following factors were primarily responsible for the improvement in gross profit margins for Semiconductor segment in 2002 as compared to 2001:

Lower additional excess inventory and related charges of \$45.5 million in 2002 as compared to \$204.6 million in 2001. The charges were primarily associated with underutilization charges related to a partial idling of our fabrication facilities due to decreased demand;

Lower manufacturing variances, due to improved capacity utilization for the Semiconductor segment during 2002; and

Lower compensation-related costs for manufacturing in 2002 as compared to 2001 as a result of a decrease in average manufacturing headcount.

Gross profit margins improved, even though Semiconductor segment revenues were lower in 2002 as compared to 2001.

The gross profit margin as a percentage of revenues for the Storage Systems segment increased to 37% in 2002 from 30% in 2001. The following factors were primarily responsible for the improvement in gross profit margins for the Storage Systems segment in 2002 as compared to 2001:

## Edgar Filing: LSI LOGIC CORP - Form 10-K

Lower compensation-related costs in 2002 due to decreases in average manufacturing headcount in 2002 as compared to 2001 as a result of restructuring actions executed in 2002;

The adverse impact in 2001 of a \$6.0 million charge related to the write-down of excess inventory for certain cancelled product programs;

Decreased amortization of capitalized software development costs as a percentage of revenues; and

Increased revenues, resulting in lower overhead and fixed costs as a percentage of revenues.

### **Research and development:**

	Year ended December 31,		
	2003	2002	2001
	(in millions)		
Semiconductor segment	\$ 386.9	\$ 421.3	\$ 473.1
Percentage of segment revenues	30%	28%	30%
Storage Systems segment	\$ 45.8	\$ 36.1	\$ 30.0
Percentage of segment revenues	11%	11%	14%
<b>Consolidated</b>	<b>\$ 432.7</b>	<b>\$ 457.4</b>	<b>\$ 503.1</b>
Percentage of revenues	26%	25%	28%

### **2003 compared to 2002**

Research and development ( R&D ) expenses, on a consolidated basis, decreased \$24.7 million or 5% during 2003 as compared to 2002.

R&D expenses for the Semiconductor segment decreased \$34.4 million or 8% in 2003 as compared to 2002. The decrease in R&D expenses for the Semiconductor segment is primarily due to benefits from the cost-cutting measures implemented as part of the restructuring actions of 2001 to 2003 (see Note 4 of the Notes).

The decrease was offset in part because the technology transfer agreement entered into with Silterra during 1999 ended in 2002, which included a benefit of \$8 million for 2002 (See Note 5 of the Notes).

We develop advanced sub-micron product technologies. We continued the build-out of the current generation RapidChip platform infrastructure in 2003. Products utilizing RapidChip technology combine the high-density, high-performance and proven intellectual property benefits of cell-based ASICs with the advantages of Field Programmable Gate Arrays ( FPGAs ), such as lower development costs and faster time to market. We expect products utilizing RapidChip technology to have performance comparable to cell-based ASICs at a cost significantly lower than FPGAs. Markets for our RapidChip platform ASIC solutions will include communications, storage, industrial, and others. Our customer base for RapidChip technology encompasses a range from small start-up companies to major system OEMs throughout all geographic markets. We shipped our first RapidChip platform products in the fourth quarter of 2003.

R&D expenses for the Semiconductor segment increased to 30% of revenues in 2003 from 28% in 2002. This is a result of lower revenues, offset in part by lower R&D expenses for 2003 as compared to 2002.

R&D expenses for the Storage Systems segment increased by \$9.7 million or 27% in 2003 as compared to 2002. The increase primarily resulted from our strategy to invest in R&D programs to enhance the features, functionality and performance of our existing products and to add new products to our portfolio. In particular, we incurred additional R&D expenses in 2003 as a result of hiring 91 additional R&D employees in connection with our August 2002 acquisition of IBM's Mylex business unit. R&D expenses as a percentage of revenues for the Storage Systems segment remained unchanged at 11% in 2003 and 2002.

**2002 compared to 2001**

Consolidated R&D expenses decreased \$45.7 million or 9% in 2002 as compared to 2001. During the same period, R&D expenses for the Semiconductor segment decreased \$51.8 million or 11%. The decrease was primarily attributable to the cost-cutting measures implemented as part of the restructuring actions in 2001 and 2002. (See Note 4 of the Notes.) The decrease was offset in part by the following:

A lower benefit of \$8 million was recorded to R&D in 2002 as compared to \$20 million recorded in 2001. This benefit is associated with the technology transfer agreement entered into with Silterra in Malaysia during 1999 (See Note 5 of the Notes);

Continued R&D expenses for the former C-Cube and AMI RAID businesses, which are a part of the Semiconductor segment and included in our consolidated financial statements from May 11, 2001 and August 31, 2001, respectively; and

Expenditures related to continued development of advanced sub-micron products and process technologies, which includes the development of RapidChip.

R&D expenses for the Semiconductor segment decreased to 28% of revenues in 2002 from 30% in 2001. This decline is a result of lower R&D spending as discussed above offset in part by lower Semiconductor segment revenues in 2002 as compared to 2001.

R&D expenses for the Storage Systems segment increased \$6.1 million or 20% in 2002 as compared to 2001. We incurred additional research and development expenses in 2002 as a result of payment of salaries for approximately four months during 2002 of the additional former Mylex employees. R&D expenses as a percentage of revenues for the Storage Systems segment decreased to 11% in 2002 from 14% in 2001 as a result of an increase in revenues offset in part by an increase in R&D expenses in 2002.

***Selling, general and administrative:***

	Year ended December 31,		
	2003	2002	2001
	(in millions)		
Semiconductor segment	\$ 171.8	\$ 181.2	\$ 241.5
Percentage of segment revenues	14%	12%	15%
Storage Systems segment	\$ 62.4	\$ 49.0	\$ 65.8
Percentage of segment revenues	15%	15%	31%
Consolidated	\$ 234.2	\$ 230.2	\$ 307.3
Percentage of revenues	14%	13%	17%

**2003 compared to 2002**

Consolidated selling, general and administrative (referred to as SG&A ) expenses increased \$4.0 million or 2% during 2003 as compared to 2002.

SG&A expenses for the Semiconductor segment decreased \$9.4 million or 5% in 2003 as compared to 2002. The decrease for the Semiconductor segment was primarily attributable to the various cost reduction measures implemented from 2001 to 2003 (see Note 4 of the Notes) offset in part by a slight increase in compensation-related costs. For the Semiconductor segment, SG&A expenses as a percentage of revenues increased to 14% in 2003 from 12% in 2002. This is primarily a function of lower semiconductor segment revenues, offset in part by lower SG&A expenses.

## Edgar Filing: LSI LOGIC CORP - Form 10-K

SG&A expenses for the Storage Systems segment increased \$13.4 million or 27% in 2003 as compared to 2002. The increase is primarily a result of spending increases on sales and related activities to support existing channel customers and develop new channel customers. In addition, higher revenues resulted in higher selling commissions. For the Storage Systems segment, SG&A expenses as a percentage of revenues remained unchanged at 15% in 2003 as compared to 2002.

### 2002 compared to 2001

Consolidated SG&A expenses decreased \$77.1 million or 25% in 2002 as compared to 2001. As a percentage of revenues, SG&A expenses decreased to 13% in 2002 from 17% in 2001 on a consolidated basis. SG&A expenses for the Semiconductor segment decreased \$60.3 million or 25% as compared to 2001. For the Semiconductor segment, SG&A expenses decreased to 12% from 15% as a percentage of revenues over the same period. The decreases on a consolidated basis and for the Semiconductor segment were primarily attributable to the various cost-cutting measures implemented in 2001 and 2002 (See Note 4 of the Notes). The decrease was offset in part by continued SG&A expenses for the former C-Cube and AMI RAID businesses, which were added as part of the Semiconductor segment and included in our consolidated financial statements in the second and third quarters of 2001.

For the Storage Systems segment, SG&A expenses were \$49.0 million in 2002, down 26% from \$65.8 million in 2001. As a percentage of revenues, SG&A expenses for the Storage Systems segment decreased to 15% in 2002 from 31% in 2001. The decrease is primarily a result of lower bad debt expenses of \$6.3 million in 2002 due to payments we collected from two customers against which we had previously taken reserves; reimbursements from a customer of \$5.9 million for selling expenses under our master distributor arrangement, which was entered into during the first quarter of 2002; and higher revenues in 2002 as compared to 2001.

### *Acquired in-process research and development:*

There were no acquired in-process research and development ( IPR&D ) expenses in 2003. We recorded a charge of \$2.9 million and \$96.6 million for the years ended December 31, 2002 and 2001, respectively, associated with IPR&D in connection with various acquisitions. The details for the major acquisitions, at the acquisition dates, are summarized in the table below:

Company	Acquisition Date	IPR&D	Discount rate	Revenue projections extend through
<b>(dollar amounts in millions)</b>				
Mylex unit of IBM	August 2002	\$1.9	25%	2006
RAID Division of AMI	August 2001	19.1	20%	2006
C-Cube	May 2001	77.5	27.5%	2006

The amounts of IPR&D were determined by identifying research projects for which technological feasibility had not been established and no alternative future uses existed as of the respective acquisition dates. The value of the projects identified to be in progress was generally determined by estimating the future cash flows from the projects once commercially feasible, discounting the net cash flows back to their present value and then applying a percentage of completion to the calculated value. The net cash flows from the identified projects were based on estimates of revenues, cost of revenues, research and development costs, selling general and administrative costs and applicable income taxes for the projects. Total revenues for the projects are expected to extend through the dates noted in the above table by acquisition. These projections were based on estimates of market size and growth, expected trends in technology and the expected timing of new product introductions by our competitors and us. These estimates did not account for any potential synergies realizable as a result of the acquisition and were in line with industry averages and growth estimates.

## Edgar Filing: LSI LOGIC CORP - Form 10-K

*Percentage of completion.* The percentage of completion for each project was determined based on research and development expenses incurred up to the acquisition dates as a percentage of total research and development expenses to bring the projects to technological feasibility.

*Discount rates.* The discount rate is used for the projects to account for the risks associated with the inherent uncertainties surrounding the successful development of the IPR&D, market acceptance of the technology, the useful life of the technology, and the profitability level of such technology and the uncertainty of technological advances, which could impact the estimates described above. See details in table above.

*Project descriptions and estimates of completion by acquisition.*

*Mylex unit of IBM.* On August 29, 2002, we finalized an Asset Purchase Agreement with IBM. Under the agreement, we acquired certain tangible and intangible assets associated with IBM's Mylex business unit. The acquisition has enhanced product offerings in the expanding entry-level storage systems space within the Storage Systems segment and the PCI-RAID offering in the Semiconductor segment. As of the acquisition date, there were several projects in-process. Development of storage systems hardware technology started in 2000, while development of firmware and subsystems components technology started in 2002. As of August 29, 2002, we estimated that the projects were from 10% to 50% complete. As of the acquisition date, the cost to complete these projects was estimated at \$4.6 million in 2002 and \$2.6 million in 2003. As of December 31, 2003, the projects were completed.

*RAID business.* On August 31, 2001, we entered into an Asset Purchase Agreement with AMI. Under the agreement, we acquired certain tangible and intangible assets associated with AMI's RAID business. The acquisition enhanced product offerings and is included in the Semiconductor segment. As of the acquisition date, there were several projects in process. The projects were for development of RAID technology applications. Development of these projects started in early 2000 and 2001. As of August 31, 2001, we estimated the projects were approximately 12% to 62% complete for the RAID projects and the cost to complete these projects was estimated at \$4.6 million for 2001 and \$2.4 million for 2002. As of December 31, 2003, the projects were completed.

*C-Cube.* On May 11, 2001, we acquired C-Cube Microsystems Inc., pursuant to a definitive merger agreement. The acquisition enhanced our consumer product offerings in the Semiconductor segment. As of the acquisition date, there were various projects that were in process. The development of these projects started in early 1999. As of May 11, 2001, we estimated the projects were approximately 61% to 84% complete. As of the acquisition date, the cost to complete these projects was estimated at \$22.7 million in 2001 and \$9.1 million in 2002. As of December 31, 2003, the projects were completed or written-off. See discussion in Note 4 of the Notes.

### ***Restructuring of operations and other items, net:***

#### **2003**

We recorded net charges of \$180.6 million in restructuring of operations and other items for the year ended December 31, 2003 consisting of \$182.8 million in charges for restructuring of operations, and a gain of \$2.2 million for other items. Of these charges, \$165.7 million was recorded in the Semiconductor segment and \$14.9 million was included in the Storage Systems segment.

#### ***Restructuring and impairment of long-lived assets:***

On January 1, 2003, we adopted SFAS No. 146, Accounting for Exit or Disposal Activities. SFAS No. 146 has been applied to restructuring activities initiated after December 31, 2002 and changes the timing of when restructuring charges are recorded to the date when the liabilities are incurred.



First quarter of 2003:

In February 2003, we downsized operations and recorded \$35.7 million in charges for restructuring of operations and other items. Of this charge, \$21.1 million was associated with the Semiconductor segment and \$14.6 million was attributable to the Storage Systems segment. The charges consisted of severance and termination benefits of \$4.5 million for 210 employees involved in manufacturing operations, R&D and SG&A; \$1.4 million for costs associated with exiting certain operating leases primarily for real estate; and write-downs of \$24.1 million for certain acquired intangible assets, \$3.5 million for capitalized software and \$2.2 million for fixed assets. During the year ended December 31, 2003, payments related to the February 2003 restructuring actions consisted of approximately \$4.4 million for severance and termination benefits and \$0.6 million for lease and contract terminations.

Second quarter of 2003:

In April 2003, we announced a restructuring of our operations that included a reduction in workforce and the consolidation of certain non-manufacturing facilities. A charge of \$32.4 million was recorded in the Semiconductor segment consisting of severance and termination benefits of \$9.1 million for 325 employees involved in manufacturing operations, research and development, marketing, sales and administration; \$18.6 million for costs associated with exiting certain operating leases primarily for real estate; other exit costs of \$0.2 million; and a write-down of \$4.5 million for fixed assets due to impairment. During the year ended December 31, 2003, payments related to the April 2003 restructuring actions consisted of approximately \$9.0 million for severance and termination benefits, \$2.6 million for lease and contract terminations and \$0.1 million for other exit costs.

In June 2003, we announced the decision to sell the Tsukuba, Japan manufacturing facility. During the second quarter, a charge of \$72.9 million was recorded in the Semiconductor segment to write down fixed assets to their fair market value. The fair value was reclassified from property, plant and equipment to other current assets to reflect the intention to dispose of the facility within the next twelve months. In addition, approximately \$2.0 million in restructuring charges were recorded in the second quarter for severance and other exit costs. See further discussion in the third quarter below.

In June 2003, we also recorded \$19.4 million of additional fixed asset write-downs to reflect the decrease in fair market value of assets held for sale during the period. This write-down included a reduction in the value of the Colorado Springs fabrication facility of \$16.4 million to reflect continued efforts to sell the facility.

Third quarter of 2003:

*Agreement to sell Japan fabrication facility:*

In September 2003, we entered into a definitive agreement to sell the Tsukuba, Japan manufacturing facility to Rohm, a Japanese company. The sale closed during November 2003 for 2.82 billion yen (approximately \$25.8 million). As part of the definitive agreement, we agreed to purchase a minimum amount of production wafers from Rohm for a period of 15 months following the close of the transaction. As a result, a charge of \$4.3 million was recorded in cost of revenues during the third quarter of 2003. This charge is a result of the application of our policy to accrue for non-cancelable inventory purchase commitments in excess of 12 months of estimated demand. Included in the \$4.3 million charge to cost of revenues is a reclassification of \$3.0 million from restructuring expense originally recorded in the second quarter of 2003 to better reflect the terms of the definitive agreement. Also in the third quarter, \$1.8 million was recorded for additional severance benefits to be paid and for contract termination and other exit costs associated with the definitive agreement. During the year ended December 31, 2003, payments related to the Japan restructuring actions consisted of approximately \$1.3 million for severance and termination benefits and \$0.2 million for lease and contract terminations.

*Other third quarter 2003 restructuring actions:*

In the third quarter of 2003, we continued to consolidate non-manufacturing facilities and recorded \$1.5 million for costs associated with exiting certain operating leases for real estate as the facilities ceased being used.

In September 2003, we decided to discontinue development programs and to refocus sales and marketing efforts for certain product lines in the Semiconductor segment. As a result of an analysis of future net cash flows related to the affected product lines, it was determined that certain acquired intangible assets were impaired. An impairment charge of \$21.0 million related to the write-down of the acquired intangible assets to fair market value was recorded in the third quarter of 2003. These intangible assets were originally acquired in connection with the acquisition of C-Cube Microsystems in the second quarter of 2001. In addition, \$3.2 million in restructuring charges were recorded in the third quarter of 2003. These charges related to severance and termination benefits for 97 employees primarily involved in research and development and for certain contract termination costs and fixed asset write downs due to impairment. The severance benefits were paid during the third quarter of 2003.

Fourth quarter of 2003:

In the fourth quarter of 2003, we reversed approximately \$2.2 million of previously accrued restructuring expenses. The reversal was primarily due to the combination of a favorable negotiation to terminate leases for real property and severance payments that were lower than expected due to the timing of the sale of the Japan manufacturing facility to Rohm. An expense of \$1.6 million was recorded primarily to reflect the change in time value of accruals for facility lease termination costs and the write down of fixed assets due to impairment. Certain other reclassifications were made between asset decommissioning costs and other facility closure costs to reflect changes in management estimates for the remaining costs for these activities.

In December 2003, we recorded \$1.6 million of additional fixed asset write-downs to reflect the decrease in fair market value of assets held for sale during the period. We also recorded a realized gain of \$5.1 million on the sale of fixed assets that had been previously held for sale.

The fair value of equipment, facilities and intangible assets determined to be impaired was the result of the use of management estimates. Given that current market conditions for the sale of older fabrication facilities and related equipment may fluctuate, there can be no assurance that we will realize the current net carrying value of the assets held for sale. We reassess the realizability of the carrying value of these assets at the end of each quarter until the assets are sold or otherwise disposed of and additional adjustments may be necessary. Assets held for sale of \$30 million and \$74 million were included as a component of prepaid expenses and other current assets as of December 31, 2003 and December 31, 2002, respectively. Assets classified as held for sale are not depreciated. We are making appropriate efforts to sell assets held for sale within the next twelve months.

The following table sets forth our restructuring reserves as of December 31, 2003, which are included in other accrued liabilities on the balance sheet:

	<b>Balance at December 31, 2002</b>	<b>Restructuring Expense 2003</b>	<b>Release of reserve and reclassifications</b>	<b>Utilized during 2003</b>	<b>Balance at December 31, 2003</b>
(In thousands)					
Write-down of excess assets (a)	\$ 6,008	\$ 147,454	\$ (6,422)	\$ (144,379)	\$ 2,661
Lease terminations and maintenance contracts (b)	6,757	23,444	(1,146)	(8,034)	21,021
Facility closure and other exit costs (c)	8,129	1,072	1,203	(8,268)	2,136
Payments to employees for severance (d)	1,391	18,095	(928)	(17,684)	874
<b>Total</b>	<b>\$ 22,285</b>	<b>\$ 190,065</b>	<b>\$ (7,293)</b>	<b>\$ (178,365)</b>	<b>\$ 26,692</b>

- (a) The amounts utilized in 2003 reflect \$142.4 million of non-cash write-downs of amortizable intangible and other long-lived assets in the U.S and Japan due to impairment, and \$2.0 million in cash payments to decommission and sell assets. The write-downs of the intangible and other long-lived assets were accounted for as a reduction of the assets and did not result in a liability. The \$2.7 million balance as of December 31, 2003, relates to machinery and equipment decommissioning costs in the U.S and estimates of selling costs for assets held for sale which is expected to be utilized during 2004.
- (b) Amounts utilized represent cash payments. The balance remaining for primarily real estate lease terminations and maintenance contracts will be paid during the remaining terms of these contracts, which extend through 2011.
- (c) Amounts utilized represent cash payments. The balance remaining for facility closure and other exit costs will be paid during 2004.
- (d) Amounts utilized represent cash severance payments to 777 employees during 2003. The balance remaining for severance is expected to be paid by the end of the first quarter of 2004.

*Other items:*

A gain of approximately \$2.2 million was recorded in restructuring and other items, net during the second quarter of 2003 associated with additional sales of intellectual property associated with the CDMA handset product technology.

**2002**

We recorded approximately \$67.1 million in restructuring of operations and other items for the year ended December 31, 2002, consisting of \$75.2 million for restructuring of operations, and a gain of \$8.1 million for other items including the gain on sale of CDMA handset product technology. Restructuring of operations and other items were primarily included in the Semiconductor segment; the restructuring expense included in the Storage Systems segment was not significant.

*Restructuring and impairment of long-lived assets:*

In the first quarter of 2002, we announced a set of actions to reduce costs and streamline operations. These actions included a worldwide reduction in workforce, downsizing our manufacturing operations in Tsukuba, Japan, and the decision to exit CDMA handset product technology. During the three months ended March 31, 2002, we recorded a restructuring charge for severance for 1,150 employees worldwide and exit costs primarily associated with cancelled contracts and operating leases. As a result of the restructuring actions, we recorded fixed asset write-downs due to impairment in the U.S. and Japan for assets to be disposed of by sale. In the second quarter of 2002, we completed the sale of CDMA handset product technology to a third party, recognizing a net gain of \$6.4 million.

During the fourth quarter of 2002, we reversed approximately \$5 million of previously accrued restructuring expenses. As a result of our decision to terminate fewer employees than the original plan contemplated in Tsukuba, Japan, we reversed previously accrued restructuring expenses for termination benefits including outplacement costs and certain contract termination fees of \$7 million. This was offset by additional expense accruals of \$2 million for costs related to the previously announced closure of the Colorado Springs fabrication facility. Certain other reclassifications were made between lease and contract terminations and facility closure and other exit costs to reflect changes in management estimates for the remaining costs for these activities.

In September 2002, we recorded \$13 million of additional fixed asset write-downs to reflect the decrease in the fair market value of the assets during the period.

## Edgar Filing: LSI LOGIC CORP - Form 10-K

The following table sets forth our restructuring reserves as of December 31, 2002, which are included in other accrued liabilities on the balance sheet:

	<b>Balance at December 31, 2001</b>	<b>Restructuring Expense 2002</b>	<b>Release of reserve and reclassifications</b>	<b>Utilized during 2002</b>	<b>Balance at December 31, 2002</b>
(In thousands)					
Write-down of excess assets <sup>(a)</sup>	\$ 3,762	\$ 38,918	\$ 5,147	\$ (41,819)	\$ 6,008
Lease terminations and maintenance contracts(c)	10,695	12,871	(10,559)	(6,250)	6,757
Facility closure and other exit costs (c)	14,153	415	4,058	(10,497)	8,129
Payments to employees for severance <sup>(b)</sup>	724	27,490	(3,150)	(23,673)	1,391
<b>Total</b>	<b>\$ 29,334</b>	<b>\$ 79,694</b>	<b>\$ (4,504)</b>	<b>\$ (82,239)</b>	<b>\$ 22,285</b>

(a) Amounts utilized in 2002 reflect a non-cash write-down of fixed assets in the U.S. and Japan due to impairment of \$38.3 million and cash payments for machinery and equipment decommissioning costs of \$3.5 million. The fixed asset write-downs were accounted for as a reduction of the assets and did not result in a liability. The \$6.0 million balance as of December 31, 2002 relates to machinery and equipment decommissioning costs in the U.S and selling costs for assets held for sale.

(b) Amounts utilized represent cash severance payments to 1,290 employees during the year ended December 31, 2002. The \$1.4 million balance as of December 31, 2002 was paid during 2003.

(c) Amounts utilized represent cash payments.

*Other items:*

We recorded a net gain of \$1.7 million in other items during the first quarter of 2002, which consisted of a nonrefundable deposit paid to us in the first quarter of 2002 related to the termination of the agreement to sell the Colorado Springs fabrication facility during 2001, offset in part by certain costs associated with maintaining CDMA handset product technology held for sale.

### 2001

We recorded approximately \$219.6 million in restructuring of operations and other items for the year ended December 31, 2001, consisting of \$207.2 million for restructuring of operations and \$12.4 million for other items. Restructuring of operations and other items were primarily included in the Semiconductor segment; the restructuring expense included in the Storage Systems segment was not significant.

#### *Restructuring and impairment of long-lived assets:*

In September 2001, we announced the consolidation of U.S. manufacturing operations to Gresham, Oregon, including the transfer of process research and development from Santa Clara, California to Gresham, Oregon. We also announced the closure of certain assembly activities in Fremont, California, which would be transferred offshore. As a result of these actions, we recorded a restructuring charge of \$95.0 million, including fixed asset write-downs due to impairment as a result of the restructuring actions in the U.S., losses on operating leases for equipment and facilities, severance for 600 employees across multiple company activities and functions in the U.S., Europe, Japan and Asia Pacific, as well as other exit costs.

In April 2001, we announced the closure of our Colorado Springs fabrication facility. This facility was closed in the fourth quarter of 2001. We recorded an impairment charge of \$130.5 million relating to the facility, of which approximately \$35.0 million was recorded in cost of sales and \$95.5 million was recorded in restructuring charges. The restructuring charges consisted of fixed asset write-downs due to impairment as a result of the restructuring actions, losses on operating leases for equipment, severance for 413 manufacturing employees and other exit costs.

During the second quarter of 2001, we recorded an additional \$16.8 million in restructuring charges primarily associated with the write-down of fixed assets due to impairment as a result of the restructuring actions in the U.S., Japan and Hong Kong and severance charges for 240 employees across multiple company activities and functions in the U.S., Europe and Asia Pacific.



## Edgar Filing: LSI LOGIC CORP - Form 10-K

The following table sets forth our restructuring reserves as of December 31, 2001, which are included in other accrued liabilities on the balance sheet:

	Restructuring Expense	Utilized during 2001	Balance at December 31, 2001
(In thousands)			
Write-down of excess assets <sup>(a)</sup>	\$ 139,724	\$ (135,962)	\$ 3,762
Lease terminations and maintenance contracts(c)	26,912	(16,217)	10,695
Facility closure and other exit costs (c)	24,242	(10,089)	14,153
Payments to employees for severance <sup>(b)</sup>	16,346	(15,622)	724
<b>Total</b>	<b>\$ 207,224</b>	<b>\$ (177,890)</b>	<b>\$ 29,334</b>

- (a) Amounts utilized in 2001 reflect a non-cash write-down of fixed assets in the U.S., Japan and Hong Kong due to impairment of \$133.8 million and cash payments for machinery and equipment decommissioning costs of \$2.2 million. The fixed asset write-downs were accounted for as a reduction of the assets and did not result in a liability. The \$3.8 million balance as of December 31, 2001 relates to machinery and equipment decommissioning costs in the U.S.
- (b) Amounts utilized represent cash payments related to the severance of 1,180 employees during the year ended December 31, 2001.
- (c) Amounts utilized represent cash payments.
- Other items:*

We recorded approximately \$12.4 million in other items during 2001 as follows:

\$8.1 million in charges associated with the write-down of intangible assets due to impairment. The majority of the intangible assets were originally acquired in the purchase of a division of NeoMagic in the second quarter of 2000.

\$4.3 million in charges primarily consisting of the write-down of an investment in a marketable equity security and related purchased intellectual property.

### ***Amortization of non-cash deferred stock compensation:***

Amortization of non-cash deferred stock compensation is due to non-cash deferred stock compensation recorded in connection with acquisitions. The acquisitions for which deferred stock compensation and related amortization were recorded consisted of an acquisition in the fourth quarter of 2002, C-Cube and the RAID business from AMI in 2001, and DataPath and Syntax in 2000. No deferred stock compensation was recorded in connection with the acquisition of the Mylex business unit in 2002. There were no business combination transactions in 2003. We amortize deferred stock compensation ratably over the vesting period. Deferred stock compensation is adjusted to reflect the departure of any employee prior to vesting.

Amortization of non-cash deferred stock compensation of \$26.0 million, \$77.3 million and \$104.6 million was recorded in 2003, 2002 and 2001, respectively. At December 31, 2003, the deferred stock compensation that remained was \$24.8 million, which is expected to be amortized over the next two years. The balance of deferred stock compensation that remained to be amortized at December 31, 2002, was \$51.2 million.

### ***Amortization of intangibles:***

Amortization of intangibles decreased to \$76.4 million in 2003 from \$78.6 million in 2002. Amortization decreased during 2003 as a result of the write-down in the first quarter of \$15.1 million of intangible assets in the Semiconductor segment and \$9.0 million of intangible assets in the Storage Systems segment. In the third quarter of 2003 we wrote-down an additional \$21.0 million of intangible assets originally acquired in connection with the acquisition of C-Cube Microsystems which was added to our Semiconductor segment in the second quarter of 2001. The charges were recorded in restructuring and other items, net in 2003. See Note 4 of the Notes. These decreases were offset in part by a full year of amortization for intangible assets acquired during the third and fourth quarters of 2002.

Amortization of intangibles decreased to \$78.6 million in 2002 from \$188.3 million in 2001. The decrease is primarily attributable to cessation of amortization of goodwill as of January 1, 2002 in accordance with SFAS No. 142, Goodwill and Other Intangible Assets, offset by the additional intangible assets and related amortization recorded in connection with two acquisitions during the second half of 2002.



## Edgar Filing: LSI LOGIC CORP - Form 10-K

As discussed above, our goodwill balance of approximately \$968.5 million as of December 31, 2003 is no longer amortized, but is instead tested for impairment annually or sooner if circumstances indicate that it may no longer be recoverable. The annual impairment test was performed at December 31, 2003 and it indicated that goodwill was not impaired. Factors that could trigger an impairment review sooner than annually are discussed in the critical accounting estimates section later in this Annual Report on Form 10-K. Goodwill is tested for impairment by reporting unit. Our reporting units are Semiconductor and Storage Systems. The impairment testing is performed in a two-step process. The first step requires comparing the fair value of each reporting unit to its net book value. An impairment exists if the fair value of the reporting unit is lower than its net book value. The second step of the process is only performed if an impairment exists, as it involves measuring the actual impairment to goodwill. We use management estimates to perform the first step of the goodwill impairment test. Two methodologies were used to obtain the fair value for each reporting unit as of December 31, 2003: Discounted Cash Flow and Market Multiple.

The Discounted Cash Flow and Market Multiple methodologies include assumptions about future conditions within our reporting units and related industries. These assumptions include estimates of future market size and growth, expected trends in technology, timing of new product introductions by our competitors and us, and the nature of the industry in which comparable companies and we operate. If significant changes to these assumptions occur, goodwill could become impaired in the future. The valuation of long-lived and intangible assets and goodwill is considered to be a critical accounting estimate to us and is discussed further later in this Annual Report on Form 10-K.

### ***Interest expense:***

Interest expense decreased by \$21.3 million to \$30.7 million in 2003 from \$52.0 million in 2002. The decrease is due to the repurchase/redemption of \$710.0 million of Convertible Subordinated Notes ( Convertible Notes ) during 2003 and \$135.0 million during 2002. The decrease from the repurchases and redemptions was partly offset by interest expense on the \$350 million of 4% Convertible Notes issued on May 12, 2003 (see Note 9 of the Notes).

Our interest expense continued to be below the stated coupon rate of approximately 4% as a result of the interest rate swaps (the Swaps ) on the Convertible Notes entered into in the second quarter of 2002.

With the objective of protecting our cash flows and earnings from the impact of fluctuations in interest rates, while minimizing the cost of capital, we may enter into or terminate interest rate swaps. In June 2002, we entered into the Swaps with various investment banks. The Swaps effectively converted fixed interest payments on a portion of our Convertible Notes to LIBOR-based floating rates. The Swaps qualified for hedge accounting treatment. (See Note 7 of the Notes.) During the second quarter of 2003, we terminated the Swaps, resulting in a deferred gain of \$44.1 million that will be amortized as a benefit to interest expense over the remaining term of the hedged Convertible Notes. A portion of the deferred gain was written off as part of the net gain or loss on the repurchase/redemption of the hedged Convertible Notes during 2003. As of December 31, 2003, a deferred gain of \$25.4 million was recorded as a component of the Convertible Notes.

Interest expense increased to \$52.0 million in 2002 from \$44.6 million in 2001. The increase is due to additional interest expense incurred on the increased debt outstanding in 2002 due to the issuance of the \$490.0 million of 4% Convertible Notes issued in October 2001. (See Note 9 of the Notes.) The increase was offset in part by a reduction in the effective interest rate payable on the Convertible Notes as a result of the Swaps entered into in the second quarter of 2002. At December 31, 2002, a notional amount of \$740 million of our Convertible Notes was covered by the Swaps.

### ***Interest income and other, net:***

Interest income and other, net, was \$18.9 million in 2003 as compared to \$26.4 million in 2002. Interest income decreased by \$3.3 million to \$28.3 million in 2003 from \$31.6 million in 2002. The decrease in interest income is mainly due to lower returns on our short-term investments during the year ended December 31, 2003 as compared to the same period of 2002. Other expenses net of \$9.4 million in



2003 included \$8.5 million in charges associated with write-downs of investments in equity securities due to impairment that were considered by management to be other than temporary (See Note 6 of the Notes), a net loss on the redemption/repurchase of Convertible Notes of \$3.9 million, and currency option premium expenses, which were offset in part by net foreign exchange gains, gains on sale of miscellaneous assets, and other expenses that were individually insignificant.

Interest income and other, net, was \$26.4 million in 2002 as compared to \$14.5 million in 2001. Interest income decreased to \$31.6 million in 2002 from \$42.7 million in 2001. The decrease in interest income is attributable to lower returns due to the declining interest rate environment and lower invested cash balances in 2002 as compared to 2001. Other expense of \$5.2 million in 2002 included the following:

A gain of \$14.3 million on the repurchase of a portion of the Convertible Notes, net of the write-off of debt issuance costs associated with the issuance of the Convertible Notes. During the third and fourth quarters of 2002, we repurchased and retired \$115.0 million of the \$500 million 4% Convertible Notes issued in 2000 and \$20.0 million of the \$345 million 4 1/4% Convertible Notes issued in 1999. Effective January 1, 2002, we early adopted the provisions of Statement of Financial Accounting Standards No. 145, Rescission of FASB Statements No. 4, 44, and 64, Amendment of FASB Statement No. 13, and Technical Corrections related to extinguishment of debt. As a result, the gain on the repurchase of debt is included in interest income and other, net, in the statement of operations (See Note 9 of the Notes);

A net write-down of certain equity investments for \$19.4 million due to impairment considered by our management to be other than temporary. (See Note 6 of the Notes.); and

A gain on miscellaneous asset sales, the cost of purchased option contracts, bank fees and other miscellaneous expenses.

***Gain on sale of equity securities:***

During 2001, we sold investments in certain marketable equity securities for \$7.9 million in the open market, realizing a pre-tax gain of approximately \$5.3 million.

***Provision/(benefit) for income taxes:***

During 2003, we recorded an income tax expense of \$24.0 million, which represents an effective tax rate of approximately (8%). This rate differs from the U.S. statutory rate primarily due to losses of our foreign subsidiaries, which are not benefited or are benefited at lower rates, earnings of certain foreign subsidiaries taxed in the U.S., and alternative minimum taxes. The effect of these charges has been partially offset by the benefit of foreign tax and research and development tax credits.

In 2002, we recorded an income tax expense of \$1.8 million, which represents an effective tax rate of approximately (1%). This rate differs from the U.S. statutory rate primarily due to losses of our foreign subsidiaries, which are not benefited or are benefited at lower rates, foreign tax expense in certain jurisdictions, and reductions in the value of our deferred tax assets with the corresponding charge to income tax expense of approximately \$62 million. The effect of these charges was partially offset by the expanded net operating loss carry-back provided by a law change in 2002, as well as the reversal of taxes previously accrued and the conclusion of a federal income tax audit with the Internal Revenue Service for the income tax years 1995 through 2000.

In 2001, we recorded an income tax benefit of \$39.2 million, which represents an effective tax rate of approximately 4%. This rate differs from the U.S. statutory rate primarily due to losses of our foreign subsidiaries, which are not benefited or are benefited at lower rates, foreign tax expense in certain jurisdictions, net operating losses not currently benefited, and items related to acquisitions, which are non-deductible for tax purposes.

***Minority interest in net income of subsidiary:***

Minority interest in net income of subsidiary was not significant for the periods presented. The changes in minority interest were attributable to the composition of earnings and losses in one of our international affiliates for each of the respective years.

**FINANCIAL CONDITION, CAPITAL RESOURCES AND LIQUIDITY**

Cash, cash equivalents and short-term investments decreased to \$813.7 million at December 31, 2003, from \$990.0 million at December 31, 2002. The decrease is mainly due to net cash outflows from investing and financing activities, partially offset by cash and cash equivalents provided by operating activities as described below.

***Working capital.*** Working capital decreased by \$229.5 million to \$998.8 million at December 31, 2003, from \$1.23 billion as of December 31, 2002. Working capital declined in 2003 as a result of the following:

We paid \$716.0 million for the repurchase or redemption of Convertible Notes during 2003, which was partially offset by \$350.0 million in cash proceeds received from the issuance of the 2003 Convertible Notes in the second quarter of 2003 (see Note 9 of the Notes);

Accounts receivable declined by \$17.4 million to \$231.2 million as of December 31, 2003 from \$248.6 million at December 31, 2002. The decrease is mainly attributable to decreased revenues in the fourth quarter of 2003 as compared to the fourth quarter of 2002;

Prepaid expenses and other current assets decreased by \$43.1 million, primarily due to the termination of the interest rate swap which caused a reduction in the related interest receivable (see Note 7 of the Notes) and a lower balance of assets held for sale due to sales and write-downs of assets, net of additions (see Note 4 of the Notes);

Accounts payable increased by \$1.8 million due to timing of payments;

Accrued salaries, wages and benefits increased by \$4.5 million due to timing differences in payment of salaries and bonuses; and

Income taxes payable increased by \$28.4 million due to the timing of tax payments made and the income tax provision recorded in 2003.

The decrease in working capital was offset, in part, by the following:

Inventories increased by \$4.1 million, primarily as a result of decreased revenues, offset in part by decreased production in the fourth quarter of 2003 as compared to the fourth quarter of 2002;

Current deferred tax assets, net of current deferred tax liabilities increased by \$6.9 million due to changes in underlying temporary differences (see Note 11 of the Notes); and

Other accrued liabilities decreased by \$31.0 million mainly due to a reduction in interest payable primarily due to the timing of interest payments and the reduction in the balance of outstanding Convertible Notes, offset in part by higher restructuring reserves (see Note 4 of the Notes).

***Cash and cash equivalents generated from operating activities.*** During 2003, we generated \$189.8 million of net cash and cash equivalents from operating activities compared to \$164.8 million generated in 2002. Cash and cash equivalents generated from operating activities for the year ended December 31, 2003 were the result of the following:

## Edgar Filing: LSI LOGIC CORP - Form 10-K

Higher net changes in assets and liabilities, net of assets acquired and liabilities assumed in business combinations for the year ended December 31, 2003 as compared to the same period in 2002, offset by lower income (before depreciation and amortization; non-cash restructuring and other items; amortization of non-cash deferred stock compensation acquired in-process R&D; provision for inventories and losses on write-downs of equity securities, net of gain on sales) over the two periods presented. The non-cash items and other non-operating adjustments are quantified in our Consolidated Statements of Cash Flows included in this Current report on Form 10-K;

Changes in working capital components from December 31, 2003 as compared to December 31, 2002 as discussed above; and

Cash of \$44.9 million, which was received upon termination of the Swaps during the second quarter of 2003 (see Note 7 of the Notes). The fair value of the Swap was formerly included in other non-current assets.

**Cash and cash equivalents used in investing activities.** Cash and cash equivalents used in investing activities during 2003 were \$0.2 million as compared to \$402.3 million used in 2002. The primary investing activities or changes during 2003 were as follows:

Purchases of debt and equity securities available for sale, net of sales and maturities in 2003;

Proceeds of \$160.0 million from the sale-leaseback transaction entered into during the first quarter of 2003 (see Note 13 of the Notes);

Proceeds from the sale of property and equipment and the sale of the Japan manufacturing facility to Rohm (see Note 4 of the Notes);

Purchases of property and equipment during 2003; and

Higher non-current assets and deposits in 2003, primarily as a result of the new lease agreement entered into during the first quarter of 2003 (see Note 13 of the Notes).

Capital additions were \$78.2 million in 2003 as compared to \$48.2 million in 2002. We believe that maintaining technological leadership in the highly competitive worldwide semiconductor manufacturing industry requires access to additional advanced manufacturing capacity. Our focus is on establishing strategic supplier alliances with foundry semiconductor manufacturers, which enables us to have access to advanced manufacturing capacity, and reduces our capital spending requirements. We expect capital expenditures to be approximately \$100 million in 2004.

**Cash and cash equivalents used in financing activities.** Cash and cash equivalents used in financing activities during 2003 were \$375.0 million as compared to \$75.3 million in 2002. The increase is primarily attributable to cash paid to redeem/repurchase the 1999 and 2000 Convertible Notes, partially offset by cash proceeds from the issuance of the 2003 Convertible Notes, accompanied by lower cash proceeds from issuance of common stock under our employee stock option and purchase plans in 2003 as compared to 2002.

On May 12, 2003, we issued \$350 million of 4% Convertible Subordinated Notes (the 2003 Convertible Notes ) due in 2010. We paid approximately \$10.9 million for debt issuance costs that are being amortized using the interest method (See Note 9 of the Notes).

Approximately \$28 million of the proceeds from the issuance of the 2003 Convertible Notes were used to purchase call spread options on LSI's common stock (the Call Spread Options ). The Call Spread Options, including fees and costs have been accounted for as capital transactions in accordance with Emerging Issues Task Force No. 00-19, Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company's Own Stock. The Call Spread Options cover approximately 26.1

million shares of our common stock, which is the number of shares that are initially issuable upon conversion of the 2003 Convertible Notes in full. The Call Spread Options are designed to mitigate dilution from conversion of the 2003 Convertible Notes in the event that the market price per share of our common stock upon exercise of the Call Spread Options is greater than \$13.42 and is less than or equal to \$23.875. The Call Spread Options may be settled at our option in either net shares or in cash and expire in 2010.

The proceeds from the 2003 Convertible Notes were used to repurchase \$153 million of the 1999 Convertible Notes and \$135 million of the 2000 Convertible Notes during the second quarter of 2003. A net pre-tax loss of \$2 million was recognized, in interest income and other, net, on the repurchases of the 1999 and 2000 Convertible Notes. The pre-tax loss is net of the write-off of debt issuance costs and a portion of the deferred gain on the terminated Swaps (see Note 7 of the Notes).

On September 18, 2003, we redeemed the balance of the 1999 Convertible Notes that were outstanding on that date (See Note 9 of the Notes). Cash of \$173 million was paid to redeem the remaining 1999 Convertible Notes at a total redemption price of \$1,008.86 per \$1,000 principal amount of the notes consisting of \$1,008.50 principal amount plus accrued interest of \$0.36. A net pre-tax loss of \$1 million was recognized, in interest income and other, net, on the redemption of the 1999 Convertible Notes. The pre-tax loss is net of the write-off of debt issuance costs and the remaining deferred gain on the terminated Swap (see Note 9 of the Notes).

On December 24, 2003, we redeemed the balance of the 2000 Convertible Notes that were outstanding on that date. Cash of \$258 million was paid to redeem the remaining 2000 Convertible Notes at a total redemption price of \$1030.33 per \$1,000 principal amount of notes, consisting of \$1,016.00 principal plus interest of \$ 14.33. A net pre-tax loss of approximately \$1 million was recognized, in interest income and other, net, on the redemption of the 2000 Convertible Notes. The pre-tax loss is net of the write-off of debt issuance costs and the remaining deferred gain on the terminated Swap (see Note 7 and 9 of the Notes).

It is our policy to reinvest our earnings and we do not anticipate paying any cash dividends to stockholders in the foreseeable future.

We may seek additional equity or debt financing from time to time. We believe that our existing liquid resources and funds generated from operations, combined with funds from such financing and our ability to borrow funds, will be adequate to meet our operating and capital requirements and obligations for the foreseeable future. However, we cannot be certain that additional financing will be available on favorable terms. Moreover, any future equity or convertible debt financing will decrease the percentage of equity ownership of existing stockholders and may result in dilution, depending on the price at which the equity is sold or the debt is converted.

On February 19, 2004, Storage Systems filed a Registration Statement on Form S-1 with the Securities and Exchange Commission. If the initial public offering is completed as currently intended, we plan to receive the net cash proceeds from the offering from Storage Systems in the form of a dividend. We may sell shares of Storage Systems common stock in the public market or in private transactions, which may not include the sale of a controlling interest in Storage Systems.

We currently intend to distribute to our stockholders, by the summer of 2005, all remaining shares of Storage Systems common stock held by us at such time. We will determine the timing, structure and all terms of the distribution taking into account factors such as market conditions. Completion of the distribution would also be contingent upon the receipt of a favorable tax ruling from the Internal Revenue Service and/or a favorable opinion from our tax advisor as to the tax-free nature of the distribution for U.S. federal income tax purposes. We are not obligated to undertake the distribution, and the distribution may not occur by the contemplated time or at all. We do not expect our operating cash flows to be materially affected in periods subsequent to the distribution.

**CONTRACTUAL OBLIGATIONS**

The following table summarizes our contractual obligations at December 31, 2003, and the effect these obligations are expected to have on our liquidity and cash flow in future periods.

Contractual Obligations	Payments due by period				
	Less than 1 year	1 - 3 years	4 - 5 years	After 5 years	Total
	(in millions)				
Convertible Subordinated Notes	\$	\$ 490.0	\$	\$ 350.0	\$ 840.0
Operating lease obligations	131.5	212.3	31.0	26.9	401.7
Capital lease obligations	0.4	0.2			0.6
Purchase commitments	132.5	12.9	0.1		145.5
<b>Total</b>	<b>\$ 264.4</b>	<b>\$ 715.4</b>	<b>\$ 31.1</b>	<b>\$ 376.9</b>	<b>\$ 1,387.8</b>

*Convertible Subordinated Notes*

As of December 31, 2003, we have \$490 million of Convertible Notes due in November 2006 ( 2001 Convertible Notes ) and \$350 million of the 2003 Convertible Notes due in May 2010. All of the Convertible Notes are subordinated to all existing and future senior debt, are convertible at the holder's option, at any time prior to the maturity date of the Convertible Notes, into shares of our common stock. The 2001 and 2003 Convertible Notes have conversion prices of approximately \$26.34 per share and \$13.42 per share, respectively. The 2001 Convertible Notes are convertible at the holder's option, at any time after 60 days following issuance, into shares of our company's common stock. The 2001 Convertible Notes are redeemable at our option, in whole or in part, on at least 30 days notice at any time on or after the call date, which is two years before the due date. We cannot elect to redeem the 2003 Convertible Notes prior to maturity. Each holder of the 2001 and 2003 Convertible Notes has the right to cause us to repurchase all of such holder's convertible notes at 100% of their principal amount plus accrued interest upon the occurrence of any fundamental change, which includes a transaction or event such as an exchange offer, liquidation, tender offer, consolidation, merger or combination. Interest is payable semiannually.

Fluctuations in our stock price impact the prices of our outstanding convertible securities and the likelihood of the convertible securities being converted into cash or equity. If we are required to redeem any of the Convertible Notes for cash, it may affect our liquidity position. However, in the event they do not convert to equity, we believe that our current cash position and expected future operating cash flows will be adequate to meet these obligations as they mature. From time to time, we may buy back Convertible Notes.

*Operating Lease Obligations*

As of December 31, 2003, we had operating leases financing certain wafer fabrication equipment (see Note 13 of the Notes). The debt related to these operating leases is not reflected on the balance sheet. Under these leases, we are required to maintain unrestricted cash and short-term investment reserves in an amount no less than \$350 million. We were in compliance with this requirement as of December 31, 2003.

We guarantee residual values of equipment on these leases. As of December 31, 2003, we do not expect to realize a loss on the guarantee at the end of the lease term and, accordingly, no additional rent expense has been recognized (see Note 13 of the Notes).

We also lease real estate, certain other equipment and software under non-cancelable operating leases.

*Purchase Commitments*

We maintain certain purchase commitments primarily for raw materials with suppliers and for some non-production items. Purchase commitments for inventory materials are generally restricted to a forecasted

time-horizon as mutually agreed upon between the parties. This forecasted time-horizon can vary among different suppliers.

*Standby letters of credit*

In connection with the equipment operating leases described above in *Operating Lease Obligations*, we entered into standby letters of credit for \$63 million which will expire at the end of the lease term. These instruments are off-balance sheet commitments to extend financial guarantees. The fair value of the letters of credit approximates the contract amount.

At December 31, 2003 and 2002, we had outstanding standby letters of credit of \$14 million and \$15 million, respectively, that are in addition to the ones mentioned above entered into in conjunction with the equipment lease. These instruments are off-balance sheet commitments to extend financial guarantees for certain self-insured risks, import/export taxes and performance under contracts, and generally have one-year terms. The fair value of the letters of credit approximates the contract amount.

**CRITICAL ACCOUNTING ESTIMATES**

The discussion and analysis of our financial condition and results of operations are based on the consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. Note 1 of the Notes describes the significant accounting policies essential to the consolidated financial statements. The preparation of these financial statements requires estimates and assumptions that affect the reported amounts and disclosures.

We believe the following to be critical accounting estimates. That is, they are both important to the portrayal of our Company's financial condition and results, and they require significant management judgments and estimates about matters that are inherently uncertain. As a result of the inherent uncertainty, there is a likelihood that materially different amounts would be reported under different conditions or using different assumptions. Although we believe that our judgments and estimates are reasonable, appropriate and correct, actual future results may differ materially from our estimates.

*Inventory Valuation Methodology.* Inventories are valued at the lower of cost or market using the first-in, first-out (FIFO) method. We write down our inventories for estimated obsolescence and unmarketable inventory in an amount equal to the difference between the cost of the inventory and the estimated market value based upon assumptions about future demand and market conditions. Inventory impairment charges create a new cost basis for inventory.

We balance the need to maintain strategic inventory levels to ensure competitive delivery performance to our customers with the risk of inventory obsolescence due to rapidly changing technology and customer requirements, product life-cycles, life-time buys at the end of supplier product runs and a shift of production to outsourcing. If actual demand or market conditions are less favorable than we project or our customers fail to meet projections, additional inventory write-downs may be required. Our inventory balance was approximately \$199 million and \$194 million as of December 31, 2003, and 2002, respectively.

If market conditions are more favorable than expected, we could experience more favorable gross profit margins going forward as we sell inventory that was previously written down.

*Valuation of long-lived and intangible assets and goodwill.* We operate our own wafer fabrication facilities and make significant capital expenditures to ensure that we are technologically competitive. In addition, we have actively pursued the acquisition of businesses, which has resulted in significant goodwill and intangible assets. We assess the impairment of long-lived assets, identifiable intangibles and related goodwill annually or sooner if events or changes in circumstances indicate that the carrying value may not be recoverable. Factors that could trigger an impairment review include the following: (i) significant negative industry or economic trends; (ii) exiting an activity in conjunction with a restructuring of operations; (iii) current, historical or projected losses that demonstrate continuing losses associated with an asset; or (iv) a significant decline in our market capitalization, for an extended period of time, relative to net book value. When we determine that there is an indicator that the carrying value of long-lived assets, identifiable intangibles and related goodwill may not be recoverable, we measure impairment based on

estimates of future cash flows. These estimates include assumptions about future conditions such as future revenues, gross margins, operating expenses within our Company, the fair values of certain assets based on appraisals, and industry trends. See Notes 3 and 8 to the Notes for more details on long-lived and intangible assets and goodwill.

*Valuation of residual value guarantees.* We guarantee the residual values of equipment associated with two of our operating leases. (See Note 13 of the Notes.) If it becomes probable that a loss on the guarantees will occur, we would immediately recognize the deficiency as additional rent expense on a straight-line basis over the remaining term of the lease. In order to assess whether or not a loss has occurred, we use management estimates to estimate the residual value of the equipment. These estimates include assumptions about future conditions within our Company and industry. We test for potential loss annually or sooner if events or changes in circumstances indicate that the residual value of the equipment may be lower than the guaranteed residual value. As of December 31, 2003, our maximum potential exposure to residual value guarantees is \$163 million.

*Restructuring reserves.* We have recorded reserves/accruals for restructuring costs related to the restructuring of operations. The restructuring reserves include payments to employees for severance, termination fees associated with leases and other contracts, decommissioning and selling costs associated with assets held for sale, and other costs related to the closure of facilities. After the adoption of Statement of Financial Accounting Standards No. 146 ( SFAS No. 146 ) on January 1, 2003, the reserves have been recorded when management has approved a plan to restructure operations and a liability has been incurred rather than the date upon which management has approved and announced a plan. The restructuring reserves are based upon management estimates at the time they are recorded. These estimates can change depending upon changes in facts and circumstances subsequent to the date the original liability was recorded. For example, existing accruals for severance may be modified if employees are redeployed due to circumstances not foreseen when the original plans were initiated, accruals for outplacement services may not be fully utilized by former employees, and severance accruals could change for statutory reasons in countries outside the United States. Accruals for facility leases under which we ceased-using the benefits conveyed to us under the lease may change if market conditions for subleases change or if we later negotiate a termination of the lease. Prior to the adoption of SFAS No. 146, restructuring reserves were recorded at the time we announced a plan to exit certain activities and were based on estimates of the costs and length of time to exit those activities. See Note 4 of the Notes for a complete discussion of our restructuring actions and all related restructuring reserves by type as of December 31, 2003.

*Income taxes.* We recognize deferred tax assets and liabilities based on the differences between the financial statement carrying amounts and the tax basis of the assets and liabilities. We have recorded a valuation allowance to reduce the deferred tax assets to the amount that is more likely than not to be realized. We have considered future taxable income and ongoing prudent and feasible tax planning strategies in assessing the need for the valuation allowance. See Note 11 of the Notes for more details about our deferred tax assets and liabilities.

The calculation of the Company's tax liabilities involves the application of United States generally accepted accounting principles to complex tax rules and regulations within multiple jurisdictions throughout the world. The Company's tax liabilities include estimates for all income and related taxes which the Company believes are probable and which can be reasonably estimated. To the extent that the Company's estimates are understated, additional charges to income tax expense would be recorded in the period in which the Company determines such understatement. If the Company's income tax estimates are overstated, income tax benefits will be recognized when realized.

#### **Recent Accounting Pronouncements**

In December 2003, the Securities and Exchange Commission (SEC) issued Staff Accounting Bulletin No. 104 (SAB 104), Revenue Recognition. SAB 104 supercedes SAB 101, Revenue Recognition in Financial Statements. The primary purpose of SAB 104 is to rescind accounting guidance contained in SAB 101 related to multiple element revenue arrangements, superceded as a result of the issuance of EITF 00-21. Additionally, SAB 104 rescinds the SEC's Revenue Recognition in Financial Statements Frequently

Asked Questions and Answers (the FAQ) issued with SAB 101 that had been codified in SEC Topic 13, Revenue Recognition. Selected portions of the FAQ have been incorporated into SAB 104. While the wording of SAB 104 has changed to reflect the issuance of EITF 00-21, the revenue recognition principles of SAB 101 remain largely unchanged by the issuance of SAB 104. The issuance of SAB 104 did not have a material impact on our financial position, results of operations or cash flows.

In November 2003, the Emerging Issues Task Force ( EITF ) reached a consensus on Issue No. 03-10, Application of EITF Issue No. 02-16, Accounting by a Customer (Including a Reseller) for Certain Consideration Received from a Vendor, by Resellers to Sales Incentives Offered to Consumers by Manufacturers . This issue clarifies whether consideration received by a reseller from a vendor that is reimbursement by the vendor for honoring the vendor s sales incentives offered directly to consumers should be recorded as a reduction of the cost of the reseller s cost of sales. The provisions of EITF Issue No. 03-10 should be applied prospectively in fiscal years beginning after December 15, 2003 with no early adoption or retroactive reclassification permitted. The adoption of this standard is not expected to have a material impact on our consolidated balance sheet or statements of operations.

In January 2003, the Financial Accounting Standards Board ( FASB ) issued FASB Interpretation No. 46 ( FIN 46 ), Consolidation of Variable Interest Entities, an Interpretation of ARB No. 51. FIN 46 requires certain variable interest entities to be consolidated by the primary beneficiary of the entity if the equity investors in the entity do not have the characteristics of a controlling financial interest or do not have sufficient equity at risk for the entity to finance its activities without additional subordinated financial support from other parties. FIN 46 is effective immediately for all new variable interest entities created or acquired after January 31, 2003. For variable interest entities created or acquired prior to February 1, 2003, the provisions of FIN 46 were to be applied for the first interim or annual period beginning after June 15, 2003. In December 2003, the FASB released a revision of FIN 46 to address various implementation issues and modify the effective date for applying the provisions of FIN 46. A public entity shall apply the provisions of the FIN 46 revision no later than the end of the first reporting period that ends after March 15, 2004. However, a public entity shall apply FIN 46 to entities considered to be special-purpose entities no later than as of the end of the first reporting period that ends after December 15, 2003. On March 28, 2003, we entered into new operating leases to refinance the old leases. See Note 13 of the Notes. We refinanced these leases in a manner that best met our capital financing strategy, and cost of capital objectives and the new leases are not subject to the consolidation provisions of FIN 46. We believe that the adoption of this standard will not have a material impact on our consolidated balance sheets or statement of operations.

#### FACTORS THAT MAY AFFECT FUTURE OPERATING RESULTS

Statements in this discussion and analysis include forward-looking information within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. All forward-looking statements included in this discussion and analysis are based on information available to us on the date of filing of this Annual Report on Form 10-K, and we assume no obligation to update any such forward-looking statements. These statements involve known and unknown risks and uncertainties. Our actual results in future periods may be significantly different from any future performance suggested in this report. In some cases, you can identify forward-looking statements by terminology such as may, will, expects, plans, anticipates, believes, estimates, intends, projects, similar expressions. For such statements, we claim the protection under the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. For a detailed discussion of risk factors, refer to the Risk Factors section set forth in Part I, Item 1 of this Annual Report on Form 10-K, which is incorporated by reference into this Part II, Item 7.

While management believes that the discussion and analysis in this report is adequate for a fair presentation of the information, we recommend that you read this discussion and analysis in conjunction with the remainder of this Annual Report on Form 10-K.



**Item 7A. Quantitative and Qualitative Disclosures about Market Risk**

**Interest rate sensitivity.** With the objective of protecting our cash flows and earnings from the impact of fluctuations in interest rates, while minimizing the cost of capital, we may enter into or terminate interest rate swaps. In June 2002, we entered into interest rate swap transactions (the Swaps ) with several investment banks. The Swaps effectively converted fixed interest payments on a portion of our 4% and 4.25% Convertible Subordinated Notes to LIBOR-based floating rates. The Swaps qualified for hedge accounting as fair value hedges, with changes in the fair value of the interest rate risk on the Convertible Notes being offset by changes in the fair values of the Swaps recorded as a component of interest expense. (See Note 7 of the Notes.)

In the second quarter of 2003, we terminated Swaps with a notional amount of \$740 million. The termination resulted in a deferred gain of \$44 million being recorded as a component of the Convertible Notes and is being amortized as a benefit to interest expense over the remaining term of the hedged Convertible Notes. A portion of the deferred gain was written off as part of the net gain or loss on the repurchase/redemption of the hedged Convertible Notes during 2003. As of December 31, 2003, a deferred gain of \$25.4 million remains to be amortized. In 2003, before termination, the difference between the changes in the fair values of the derivative and the hedged risk resulted in a benefit to interest expense of \$1 million. The difference between the changes in the fair values of the derivative and the hedged risk resulted in a \$4.0 million charge that we included in interest expense in our statement of operations for the year ended December 31, 2002.

In May 2003, we entered into an interest rate swap transaction to effectively convert the LIBOR-based floating rate interest payments on the equipment operating lease discussed in Note 13 of the Notes, with an original notional amount of \$395 million, to a fixed interest rate ( Lease Swap ). The Lease Swap qualifies to be accounted for as a cash flow hedge of the forecasted interest payments attributable to the benchmark interest rate on the equipment operating lease through September 2006. Fluctuations in interest rates affect the fair value of the Lease Swap, which is recorded as asset or liability and the unrealized gains or losses recorded in accumulated other comprehensive income in the statement of financial position.

In 2003, an interest rate move of 33 basis points (10% of our weighted-average worldwide interest rate on outstanding debt in 2003) affecting our floating rate financial instruments as of December 31, 2003, including debt obligations, investments and fabrication equipment leases, would not have had a significant effect on our financial position, results of operations and cash flows over the next fiscal year, assuming that the investment balance remains consistent. An interest rate move of 30 basis points (10% of our weighted-average worldwide interest rate on outstanding debt in 2002) affecting our floating-rate financial instruments as of December 31, 2002, including both debt obligations and investments, would not have a significant effect on our financial position, results of operations and cash flows.

**Foreign currency exchange risk.** We have foreign subsidiaries that operate and sell our products in various global markets. As a result, our cash flow and earnings are exposed to fluctuations in foreign currency exchange rates. We attempt to limit these exposures through operational strategies and financial market instruments. We use various hedge instruments, primarily forward contracts with maturities of twelve months or less and currency option contracts, to manage our exposure associated with net asset and liability positions and cash flows denominated in non-functional currencies. We did not enter into derivative financial instruments for trading purposes during 2003 and 2002.

Based on our overall currency rate exposures at December 31, 2003, including derivative financial instruments and nonfunctional currency-denominated receivables and payables, a near-term 10% appreciation or depreciation of the U.S. dollar would not have a significant effect on our financial position, results of operations and cash flows over the next fiscal year. In 2002, a near-term 10% appreciation or depreciation of the U.S. dollar would also not have had a significant effect.

**Equity price risk.** We have investments in marketable available-for-sale equity securities included in long-term assets. The fair values of these investments are sensitive to equity price changes. Changes in the value of these investments are ordinarily recorded through accumulated comprehensive income. The

increase or decrease in the fair value of the investments would affect our results of operations to the extent the investments were sold or that declines in value were concluded by management to be other than temporary.

If prices of the marketable available-for-sale equity securities increase or decrease 10% from their fair value as of December 31, 2003, it would increase or decrease the investment values by \$3.5 million. As of December 31, 2002, a 10% increase or decrease in fair value would have increased or decreased the investment values by \$3.8 million. We do not use any derivatives to hedge the fair value of our marketable available-for-sale equity securities.

**Item 8. Financial Statements and Supplementary Data****LSI Logic Corporation  
Consolidated Balance Sheets**

	<b>December 31,</b>	
	<b>2003</b>	<b>2002</b>
	<b>(In thousands, except per-share amounts)</b>	
<b>Assets</b>		
Cash and cash equivalents	\$ 269,682	\$ 448,847
Short-term investments	544,007	541,129
Accounts receivable, less allowances of \$7,415 and \$7,033	231,184	248,621
Inventories	198,517	194,466
Deferred tax assets	8,116	4,248
Prepaid expenses and other current assets	138,531	181,610
	<hr/>	<hr/>
Total current assets	1,390,037	1,618,921
Property and equipment, net	481,489	746,964
Intangibles assets, net	161,236	282,579
Goodwill	968,483	968,464
Deferred tax assets	7,484	14,283
Non-current assets and deposits	318,176	220,415
Investment in equity securities	35,455	37,655
Other assets	85,541	123,455
	<hr/>	<hr/>
Total assets	\$ 3,447,901	\$ 4,012,736
	<hr/>	<hr/>
<b>Liabilities and Stockholders Equity</b>		
Accounts payable	\$ 102,632	\$ 100,856
Accrued salaries, wages and benefits	75,968	71,499
Other accrued liabilities	153,857	184,837
Income taxes payable	58,417	30,066
Deferred tax liabilities		3,060
Current portion of long-term obligations	377	361
	<hr/>	<hr/>
Total current liabilities	391,251	390,679
	<hr/>	<hr/>
Deferred tax liabilities		496
Long-term debt and capital lease obligations	865,606	1,241,217
Other non-current liabilities	141,096	73,483
	<hr/>	<hr/>
Total long-term obligations and other liabilities	1,006,702	1,315,196
	<hr/>	<hr/>
<b>Commitments and contingencies (Note 13)</b>		
Minority interest in subsidiary	7,498	6,506
	<hr/>	<hr/>
<b>Stockholders equity:</b>		
Preferred shares; \$.01 par value; 2,000 shares authorized; none outstanding		
Common stock; \$.01 par value; 1,300,000 shares authorized; 381,491 and 375,096 shares outstanding	3,815	3,751
Additional paid-in capital	2,950,051	2,954,282
Deferred stock compensation	(24,839)	(51,161)
Accumulated deficit	(920,790)	(612,243)
Accumulated other comprehensive income	34,213	5,726

Edgar Filing: LSI LOGIC CORP - Form 10-K

Total stockholders' equity	2,042,450	2,300,355
Total liabilities and stockholders' equity	\$ 3,447,901	\$ 4,012,736

See Notes to Consolidated Financial Statements.

**LSI Logic Corporation**  
**Consolidated Statements of Operations**

	Year Ended December 31,		
	2003	2002	2001
	(In thousands, except per share amounts)		
Revenues	\$ 1,693,070	\$ 1,816,938	\$ 1,784,923
Cost of revenues	1,015,865	1,122,696	1,160,432
Additional excess inventory and related charges		45,526	210,564
<b>Total cost of revenues</b>	<b>1,015,865</b>	<b>1,168,222</b>	<b>1,370,996</b>
Gross profit	677,205	648,716	413,927
Research and development	432,695	457,351	503,108
Selling, general and administrative	234,156	230,202	307,310
Acquired in-process research and development		2,920	96,600
Restructuring of operations and other items, net	180,597	67,136	219,639
Amortization of non-cash deferred stock compensation (*)	26,021	77,303	104,627
Amortization of intangibles	76,352	78,617	188,251
<b>Loss from operations</b>	<b>(272,616)</b>	<b>(264,813)</b>	<b>(1,005,608)</b>
Interest expense	(30,703)	(51,977)	(44,578)
Interest income and other, net	18,933	26,386	14,529
Gain on sale of equity securities			5,302
<b>Loss before income taxes and minority interest</b>	<b>(284,386)</b>	<b>(290,404)</b>	<b>(1,030,355)</b>
Provision for/ (benefit from) income taxes	24,000	1,750	(39,198)
<b>Loss before minority interest</b>	<b>(308,386)</b>	<b>(292,154)</b>	<b>(991,157)</b>
Minority interest in net income of subsidiary	161	286	798
<b>Net loss</b>	<b>\$ (308,547)</b>	<b>\$ (292,440)</b>	<b>\$ (991,955)</b>
<b>Net loss per share:</b>			
Basic and diluted	\$ (0.82)	\$ (0.79)	\$ (2.84)
<b>Shares used in computing per share amounts:</b>			
Basic and diluted	377,781	370,529	349,280

(\*) Amortization of non-cash deferred stock compensation, if not shown separately, would have been included in cost of revenues, research and development, and selling, general and administrative expenses, as shown below:

	Year ended December 31,		
	2003	2002	2001
	(In thousands)		
Cost of revenues	\$ 446	\$ 1,520	\$ 2,034
Research and development	20,412	58,623	77,970
Selling, general and administrative	5,163	17,160	24,623
<b>Total</b>	<b>\$ 26,021</b>	<b>\$ 77,303</b>	<b>\$ 104,627</b>

Edgar Filing: LSI LOGIC CORP - Form 10-K

See Notes to Consolidated Financial Statements.

**LSI Logic Corporation**  
**Consolidated Statements of Stockholders Equity**

	Common Stock		Additional Paid-in Capital	Deferred Stock Compensation	(Accumulated Deficit)/ Retained Earnings	Accumulated Other Comprehensive Income/(Loss)	Total
	Shares	Amount					
(In thousands)							
Balances at December 31, 2000	321,523	\$ 3,215	\$ 1,931,564	\$ (163,045)	\$ 672,152	\$ 54,251	\$ 2,498,137
Net loss					(991,955)		
Foreign currency translation adjustments						(31,069)	
Unrealized loss on available-for-sale securities						(8,725)	
<b>Total comprehensive loss</b>							<b>(1,031,749)</b>
Issuance to employees under stock option and purchase plans	6,249	62	81,588				81,650
Issuance of common stock for conversion of convertible debt	4		65				65
Issuance of common stock in conjunction with acquisitions (Note 2)	40,670	407	892,421				892,828
Deferred stock compensation (Note 2)					(65,673)		(65,673)
Amortization of deferred stock compensation					104,627		104,627
Balances at December 31, 2001	368,446	3,684	2,905,638	(124,091)	(319,803)	14,457	2,479,885
Net loss					(292,440)		
Foreign currency translation adjustments						11,358	
Unrealized loss on available-for-sale securities						(20,089)	
<b>Total comprehensive loss</b>							<b>(301,171)</b>
Issuance to employees under stock option and purchase plans	6,292	63	45,102				45,165
Issuance of common stock in conjunction with acquisitions (Note 2)	358	4	3,542				3,546
Deferred stock compensation (Note 2)					(4,373)		(4,373)
Amortization of deferred stock compensation					77,303		77,303

Edgar Filing: LSI LOGIC CORP - Form 10-K

Balances at December 31, 2002	375,096	3,751	2,954,282	(51,161)	(612,243)	5,726	2,300,355
Net loss					(308,547)		
Foreign currency translation adjustments						21,309	
Unrealized gain on available-for-sale securities						5,183	
Unrealized gain on cash flow hedge						1,995	
<b>Total comprehensive loss</b>							<b>(280,060)</b>
Issuance to employees under stock option and purchase plans	6,386	64	30,886				30,950
Issuance or return from escrow of common stock in conjunction with acquisitions	9		(6,816)				(6,816)
Forfeiture of restricted shares (Note 2)			(301)	301			
Cash paid for call spread options (Note 9)			(28,000)				(28,000)
Amortization of deferred stock compensation				26,021			26,021
<b>Balances at December 31, 2003</b>	<b>381,491</b>	<b>\$ 3,815</b>	<b>\$ 2,950,051</b>	<b>\$ (24,839)</b>	<b>\$ (920,790)</b>	<b>\$ 34,213</b>	<b>\$ 2,042,450</b>

See Notes to Consolidated Financial Statements.



**LSI Logic Corporation**  
**Consolidated Statements of Cash Flows**

	Year Ended December 31,		
	2003	2002	2001
	(In thousands)		
Operating activities:			
Net loss	\$ (308,547)	\$ (292,440)	\$ (991,955)
Adjustments:			
Depreciation and amortization	262,728	349,326	532,562
Amortization of non-cash deferred stock compensation	26,021	77,303	104,627
Acquired in-process research and development		2,920	96,600
Non-cash restructuring and other items	148,252	46,050	184,876
Loss on write-down of equity securities, net of gain on sales	8,518	19,423	9,906
Loss/(gain) on redemption/repurchase of Convertible Subordinated Notes	3,885	(14,260)	
(Gain)/loss on sale of property and equipment	(6,896)	2,928	3,142
Changes in deferred tax assets and liabilities	(646)	61,385	(45,271)
Changes in assets and liabilities, net of assets acquired and liabilities assumed in business combinations:			
Accounts receivable, net	18,220	(54,619)	345,439
Inventories	(4,232)	75,579	43,182
Prepaid expenses and other assets	63,325	18,648	18,030
Accounts payable	1,684	(35,828)	(138,100)
Accrued and other liabilities	(22,559)	(91,619)	(40,445)
Net cash provided by operating activities	189,753	164,796	122,593
Investing activities:			
Purchase of debt securities available-for-sale	(2,219,484)	(1,771,809)	(1,272,897)
Maturities and sales of debt securities available-for-sale	2,203,313	1,478,596	1,858,304
Purchase of equity securities	(200)	(11,894)	(12,269)
Proceeds from sales of equity securities	1,060		7,926
Purchase of property and equipment	(78,189)	(48,245)	(227,394)
Proceeds from sale of property and equipment	24,737	6,745	
Proceeds from the sale-lease back of equipment	160,000		
Proceeds from the sale of the Japan manufacturing facility	25,846		
Increase in non-current assets and deposits	(390,135)	(8,920)	(325,894)
Decrease in non-current assets and deposits	272,868	9,156	
Acquisitions of companies, net of cash acquired		(55,916)	(177,677)
Net cash used in investing activities	(184)	(402,287)	(149,901)
Financing activities:			
Proceeds from borrowings	350,000		690,088
Repayment of debt obligations	(327)	(332)	(201,226)
Redemption/Repurchase of Convertible Subordinated Notes	(715,983)	(118,938)	
Debt issuance costs	(10,984)		(16,249)
Cash paid for call spread options	(28,000)		
Issuance of common stock	30,306	43,992	81,650
Net cash (used in)/provided by financing activities	(374,988)	(75,278)	554,263
Effect of exchange rate changes on cash and cash equivalents	6,254	4,478	(5,712)
(Decrease)/increase in cash and cash equivalents	(179,165)	(308,291)	521,243

Edgar Filing: LSI LOGIC CORP - Form 10-K

Cash and cash equivalents at beginning of period	448,847	757,138	235,895
Cash and cash equivalents at end of period	\$ 269,682	\$ 448,847	\$ 757,138

See Notes to Consolidated Financial Statements.

**LSI Logic Corporation**  
**Notes to Consolidated Financial Statements**

**Note 1- Significant Accounting policies**

**Nature of business.** LSI Logic Corporation ( the Company or LSI ) supplies high-performance integrated circuits and highly scalable enterprise storage systems. The Company is focused on the four markets of consumer products, communications, storage components and storage systems.

The semiconductor industry is characterized by rapid technological change, competitive pricing pressures and cyclical market patterns. The Company's financial results are affected by a wide variety of factors, including general economic conditions worldwide, economic conditions specific to the semiconductor industry, the timely implementation of new manufacturing technologies and the ability to safeguard patents and intellectual property in a rapidly evolving market. In addition, the semiconductor market has historically been cyclical and subject to significant economic downturns at various times.

**Basis of presentation.** The consolidated financial statements include the accounts of the Company and all of its subsidiaries. Intercompany transactions and balances have been eliminated in consolidation. Where the functional currency of the Company's foreign subsidiaries is the local currency, all assets and liabilities are translated into U.S. dollars at the current rates of exchange as of the balance sheet date and revenues and expenses are translated using weighted average rates prevailing during the period. Accounts and transactions denominated in foreign currencies have been remeasured into functional currencies before translation into U.S. dollars. Foreign currency transaction gains and losses are included as a component of interest income and other. Gains and losses from foreign currency translation are included as a separate component of comprehensive income.

Minority interest in a subsidiary represents the minority stockholders' proportionate share of the net assets and the results of operations for one of the Company's majority-owned Japanese subsidiaries. Sales of common stock of the Company's subsidiary and purchases of such shares may result in changes in the Company's proportionate share of the subsidiary's net assets.

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting periods. Actual results could differ materially from these estimates.

Certain items previously reported in specific financial statement captions have been reclassified to conform to the 2003 presentation.

**Acquisitions.** The estimated fair value of acquired assets and assumed liabilities and the results of operations for acquisitions accounted for under the purchase method of accounting are included in the Company's consolidated financial statements as of the effective date of the purchase, through the end of the period. The total purchase price is allocated to the estimated fair value of assets acquired and liabilities assumed based on management estimates. The fair value of common shares issued for acquisitions was determined using the average closing stock price for the period of two days before and after the date the number of LSI common shares to be issued was fixed. The purchase price includes direct acquisition costs consisting of investment banking, legal and accounting fees. There were no significant differences between the accounting policies of the Company and the acquired entities. There were no acquisitions in 2003. See Note 2 for prior year acquisitions.

**Cash equivalents.** All highly liquid investments purchased with an original maturity of 90 days or less are considered to be cash equivalents. Cash equivalents are reported at amortized cost plus accrued interest.

**Accounts receivable and allowance for doubtful accounts.** Trade receivables are reported in the balance sheet reduced by an allowance for doubtful accounts for estimated losses resulting from receivables

not considered to be collectible. The allowance for doubtful accounts is estimated by evaluating customer's history and credit worthiness as well as current economic and market trends.

**Investments.** Available-for-sale investments include marketable short-term investments and long-term investments in marketable and non-marketable shares of technology companies. Short-term investments in marketable debt securities are reported at fair value and include all debt securities regardless of their maturity dates. Long-term investments in marketable equity securities are reported at fair value with unrealized gains and losses, net of related tax, recorded as a separate component of comprehensive income in stockholders' equity until realized. The investments in long-term restricted and non-marketable equity securities are recorded at cost. Gains and losses on securities sold are determined based on the specific identification method and are included in interest income and other and research and development. The Company does not hold any of these securities for speculative or trading purposes.

For all investment securities, unrealized losses that are considered to be other than temporary are considered impairment losses and recognized as a component of interest income and other. In order to determine if an impairment has occurred, the Company reviews the financial performance of each investee, industry performance and outlook for each investee, the trading prices of marketable securities and pricing in current rounds of financing for non-marketable equity securities. For marketable equity securities, the impairment losses were measured using the closing market price of the marketable securities on the date management determined that the investments were impaired. For non-marketable equity securities, the impairment losses were measured by using pricing in current rounds of financing.

**Inventories.** Inventories are stated at the lower of cost or market. Cost is computed on a currently adjusted standard basis (which approximates first-in, first-out) for raw materials, work-in-process and finished goods. Inventory reserves are established when conditions indicate that the selling price could be less than cost due to physical deterioration, obsolescence, changes in price levels, or other causes. Reserves are established for excess inventory generally based on inventory levels in excess of 12 months of demand, as judged by management, for each specific product.

**Property and equipment.** Property and equipment are recorded at cost and include interest on funds borrowed during the construction period. Depreciation and amortization for property and equipment are calculated based on the straight-line method over the estimated useful lives of the assets as presented below:

Buildings and improvements	20-40 years
Equipment	3-5 years
Furniture and fixtures	5 years

Amortization of leasehold improvements is computed using the shorter of the remaining term of the Company's facility leases or the estimated useful lives of the improvements. Depreciation for property and equipment totaling \$149 million, \$206 million and \$273 million was included in the Company's results of operations during 2003, 2002 and 2001, respectively.

**Software.** The Company capitalizes both purchased software and, to a lesser extent, certain software development costs associated with its Storage Systems segment. Purchased software primarily includes purchased software and external consulting fees related to the purchase and implementation of software projects used for business operations and engineering design activities. Capitalized software projects are amortized over the estimated useful lives of the projects, typically a two-to-five year period. Development costs for software that will be sold to customers and/or embedded in certain hardware products are capitalized beginning when a product's technological feasibility has been established. Capitalized development costs are amortized to cost of revenues when ready for general release to customers over the estimated useful life of the product, typically an 18 to 24 month period. The Company had \$125 million and \$163 million of capitalized software costs and \$118 million and \$144 million of accumulated amortization included in other assets at December 31, 2003 and 2002, respectively. Software amortization totaling \$25 million, \$43 million and \$56 million was included in the Company's results of operations during 2003, 2002 and 2001, respectively.

**Impairment of long-lived assets and lease guarantees.** The Company evaluates the carrying value of long-lived assets whenever events or changes in circumstances indicate the carrying value of an asset may not be recoverable. The determination of recoverability is based on an estimate of undiscounted cash flows expected to result from the use and eventual disposition of the asset. In the event such cash flows are not expected to be sufficient to recover the recorded value of the assets, the assets are written down to their estimated fair values. When assets are removed from operations and held for sale, the impairment loss is estimated as the excess of the carrying value of the assets over their fair value.

The Company guarantees the residual values of equipment associated with two operating leases (see Note 13 of the Notes). If it becomes probable that a loss on the guarantees will occur, the Company would immediately recognize the deficiency as additional rent expense on a straight-line basis over the remaining term of the lease. In order to assess whether or not a loss has occurred, the Company uses management estimates to estimate the residual value of the equipment. These estimates include assumptions about future conditions within the Company and industry. The Company tests for potential loss annually or sooner if events or changes in circumstances indicate that the residual value of the equipment may be lower than the guaranteed residual value.

**Self-insurance.** The Company retains certain exposures in its insurance plan under self-insurance programs. Reserves for claims made and reserves for estimated claims incurred but not yet reported are recorded as current liabilities.

**Product warranties.** The Company warrants finished goods against defects in material and workmanship under normal use and service for periods of one to five years for Semiconductor products and Storage Systems hardware products and 90 days for Storage Systems software products. A liability for estimated future costs under product warranties is recorded when products are shipped. See Note 13 of the Notes.

**Fair value disclosures of financial instruments.** The estimated fair value of financial instruments is determined by the Company, using available market information and valuation methodologies considered to be appropriate. However, considerable judgment is required in interpreting market data to develop the estimates of fair value. Accordingly, the estimates presented herein are not necessarily indicative of the amounts that the Company could realize in a current market exchange. The use of different market assumptions and/or estimation methodologies could have a significant effect on the estimated fair value amounts. The fair value of investments, derivative instruments and convertible debt are based on market data. Carrying amounts of accounts receivable and accounts payable approximate fair value due to the short maturity of these financial instruments.

**Derivative instruments.** All of the Company's derivative instruments are recognized as assets or liabilities in the statement of financial position and measured at fair value (see Note 7 of the Notes). The Company does not enter into derivative financial instruments for speculative or trading purposes. On the date a derivative contract is entered into, the Company designates its derivative as either a hedge of the fair value of a recognized asset or liability (fair-value hedge), as a hedge of the variability of cash flows to be received (cash-flow hedge), or as a foreign-currency hedge. Changes in the fair value of a derivative that is highly effective and is designated and qualifies as a fair-value hedge, along with the loss or gain on the hedged asset or liability that is attributable to the hedged risk (including losses or gains on firm commitments), are recorded in current period earnings. Effective changes in the fair value of a derivative that is highly effective and is designated and qualifies as a cash-flow hedge, are recorded in other comprehensive income, until earnings are affected by the variability of the cash flows. Changes in the fair value of derivatives that are highly effective, and are designated and qualify as a foreign-currency hedge, are recorded in either current period earnings or other comprehensive income, depending on whether the hedge transaction is a fair-value hedge (e.g., a hedge of a firm commitment that is to be settled in a foreign currency) or a cash-flow hedge (e.g., a foreign-currency-denominated forecasted transaction).

The Company formally documents all relationships between hedging instruments and hedged items, as well as its risk management objective and strategy for undertaking various hedge transactions. This process includes linking all derivatives that are designated as fair-value, cash-flow or foreign-currency hedges to

specific assets and liabilities on the balance sheet or to specific firm commitments or forecasted transactions. The Company also assesses, both at the hedge's inception and on an ongoing basis, whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in fair values or cash flows of the hedged items. If it were to be determined that a derivative is not highly effective as a hedge or that it has ceased to be a highly effective hedge, the Company would discontinue hedge accounting prospectively, as discussed below.

The Company would discontinue hedge accounting prospectively when (1) it is determined that the derivative is no longer highly effective in offsetting changes in the fair value or cash flows of a hedged item (including firm commitments or forecasted transactions); (2) the derivative expires or is sold, terminated or exercised; (3) the derivative is no longer designated as a hedge instrument, because it is unlikely that a forecasted transaction will occur; (4) the hedged firm commitment no longer meets the definition of a firm commitment; or (5) management determines that designation of the derivative as a hedge instrument is no longer appropriate.

When hedge accounting is discontinued because it is determined that the derivative no longer qualifies as a highly effective fair-value hedge, the derivative will continue to be carried on the balance sheet at its fair value, and the hedged asset or liability will no longer be adjusted for changes in fair value. When hedge accounting is discontinued because the hedged item no longer meets the definition of a firm commitment, the derivative will continue to be carried on the balance sheet at its fair value, and any asset or liability that was previously recorded pursuant to recognition of the firm commitment will be removed from the balance sheet and recognized as a gain or loss in current period earnings. When hedge accounting is discontinued because it is probable that a forecasted transaction will not occur, the derivative will continue to be carried on the balance sheet at its fair value, and gains and losses that were accumulated in other comprehensive income will be recognized immediately in earnings. When a fair value hedge on an interest-bearing financial instrument (such as an interest rate swap) is cancelled and hedge accounting is discontinued, the hedged item is no longer adjusted for changes in its fair value, and the remaining asset or liability will be amortized to earnings over the remaining life of the hedged item.

**Concentration of credit risk of financial instruments.** Financial instruments that potentially subject the Company to credit risk consist of cash equivalents, short-term investments, interest rate swaps and accounts receivable. Cash equivalents, short-term investments and interest rate swaps are maintained with high quality institutions, the composition and maturities of which are regularly monitored by management. A majority of the Company's trade receivables are derived from sales to large multinational computer, communication, networking, storage and consumer electronics manufacturers, with the remainder distributed across other industries. No customers accounted for greater than 10% of trade receivables as of December 31, 2003 and 2002. Concentrations of credit risk with respect to all other trade receivables are considered to be limited due to the quantity of customers comprising the Company's customer base and their dispersion across industries and geographies. The Company performs ongoing credit evaluations of its customers' financial condition and requires collateral as considered necessary. Write-offs of uncollectable amounts have not been significant.

**Revenue recognition.** Product revenue is primarily recognized upon shipment, when persuasive evidence of a sales arrangement exists, the price is fixed or determinable, title has transferred and collection of resulting receivables is reasonably assured or probable in the case of software. Standard products sold to distributors are subject to specific rights to return products; therefore, revenue recognition is deferred until the distributor sells the product to a third party. Revenue from the licensing of the Company's design and manufacturing technology is recognized when the significant contractual obligations have been fulfilled. Royalty revenue is recognized upon the sale of products subject to royalties. The Company uses the percentage-of-completion method for recognizing revenues on fixed-fee design arrangements. All amounts billed to a customer related to shipping and handling are classified as revenues while all costs incurred by the Company for shipping and handling are classified as cost of revenues. Consideration given to customers, when offered, is primarily in the form of discounts and rebates. Such consideration is accounted for as a reduction to revenues in the period the related sale is made. Reserves for estimated sales returns are established based on historical returns experience. The Company has substantial historical experience to form a basis for estimating returns when products are shipped.

## Edgar Filing: LSI LOGIC CORP - Form 10-K

The provisions of Statement of Position ( SOP ) 97-2, Software Revenue Recognition, as amended by SOP 98-9, Modification of SOP 97-2, Software Revenue Recognition, With Respect to Certain Transactions, are applied to all transactions involving the sale of software and hardware products where software is considered more than incidental to the hardware products.

The provisions of Emerging Issues Task Force ( EITF ) issue No. 00-21, Accounting for Revenue Arrangements with Multiple Deliverables apply to sales arrangements with multiple arrangements that include a combination of hardware, software and/or services. For multiple element arrangements, revenue is allocated to the separate elements based on fair value, which is determined using the price charged when the element is sold separately. If an arrangement includes undelivered elements that are not essential to the functionality of the delivered elements, the Company defers the fair value of the undelivered elements and the residual revenue is allocated to the delivered elements. If the undelivered elements are essential to the functionality of the delivered elements, no revenue is recognized. Discounts are allocated only to the delivered elements. Undelivered elements typically include installation, training, software warranty and maintenance, hardware maintenance and professional services.

**Advertising.** Advertising costs are charged to expense in the period incurred. Advertising expense was \$4 million, \$3 million and \$4 million for the years ended December 31, 2003, 2002, and 2001 respectively.

**Income Taxes.** Deferred tax assets and liabilities are recognized for temporary differences between financial statement and income tax bases of assets and liabilities. Valuation allowances are provided against deferred tax assets when it is more likely than not that some portion or all of the deferred tax asset will not be realized.

**Stock-based compensation.** The Company accounts for stock-based compensation, including stock options granted and shares issued under the Employee Stock Purchase Plan, using the intrinsic value method as prescribed in APB No. 25, Accounting for Stock Issued to Employees, and related interpretations. Compensation cost for stock options, if any, is measured as the excess of the quoted market price at grant date over the exercise price and recognized ratably over the vesting period. The Company's policy is to grant options with an exercise price equal to the quoted market price of the Company's stock on the grant date.

For all acquisitions that closed after July 2000, the intrinsic value of the unvested options, restricted awards and warrants assumed as part of the acquisitions as of the closing date of the acquisitions was recorded as deferred stock compensation as a component of the purchase price to be amortized over the respective vesting periods of the options and awards. The Company calculated the value of restricted shares issued using the closing price of its common stock on the date of consummation of the purchase. The fair value of the options and warrants assumed was determined using the Black Scholes model. Deferred stock compensation is included as a component of stockholders' equity and is amortized straight line over the vesting period of one to four years.

The following table provides pro forma disclosures as if the Company had recorded compensation costs based on the estimated grant date fair value, as defined by SFAS No. 123, for all awards granted under its stock option and stock purchase plans, the Company's net loss per share would have been adjusted to the pro forma amounts below.

Edgar Filing: LSI LOGIC CORP - Form 10-K

	Year ended December 31,		
	2003	2002	2001
	(In thousands, except per share amounts)		
Net loss, as reported	\$ (308,547)	\$ (292,440)	\$ (991,955)
Add: Amortization of non-cash deferred stock compensation expense determined under the intrinsic value method as reported in net loss, net of related tax effects *	9,243	30,583	44,772
Deduct: Total stock-based employee compensation expense determined under fair value method for all awards, net of related tax effects	(200,470)	(253,599)	(247,561)
Pro forma net loss**	\$ (499,774)	\$ (515,456)	\$ (1,194,744)
Loss per share:			
Basic and diluted -as reported	\$ (0.82)	\$ (0.79)	\$ (2.84)
Basic and diluted -pro forma	\$ (1.32)	\$ (1.39)	\$ (3.42)

\* This amount excludes amortization of non-cash deferred stock compensation on restricted stock awards.

\*\* These amounts have been adjusted to reflect higher calculated fair values for the Employee Stock Purchase Plan, which resulted in a 2% and 0.4% increase in the pro forma net loss in 2002 and 2001, respectively.

The stock-based compensation expense determined under the fair value method, included in the table above, was calculated using the Black-Scholes model. The assumptions used in this model are discussed further in Note 10 of the Notes.

**Earnings per share.** Basic earnings per share ( EPS ) is computed by dividing net income available to common stockholders (numerator) by the weighted average number of common shares outstanding (denominator) during the period. Diluted EPS is computed using the weighted-average number of common and dilutive potential common shares outstanding during the period. In computing diluted EPS, the average stock price for the period is used in determining the number of shares assumed to be repurchased upon the exercise of stock options. A reconciliation of the numerators and denominators of the basic and diluted per share amount computations is as follows:

	Year Ended December 31,								
	2003			2002			2001		
	(Loss)*	Shares+	Per-Share Amount	(Loss)*	Shares+	Per-share Amount	(Loss)*	Shares+	Per-Share Amount
(In thousands except per share amounts)									
Basic EPS:									
Net loss available to common stockholders	\$ (308,547)	377,781	\$ (0.82)	\$ (292,440)	370,529	\$ (0.79)	\$ (991,955)	349,280	\$ (2.84)
Effect of dilutive securities:									
Stock options and restricted stock awards									
Diluted EPS:									
Net loss available to common stockholders	\$ (308,547)	377,781	\$ (0.82)	\$ (292,440)	370,529	\$ (0.79)	\$ (991,955)	349,280	\$ (2.84)

\* Numerator  
+ Denominator

Options to purchase approximately 69,165,802, 57,064,593 and 73,996,916 shares were outstanding at December 31, 2003, 2002 and 2001, respectively, and were excluded from the computation of diluted shares because of their antidilutive effect on earnings per share as the Company incurred a net loss for these years. The exercise price of these options ranged from \$0.06 to \$72.25 at December 31, 2003 and 2002



## Edgar Filing: LSI LOGIC CORP - Form 10-K

and from \$0.01 to \$72.25 at December 31, 2001.

A total of 50,850,649 weighted average potentially dilutive shares associated with the 2003, 2001, 2000 and 1999 Convertible Notes were excluded from the calculation of diluted shares because of their antidilutive effect on loss per share for the year ended December 31, 2003. For the years ended December

## Edgar Filing: LSI LOGIC CORP - Form 10-K

31, 2002 and 2001, 47,059,516 and 32,277,323 weighted average potentially dilutive shares respectively, associated with the 2001, 2000 and 1999 Convertible Notes were excluded from the calculation of diluted shares because of their antidilutive effect on loss per share.

**Related party transactions.** There were no significant related party transactions during the years ended December 31, 2003, 2002 and 2001, other than as listed in Note 5.

### **Recent accounting pronouncements.**

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

In November 2003, the Emerging Issues Task Force (EITF) reached a consensus on Issue No. 03-10, Application of EITF Issue No. 02-16, Accounting by a Customer (Including a Reseller) for Certain Consideration Received from a Vendor, by Resellers to Sales Incentives Offered to Consumers by Manufacturers. This issue clarifies whether consideration received by a reseller from a vendor that is reimbursement by the vendor for honoring the vendor's sales incentives offered directly to consumers should be recorded as a reduction of the cost of the reseller's cost of sales. The provisions of EITF Issue No. 03-10 should be applied prospectively in fiscal years beginning after December 15, 2003 with no early adoption or retroactive reclassification permitted. The adoption of this standard is not expected to have a material impact on the Company's consolidated balance sheet or statements of operations.

In January 2003, the Financial Accounting Standards Board (FASB) issued FASB Interpretation No. 46 (FIN 46), Consolidation of Variable Interest Entities, an Interpretation of ARB No. 51. FIN 46 requires certain variable interest entities to be consolidated by the primary beneficiary of the entity if the equity investors in the entity do not have the characteristics of a controlling financial interest or do not have sufficient equity at risk for the entity to finance its activities without additional subordinated financial support from other parties. FIN 46 is effective immediately for all new variable interest entities created or acquired after January 31, 2003. For variable interest entities created or acquired prior to February 1, 2003, the provisions of FIN 46 were to be applied for the first interim or annual period beginning after June 15, 2003. In December 2003, the FASB released a revision of FIN 46 to address various implementation issues and modify the effective date for applying the provisions of FIN 46. A public entity shall apply the provisions of the FIN 46 revision no later than the end of the first reporting period that ends after March 15, 2004. However, a public entity shall apply FIN 46 to entities considered to be special-purpose entities no later than as of the end of the first reporting period that ends after December 15, 2003. On March 28, 2003, the Company entered into new operating leases to refinance the old leases. See Note 13 of the Notes. The Company refinanced these leases in a manner that best met the Company's capital financing strategy, and cost of capital objectives and the new leases are not subject to the consolidation provisions of FIN 46. The Company believes that the adoption of this standard will not have a material impact on its consolidated balance sheet or statement of operations.

### **Note 2- Business Combinations**

The Company is continually exploring strategic acquisitions that build upon our existing library of intellectual property, human capital and engineering talent, and increase our leadership position in the markets in which we operate. Below is a discussion of recent acquisitions and acquired in-process research and development.

Edgar Filing: LSI LOGIC CORP - Form 10-K

There were no material acquisitions in 2003. Certain restricted shares issued in connection with the AMI acquisition (see below for details) were cancelled in 2003 due to voluntary termination of employment of certain employees prior to vesting of these shares and recorded as forfeiture of restricted shares in the consolidated statements of stockholders' equity.

**2002**

During 2002, the Company completed two acquisitions accounted for under the purchase method of accounting. Pro forma statements of earnings information have not been presented because the effect of these 2002 acquisitions was not material either on an individual or an aggregate basis. See summary table below (in millions, except per share amounts):

Entity name or type of technology; Segment included in; Description of acquired business	Acquisition date	Total Purchase price	Type of Consideration	Fair Value of tangible net assets/ (liabilities) acquired	Goodwill	Current technology, trademarks and supply agreement	IPR&D	Deferred compensation
Mylex Business Unit of IBM; Storage Systems and Semiconductor segments; entry level storage systems and PCI-RAID products	August 2002	\$50.5	Cash	\$14.1	\$20.5	\$14.0	\$1.9	\$ -
Digital video product technologies; Semiconductor segment	November 2002	6.7	Cash	(0.2)	2.9	1.8	1.0	1.2

**2001**

During 2001, the Company completed two acquisitions accounted for under the purchase method of accounting. An unaudited pro forma statement of earnings information has not been presented for the RAID business because the effects of this acquisition were not material. See summary table below (in millions, except per share amounts):

Entity name, Segment included in; Description of acquired business	Acquisition date	Total Purchase price	Type of Consideration	Fair Value of tangible net assets/ (liabilities) acquired	Goodwill	Current technology & trademarks	IPR&D	Deferred compensation
RAID Division of AMI; Semiconductor segment; Redundant Array of Independent Disks ( RAID )	August 2001	\$240.5	\$224 cash 0.8 million restricted common shares	\$ (1.4)	\$128.9	\$77.5	\$19.1	\$16.4
C-Cube; Semiconductor segment; Digital video products	May 2001	893.7	40.2 million shares issued at \$18.73 per share, 10.6 million options assumed, 0.8 million warrants assumed	64.3	608.1	94.5	77.5	49.3

*Pro forma results for C-Cube acquisition.* The following unaudited pro forma summary is provided for illustrative purposes only and is not necessarily indicative of the consolidated results of operations for future periods or that actually would have been realized had the Company and C-Cube been a consolidated



entity during the periods presented. The summary combines the results of operations as if C-Cube had been acquired as of the beginning of the period presented.

The summary includes the impact of certain adjustments such as amortization of intangibles and non-cash deferred stock compensation. Additionally, the acquired in-process research and development charge of \$78 million shown above in the table has been excluded from the period presented as it arose from the acquisition of C-Cube and is a non-recurring amount. The restructuring of operations and other items of \$220 million were included in the pro forma calculation as the charges did not relate to the acquisition of C-Cube (see Note 4).

	<b>Year ended December 31, 2001 (Unaudited) (In thousands, except per-share amounts)</b>
Revenues	\$ 1,851,659
Net loss	\$ (962,488)
Basic and diluted loss per share	\$ (2.65)

**Acquired in-process research and development.** The Company recorded acquired in-process research and development ( IPR&D ) charges of \$3 million and \$97 million for the years ended December 31, 2002 and 2001, respectively. No IPR&D charges were recorded for the year ended December 31, 2003. The details for the major acquisitions at the acquisition dates are summarized in the table below.

<b>Company</b>	<b>Acquisition Date</b>	<b>IPR&amp;D</b>	<b>Discount rate</b>	<b>Percentage of Completion</b>	<b>Revenue projections extend through</b>
<b>(dollar amounts in millions)</b>					
Mylex Division of IBM	August 2002	\$1.9	25%	10% to 50%	2006
RAID Division of AMI	August 2001	19.1	20%	12% to 62%	2006
C-Cube	May 2001	77.5	27.5%	61% to 84%	2006

The amounts of IPR&D were determined by identifying research projects for which technological feasibility had not been established and no alternative future uses existed as of the respective acquisition dates. The value of the projects identified to be in progress was determined by estimating the future cash flows from the projects once commercially feasible, discounting the net cash flows back to their present value and then applying a percentage of completion to the calculated value. The net cash flows from the identified projects were based on estimates of revenues, cost of revenues, research and development costs, selling, general and administrative costs and applicable income taxes for the projects. Total revenues for the projects are expected to extend through the dates noted in the table above by acquisition. These projections were based on estimates of market size and growth, expected trends in technology and the expected timing of new product introductions by our competitors and the Company. These estimates did not account for any potential synergies realizable as a result of the acquisition and were in line with industry averages and growth estimates.

The percentage of completion for the projects was determined using the percentage of research and development expenses method. This method calculates expenses incurred up to the acquisition dates as a percentage of total research and development expenses to bring the projects to technological feasibility.

A discount rate is used for the projects to account for the risks associated with the inherent uncertainties surrounding the successful development of the IPR&D, market acceptance of the technology, the useful life of the technology, the profitability level of such technology and the uncertainty of technological advances,

which could impact the estimates described above. As of December 31, 2003, all projects were completed or written-off as discussed further in Note 4.

**Note 3-Goodwill and Intangible Assets**

The Company adopted SFAS No. 142, Goodwill and Other Intangible Assets, on January 1, 2002. As a result, goodwill is no longer amortized, but is instead tested for impairment annually or sooner if circumstances indicate that it may no longer be recoverable. In addition, intangible assets acquired prior to July 1, 2001 that do not meet the criteria for recognition under SFAS No. 141, Business Combinations have been reclassified to goodwill. Assembled workforce, net of accumulated amortization of \$56 million, was reclassified to goodwill.

Upon adoption, the Company completed the transitional goodwill impairment assessment required by SFAS No. 142 and concluded that goodwill was not impaired as of January 1, 2002. The annual impairment tests performed as of December 31, 2003 and 2002 indicated that goodwill was not impaired. For the purpose of measuring the impairment, goodwill was assigned to reporting units as defined by SFAS No. 142. The reporting units identified by the Company are Semiconductor and Storage Systems.

Goodwill and intangible assets by reportable segment are comprised of the following (in thousands):

	December 31, 2003		December 31, 2002	
	Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
<b>Unamortized intangible assets:</b>				
Semiconductor	\$ 887,992	\$	\$ 887,990	\$
Storage Systems	80,491		80,474	
<b>Total goodwill (a)</b>	<b>968,483</b>		<b>968,464</b>	
<b>Amortized intangible assets:</b>				
<b>Semiconductor:</b>				
Current technology	319,364	(195,837)	372,260	(159,295)
Trademarks	29,684	(15,981)	37,347	(13,589)
<b>Subtotal</b>	<b>349,048</b>	<b>(211,818)</b>	<b>409,607</b>	<b>(172,884)</b>
<b>Storage Systems:</b>				
Current technology	50,039	(33,802)	67,080	(32,773)
Trademarks	3,750	(2,458)	3,750	(1,954)
Customer base	5,010	(2,540)	5,010	(1,684)
Supply agreement	7,247	(3,240)	7,247	(820)
<b>Subtotal</b>	<b>66,046</b>	<b>(42,040)</b>	<b>83,087</b>	<b>(37,231)</b>
<b>Total</b>	<b>\$ 1,383,577</b>	<b>\$ (253,858)</b>	<b>\$ 1,461,158</b>	<b>\$ (210,115)</b>

(a) Goodwill is net of accumulated amortization immediately prior to the adoption of SFAS No. 142.

The changes in the carrying amount of goodwill for the years ended December 31, 2002 and 2003 are as follows (in thousands):

	Semiconductor segment	Storage Systems segment	Total
Balance as of January 1, 2002	\$ 892,212	\$ 59,968	\$ 952,180
Goodwill acquired during the year	2,915	20,506	23,421
Adjustment to goodwill acquired in a prior year for a tax refund	(7,137)		(7,137)
<b>Balance as of December 31, 2002</b>	<b>\$ 887,990</b>	<b>\$ 80,474</b>	<b>\$ 968,464</b>

Edgar Filing: LSI LOGIC CORP - Form 10-K

Adjustment to goodwill acquired in prior periods	<u>2</u>	<u>17</u>	<u>19</u>
Balance as of December 31, 2003	<u>\$ 887,992</u>	<u>\$ 80,491</u>	<u>\$ 968,483</u>

68

Edgar Filing: LSI LOGIC CORP - Form 10-K

Amortization expense is comprised of the following (in thousands):

	Year Ended December 31,		
	2003	2002	2001
Goodwill	\$	\$	\$ 130,339
Current technology	67,742	70,713	52,456
Trademarks	5,334	6,248	4,621
Customer base	856	836	835
Supply agreement	2,420	820	
<b>Total</b>	<b>\$ 76,352</b>	<b>\$ 78,617</b>	<b>\$ 188,251</b>

The amounts allocated to current technology, trademarks, customer base and supply agreement are being amortized over their estimated weighted average useful lives of two to six years.

The estimated future amortization expense of intangible assets as of December 31, 2003 is as follows (in millions):

	Amount:
Fiscal year:	
2004	\$ 70
2005	60
2006	29
2007	2
	<b>\$ 161</b>

Pro forma net loss and pro forma net loss per share excluding amortization expense for goodwill are as follows (in thousands):

	Year Ended December 31,		
	2003	2002	2001
Net loss, as reported	\$ (308,547)	\$ (292,440)	\$ (991,955)
Add back goodwill amortization			130,339
<b>Pro forma net loss</b>	<b>(308,547)</b>	<b>(292,440)</b>	<b>(861,616)</b>
Basic loss per share, as reported	\$ (0.82)	\$ (0.79)	\$ (2.84)
Add back goodwill amortization			0.37
<b>Basic pro forma loss per share</b>	<b>\$ (0.82)</b>	<b>\$ (0.79)</b>	<b>\$ (2.47)</b>
Diluted loss per share, as reported	\$ (0.82)	\$ (0.79)	\$ (2.84)
Add back goodwill amortization			0.37
<b>Diluted loss per share</b>	<b>\$ (0.82)</b>	<b>\$ (0.79)</b>	<b>\$ (2.47)</b>

**Note 4-Restructuring and other items**

**2003**



## Edgar Filing: LSI LOGIC CORP - Form 10-K

The Company recorded charges of \$181 million in restructuring of operations and other items for the year ended December 31, 2003 consisting of \$183 million in charges for restructuring of operations, and a gain of \$2 million for other items. Of these charges, \$166 million was recorded in the Semiconductor segment and \$15 million was included in the Storage Systems segment.

### *Restructuring and impairment of long-lived assets:*

On January 1, 2003, the Company adopted SFAS No. 146, Accounting for Exit or Disposal Activities. SFAS No. 146 has been applied to restructuring activities initiated after December 31, 2002 and changes the timing of when restructuring charges are recorded to the date when the liabilities are incurred.

First quarter of 2003:

In February 2003, the Company downsized operations and recorded \$36 million in charges for restructuring of operations and other items. Of this charge, \$21 million was associated with the Semiconductor segment and \$15 million was attributable to the Storage Systems segment. The charges consisted of severance and termination benefits of \$5 million for 210 employees involved in manufacturing operations, research and development and marketing and sales; \$1 million for costs associated with exiting certain operating leases primarily for real estate; and write-downs of \$24 million for certain acquired intangible assets, \$4 million for capitalized software and \$2 million for fixed assets. During the year ended December 31, 2003, payments related to the February 2003 restructuring actions consisted of approximately \$4 million for severance and termination benefits and \$1 million for lease and contract terminations.

Second quarter of 2003:

In April 2003, the Company announced a restructuring of its operations that included a reduction in workforce and the consolidation of certain non-manufacturing facilities. A charge of \$33 million was recorded in the Semiconductor segment consisting of severance and termination benefits of \$9 million for 325 employees involved in manufacturing operations, research and development, marketing, sales and administration; \$19 million for costs associated with exiting certain operating leases primarily for real estate; other exit costs of \$0.2 million; and a write-down of \$5 million for fixed assets due to impairment. During the year ended December 31, 2003, payments related to the April 2003 restructuring actions consisted of approximately \$9 million for severance and termination benefits, \$3 million for lease and contract terminations and \$0.1 million for other exit costs.

In June 2003, the Company announced the decision to sell the Tsukuba, Japan manufacturing facility. During the second quarter, a charge of \$73 million was recorded in the Semiconductor segment to write down fixed assets to their fair market value. The fair value was reclassified from property, plant and equipment to other current assets to reflect the intention to dispose of the facility within the next twelve months. In addition, approximately \$2 million in restructuring charges were recorded in the second quarter for severance and other exit costs. See further discussion in the third quarter below.

In June 2003, the Company also recorded \$19 million of additional fixed asset write-downs to reflect the decrease in fair market value of the assets during the period. This write-down included a reduction in the value of the Colorado Springs fabrication facility of \$16 million to reflect continued and accelerated efforts to sell the facility.

Third quarter of 2003:

*Agreement to sell Japan fabrication facility:*

In September 2003, the Company entered into a definitive agreement to sell the Tsukuba, Japan facility to Rohm Company Ltd. ( Rohm ), a Japanese company. The sale closed during November 2003 for 2.82 billion yen (approximately \$26 million). As part of the definitive agreement, the Company agreed to purchase a minimum amount of production wafers from Rohm for a period of 15 months following the close of the transaction. As a result, a charge of \$4 million was recorded in cost of revenues during the third quarter of 2003. This charge is a result of the application of our policy to accrue for non-cancelable inventory purchase commitments in excess of 12 months of estimated demand. Included in the \$4 million charge to cost of revenues is a reclassification of \$3 million from restructuring expense originally recorded in the second quarter of 2003 to better reflect the terms of the definitive agreement. Also in the quarter, \$2 million was recorded for additional severance benefits to be paid and for contract termination and other exit costs associated with the definitive agreement. During the year ended December 31, 2003, payments related to the Japan restructuring actions consisted of approximately \$1 million for severance and termination benefits and \$0.2 million for lease and contract terminations.

*Other third quarter 2003 restructuring actions:*

In the third quarter of 2003, the Company continued to consolidate non-manufacturing facilities and recorded \$2 million for costs associated with exiting certain operating leases for real estate as the facilities ceased being used.

In September 2003, the Company decided to discontinue development programs and to refocus sales and marketing efforts for certain product lines in the Semiconductor segment. As a result of an analysis of future net cash flows related to the affected product lines, it was determined that certain acquired intangible assets were impaired. An impairment charge of \$21 million related to the write-down of the acquired intangible assets to fair market value was recorded in the third quarter of 2003. These intangible assets were originally acquired in connection with the acquisition of C-Cube Microsystems in the second quarter of 2001. In addition, \$3 million in restructuring charges were recorded in the third quarter of 2003. These charges related to severance and termination benefits for 97 employees primarily involved in research and development and for certain contract termination costs and fixed assets write downs due to impairment. The severance benefits were paid during the third quarter of 2003.

Fourth quarter of 2003:

In the fourth quarter of 2003, the Company reversed approximately \$2 million of previously accrued restructuring expenses. The reversal was primarily due to the combination of a favorable negotiation to terminate leases for real property and severance payments that were lower than expected due to the timing of the sale of the Japan manufacturing facility to Rohm. An expense of \$1 million recorded to reflect the change in time value of accruals for facility lease termination costs and the write down of fixed assets due to impairment. Certain other reclassifications were made between asset decommissioning costs and other facility closure costs to reflect changes in management estimates for the remaining costs for these activities.

In December 2003, the Company recorded \$2 million of additional fixed asset write-downs to reflect the decrease in fair market value of the assets during the period. The Company also recorded a realized gain of \$5 million on the sale of fixed assets that had previously been held for sale.

The fair value of equipment, facilities and intangible assets determined to be impaired was the result of the use of management estimates. Given that current market conditions for the sale of older fabrication facilities and related equipment may fluctuate, there can be no assurance that the Company will realize the current net carrying value of the assets held for sale. The Company reassesses the realizability of the carrying value of these assets at the end of each quarter until the assets are sold or otherwise disposed of and additional adjustments may be necessary. Assets held for sale of \$30 million and \$74 million were included as a component of prepaid expenses and other current assets as of December 31, 2003 and December 31, 2002, respectively. Assets classified as held for sale are not depreciated.

The following table sets forth the Company's restructuring reserves as of December 31, 2003, which are included in other accrued liabilities on the balance sheet:

	<b>Balance at December 31, 2002</b>	<b>Restructuring Expense 2003</b>	<b>Release of reserve and reclassifications</b>	<b>Utilized during 2003</b>	<b>Balance at December 31, 2003</b>
(In thousands)					
Write-down of excess assets (a)	\$ 6,008	\$ 147,454	\$ (6,422)	\$ (144,379)	\$ 2,661
Lease terminations and maintenance contracts (b)	6,757	23,444	(1,146)	(8,034)	21,021
Facility closure and other exit costs (c)	8,129	1,072	1,203	(8,268)	2,136
Payments to employees for severance (d)	1,391	18,095	(928)	(17,684)	874
<b>Total</b>	<b>\$ 22,285</b>	<b>\$ 190,065</b>	<b>\$ (7,293)</b>	<b>\$ (178,365)</b>	<b>\$ 26,692</b>

(a) The amounts utilized in 2003 reflect \$142 million of non-cash write-downs of amortizable intangible and other long-lived assets in the U.S and Japan due to impairment, and \$2 million in cash payments to decommission and sell assets. The write-downs of the intangible and other long-lived assets were accounted for as a reduction of the assets and did not result in a liability. The \$3 million balance as of

## Edgar Filing: LSI LOGIC CORP - Form 10-K

December 31, 2003 relates to machinery and equipment decommissioning costs in U.S. and estimates of selling costs for assets held for sale, which is expected to be utilized during 2004.

- (b) Amounts utilized represent cash payments. The balance remaining for primarily real estate lease terminations and maintenance contracts will be paid during the remaining terms of these contracts, which extend through 2011.
- (c) Amounts utilized represent cash payments. The balance remaining for facility closure and other exit costs will be paid during 2004.
- (d) Amounts utilized represent cash severance payments to 777 employees during 2003. The balance remaining for severance is expected to be paid by the end of the first quarter of 2004.

*Other items:*

A gain of approximately \$2.2 million was recorded in restructuring and other items, net during the second quarter of 2003 associated with additional sales of intellectual property associated with the CDMA handset product technology.

### **2002**

The Company recorded approximately \$67.1 million in restructuring of operations and other items for the year ended December 31, 2002, consisting of \$75.2 million for restructuring of operations, and a gain of \$8.1 million for other items including the gain on sale of CDMA handset product technology. Restructuring of operations and other items were primarily included in the Semiconductor segment; the restructuring expense included in the Storage Systems segment was not significant.

*Restructuring and impairments of long-lived assets:*

In the first quarter of 2002, the Company announced a set of actions to reduce costs and streamline operations. These actions included a worldwide reduction in workforce, downsizing the Company's manufacturing operations in Tsukuba, Japan and the decision to exit the CDMA handset product technology. During the three months ended March 31, 2002, the Company recorded a restructuring charge for severance for 1,150 employees worldwide and exit costs primarily associated with cancelled contracts and operating leases. As a result of the restructuring actions, the Company recorded fixed asset write-downs due to impairment in the U.S. and Japan for assets to be disposed of by sale. In the second quarter of 2002, the Company completed the sale of CDMA handset product technology to a third party, recognizing a net gain of \$6.4 million.

During the fourth quarter of 2002, the Company reversed approximately \$5 million of previously accrued restructuring expenses. As a result of the Company's decision to terminate fewer employees than the original plan contemplated in Tsukuba, Japan, previously accrued restructuring expenses were reversed for termination benefits including outplacement costs and certain contract termination fees of \$7 million. This was offset by additional expense accruals of \$2 million for costs related to the previously announced closure of the Colorado Springs fabrication facility. Certain other reclassifications were made between lease and contract terminations and facility closure and other exit costs to reflect changes in management estimates for the remaining costs for these activities.

In September 2002, the Company recorded \$13 million of additional fixed asset write-downs to reflect the decrease in the fair market value of the assets during the period.

The following table sets forth the Company's restructuring reserves as of December 31, 2002, which are included in other accrued liabilities on the balance sheet:

Edgar Filing: LSI LOGIC CORP - Form 10-K

	Balance at December 31, 2001	Restructuring Expense 2002	Release of reserve and reclassifications	Utilized during 2002	Balance at December 31, 2002
(In thousands)					
Write-down of excess assets <sup>(a)</sup>	\$ 3,762	\$ 38,918	\$ 5,147	\$ (41,819)	\$ 6,008
Lease terminations and maintenance contracts(c)	10,695	12,871	(10,559)	(6,250)	6,757
Facility closure and other exit costs (c)	14,153	415	4,058	(10,497)	8,129
Payments to employees for severance <sup>(b)</sup>	724	27,490	(3,150)	(23,673)	1,391
<b>Total</b>	<b>\$ 29,334</b>	<b>\$ 79,694</b>	<b>\$ (4,504)</b>	<b>\$ (82,239)</b>	<b>\$ 22,285</b>

- (a) Amounts utilized in 2002 reflect a non-cash write-down of fixed assets in the U.S. and Japan due to impairment of \$38.3 million and cash payments for machinery and equipment decommissioning costs of \$3.5 million. The fixed asset write-downs were accounted for as a reduction of the assets and did not result in a liability. The \$6.0 million balance as of December 31, 2002 relates to machinery and equipment decommissioning costs in the U.S and selling costs for assets held for sale.
- (b) Amounts utilized represent cash severance payments to 1,290 employees during the year ended December 31, 2002. The \$1.4 million balance as of December 31, 2002 was paid during 2003.
- (c) Amounts utilized represent cash payments.

*Other items:*

The Company recorded a net gain of \$1.7 million in other items during the first quarter of 2002, which consisted of a nonrefundable deposit paid to the Company in the first quarter of 2002 related to the termination of the agreement to sell the Colorado Springs fabrication facility during 2001, offset in part by certain costs associated with maintaining CDMA handset product technology until sold.

**2001**

The Company recorded approximately \$219.6 million in restructuring of operations and other items for the year ended December 31, 2001, consisting of \$207.2 million for restructuring of operations and \$12.4 million for other items. Restructuring of operations and other items were primarily included in the Semiconductor segment; the restructuring expense included in the Storage Systems segment was not significant.

*Restructuring and impairments of long-lived assets:*

In September 2001, the Company announced the consolidation of U.S. manufacturing operations to Gresham, Oregon including the transfer of process research and development from Santa Clara, California to Gresham, Oregon. The Company also announced the closure of certain assembly activities in Fremont, California, which would be transferred offshore. As a result of these actions, the Company recorded a restructuring charge of \$95.0 million, including fixed asset write-downs due to impairment as a result of the restructuring actions in the U.S., losses on operating leases for equipment and facilities, severance for approximately 600 employees across multiple company activities and functions in the U.S., Europe, Japan and Asia Pacific, as well as other exit costs.

In April 2001, the Company announced the closure of the Company's Colorado Springs fabrication facility. This facility was closed in the fourth quarter of 2001. The Company recorded an impairment charge of \$130.5 million relating to the facility, of which approximately \$35.0 million was recorded in cost of sales and \$95.5 million was recorded in restructuring charges. The restructuring charges consisted of fixed asset write-downs due to impairment as a result of the restructuring actions, losses on operating leases for equipment, severance for 413 manufacturing employees and other exit costs.

During the second quarter of 2001, the Company recorded an additional \$16.8 million in restructuring charges primarily associated with the write-down of fixed assets due to impairment as a result of the restructuring actions in the U.S., Japan and Hong Kong and severance charges for 240 employees across multiple company activities and functions in the U.S., Europe and Asia Pacific.

## Edgar Filing: LSI LOGIC CORP - Form 10-K

The following table sets forth our restructuring reserves as of December 31, 2001, which are included in other accrued liabilities on the balance sheet:

	<b>Restructuring Expense 2001</b>	<b>Utilized during 2001</b>	<b>Balance at December 31, 2001</b>
	(In thousands)		
Write-down of excess assets <sup>(a)</sup>	\$ 139,724	\$ (135,962)	\$ 3,762
Lease terminations and maintenance contracts(c)	26,912	(16,217)	10,695
Facility closure and other exit costs (c)	24,242	(10,089)	14,153
Payments to employees for severance <sup>(b)</sup>	16,346	(15,622)	724
<b>Total</b>	<b>\$ 207,224</b>	<b>\$ (177,890)</b>	<b>\$ 29,334</b>

- (a) Amounts utilized in 2001 reflect a non-cash write-down of fixed assets in the U.S., Japan and Hong Kong due to impairment of \$133.8 million and cash payments for machinery and equipment decommissioning costs of \$2.2 million. The fixed asset write-downs were accounted for as a reduction of the assets and did not result in a liability. The \$3.8 million balance as of December 31, 2001 relates to machinery and equipment decommissioning costs in the U.S.
- (b) Amounts utilized represent cash payments related to the severance of 1,180 employees during the year ended December 31, 2001.
- (c) Amounts utilized represent cash payments.

*Other items:*

The Company recorded approximately \$12.4 million in other items during 2001 as follows:

\$8.1 million in charges associated with the write-down of intangible assets due to impairment. The majority of the intangible assets were originally acquired in the purchase of a division of NeoMagic in the second quarter of 2000.

\$4.3 million in charges primarily consisting of the write-down of an investment in a marketable equity security and related purchased intellectual property.

**Note 5-License Agreement**

In the second quarter of 1999, the Company and Silterra Malaysia Sdn. Bhd. (formerly known as Wafer Technology (Malaysia) Sdn. Bhd.) ( Silterra ) entered into a technology transfer agreement under which the Company grants licenses to Silterra with respect to certain of the Company's wafer fabrication technologies and provides associated manufacturing training and related services. In exchange, the Company received cash consideration of \$75 million and equity consideration over four years for which transfers of technology and performance of obligations of the Company were scheduled to occur. The equity consideration was valued at zero as of December 31, 2003. The obligations under the technology transfer agreement were completed as of December 31, 2002. The Company transferred technology to Silterra valued at \$8 million, \$20 million, \$24 million and \$15 million for the years ended December 31, 2002, 2001, 2000 and 1999 respectively. The amount was recorded as an offset to the Company's R&D expenses. In addition, the Company provided engineering training with a value of \$2 million, \$4 million and \$2 million for the years ended December 31, 2001, 2000 and 1999. The amount was recorded as an offset to cost of revenues.

## Note 6- Cash, Cash Equivalents and Investments

	December 31, 2003	December 31, 2002
(In thousands)		
<b>Cash and cash equivalents</b>		
Overnight deposits	\$ 103,185	\$ 117,899
Commercial paper	39,294	20,804
Corporate and municipal debt securities	11,370	30,524
U.S. government and agency securities	6,844	
<b>Total cash equivalents</b>	<b>160,693</b>	<b>169,227</b>
Cash in financial institutions	108,989	279,620
<b>Total cash and cash equivalents</b>	<b>\$ 269,682</b>	<b>\$ 448,847</b>
<b>Available-for-sale debt securities</b>		
Asset and mortgage-backed securities	\$ 345,625	\$ 102,083
U.S. government and agency securities	104,173	202,613
Corporate and municipal debt securities	90,730	180,843
Auction rate preferred stock	3,150	55,590
Foreign debt securities	329	
<b>Total short-term investments</b>	<b>\$ 544,007</b>	<b>\$ 541,129</b>
<b>Long-term investments in equity securities</b>	<b>\$ 35,455</b>	<b>\$ 37,655</b>

Net realized gains on sales of available-for-sale debt securities were \$10 million, \$8 million and \$2 million for the years ended December 31, 2003, 2002 and 2001, respectively.

Contractual maturities of available-for-sale debt securities as of December 31, 2003 were as follows (in thousands):

Due within one year	\$ 26,680
Due in 1-5 years	302,831
Due in 5-10 years	70,376
Due after 10 years	144,120
<b>Total</b>	<b>\$ 544,007</b>

The maturities of asset and mortgage-backed securities were allocated based on contractual principal maturities assuming no prepayments.

## Investments in available-for-sale securities

	Adjusted cost	Gross unrealized gains	Gross unrealized losses	Estimated fair value
(In thousands)				
<b>December 31, 2003</b>				
Short-term debt securities	\$ 544,540	\$ 1,900	\$ (2,433)	\$ 544,007
Long-term marketable equity securities	10,406	12,506		22,912
<b>December 31, 2002</b>				
Long-term marketable equity securities	13,073	6,589	(2,586)	17,076

During 2003, the Company realized a net pre-tax loss of \$10.6 million associated with certain investments in equity securities because management believed the decline in value was other than temporary. Of this pre-tax loss, approximately \$2.7 million related to investments in marketable available-for-sale equity securities and approximately \$7.9 million related to losses from investments in non-marketable equity securities. The carrying value of the above noted impaired investments in marketable and non-marketable equity securities, as of December 31, 2003 was \$9.8 million and \$8.1 million, respectively.

During 2002, the Company realized a net pre-tax loss of \$19.4 million associated with the decline in value of equity securities. Of this pre-tax loss, approximately \$6.0 million related to investments in marketable available-for-sale equity securities and approximately \$13.4 million related to losses from investments in non-marketable equity securities. The carrying value of the above noted investments in impaired marketable and non-marketable equity securities, as of December 31, 2002 was \$4.8 million and \$4.7 million, respectively. The decline in value was considered by management to be other than temporary. Sales of equity securities during 2002 were not significant.

During 2001, the Company sold equity securities for \$8 million in the open market, realizing a pre-tax gain of approximately \$5 million. The Company also wrote down to estimated fair value equity investments in certain technology companies. The write-down was for approximately \$19 million. Of this pre-tax loss, approximately \$6.5 million related to investments in marketable available-for-sale equity securities and approximately \$12.5 million related to losses from investments in non-marketable equity securities. The carrying value of the above noted investments in impaired marketable and non-marketable equity securities, as of December 31, 2001 was \$12.9 million and \$4.2 million, respectively. The decline in value of the investments was considered by management to be other than temporary. In addition, a pre-tax gain of approximately \$4 million was realized associated with an investment in equity securities of a certain technology company that was acquired by another technology company during the year.

#### **Note 7- Derivative Instruments**

##### *Foreign currency risk*

The Company has foreign subsidiaries that operate and sell the Company's products in various global markets. As a result, the Company is exposed to changes in foreign currency exchange rates and interest rates. The Company utilizes various hedge instruments, primarily forward contracts and currency option contracts, to manage its exposure associated with firm intercompany and third-party transactions and net asset and liability positions denominated in non-functional currencies.

The Company enters into purchased currency option contracts that are designated as foreign currency cash-flow hedges of third-party yen revenue exposures. Changes in the fair value of currency option contracts due to changes in time value are excluded from the assessment of effectiveness and are recognized in interest income and other, net. During the second quarter of 2003, the Company terminated all outstanding purchased currency options hedging previously forecasted yen revenues because the underlying revenue agreements were modified to be denominated in U.S. dollars. At the time the options were terminated, there were no unrealized gains or losses in accumulated other comprehensive income. For the years ended December 31, 2003 and 2002, the change in option time value was approximately \$1 million and \$2 million, respectively. During the years ended December 31, 2003 and 2002, amounts reclassified to revenues from other comprehensive income were not significant. The Company did not record any gains or losses due to hedge ineffectiveness for the years ended December 31, 2003 or 2002. There were no option contracts outstanding as of December 31, 2003 and 2002. There were no unrealized gains or losses included in accumulated other comprehensive income as of December 31, 2003 and 2002.

The Company enters into forward contracts that are designated as foreign currency cash-flow hedges of forecasted payments in euros. Changes in the fair value of the forward contracts due to changes in time value are excluded from the assessment of effectiveness and are recognized in interest income and other, net. As of December 31, 2003, the Company held forward contracts designated as foreign currency cash



flow hedges of forecasted euro payment transactions that were set to expire over a twelve-month period. There were no such hedges outstanding as of December 31, 2002. For the year ended December 31, 2003, the change in time value of these forward contracts was not significant. There were no unrealized gains or losses included in accumulated other comprehensive income as of December 31, 2003. There was a \$1 million hedge benefit reflected in the income statement for the year ended December 31, 2003. The Company did not record any gains or losses due to hedge ineffectiveness for the year ended December 31, 2003.

In October 2003, the Company entered into a forward contract to protect the U.S. dollar value of a portion of the net investment in the Company's wholly-owned Japanese subsidiary denominated in yen. The derivative was designated as and qualified as a net investment hedge and was recorded as an asset or liability in the statement of financial position while the forward contract was outstanding. The forward contract was settled in December 2003 and the realized loss of approximately \$0.5 million has been recorded in accumulated other comprehensive income until such time as the subsidiary has been liquidated. The time value of the forward contract was excluded from the assessment of hedge effectiveness.

Forward exchange contracts and options are also used to hedge certain foreign currency-denominated assets or liabilities. These derivatives do not qualify for SFAS No. 133 hedge accounting treatment. Accordingly, changes in the fair value of these hedges are recorded immediately in earnings to offset the changes in fair value of the assets or liabilities being hedged. The related gains and losses included in interest income and other, net were not significant.

#### *Interest rate risk*

With the objective of protecting cash flows and earnings of the Company from the impact of fluctuations in interest rates, while minimizing the cost of capital, the Company may enter into or terminate interest rate swaps, such as the below mentioned transactions.

The Company entered into interest rate swap transactions (the Swaps) with several investment banks in June 2002. The Swaps were entered into to convert the fixed rate interest expense on the Company's 4% and 4.25% Convertible Subordinated Notes (the Convertible Notes) to a floating rate based on LIBOR (see Note 9). The Swaps qualified for hedge accounting as fair value hedges, with changes in the fair value of the interest rate risk on the Notes being offset by changes in the fair values of the Swaps recorded as a component of interest expense.

As a result of the buyback of a portion of the Convertible Notes during the fourth quarter of 2002 (see Note 9), and the Company's continuing monitoring of asset and liability mismatches, the Company discontinued hedge accounting and terminated Swaps with a notional amount of \$345 million. The deferred gain of \$4.2 million from the termination of these Swaps was included as a component of the Convertible Notes and was being amortized as an adjustment to interest expense using the effective-interest method over the remaining term of the hedged Convertible Notes.

As of December 31, 2002, Swaps with a notional amount of \$740 million effectively converted fixed interest payments to LIBOR-based floating rates. The difference between the changes in the fair values of the derivative and the hedged risk resulted in an increase in interest expense of \$4 million during the year ended December 31, 2002. The change in fair value of the hedged interest rate risk was \$37 million as of December 31, 2002 and was included in long-term debt. The fair value of the Swaps was \$33 million as of December 31, 2002 and was included in other long-term assets.

In the second quarter of 2003, the Company terminated Swaps with a notional amount of \$740 million. The deferred gain of \$44 million from the termination of these Swaps was included as a component of the Convertible Notes and is being amortized as an adjustment to interest expense over the remaining term of the hedged Convertible Notes. Before termination, the difference between the changes in the fair values of the derivative and the hedged risk resulted in a benefit to interest expense of \$1 million for the year ended December 31, 2003. Under the terms of the Swaps, the Company provided collateral to match any mark-to-market

exposure on the swaps. Collateral of approximately \$7 million included in other long-term assets as of December 31, 2002, was returned to the Company upon termination of the Swaps.

Deferred gains on terminated swaps associated with Convertible Notes repurchased or redeemed during 2003 were written-off as part of the net gain or loss on redemption of the Convertible Notes. As of December 31, 2003, a deferred gain of \$25 million was included as a component of the Convertible Notes and is being amortized as an adjustment to interest expense using the effective-interest method over the remaining term of the hedged Convertible Notes (see Note 9).

In the second quarter of 2003, the Company entered into an interest rate swap transaction to effectively convert the LIBOR-based floating rate interest payments on the equipment operating leases discussed in Note 13 of the Notes, with an initial notional amount of \$395 million, to a fixed interest rate (the Lease Swap). The Lease Swap qualifies to be accounted for as a cash-flow hedge of the forecasted interest payments attributable to the benchmark interest rate on the equipment operating leases through September 2006. The unrealized gains or losses included in accumulated other comprehensive income will be reclassified to cost of revenues on a quarterly basis as lease payments are made. A loss of approximately \$1 million, net of tax of \$1 million included in accumulated other comprehensive income as of December 31, 2003, is expected to be reclassified to cost of revenues within the next 12 months. The loss due to ineffectiveness recorded in interest income and other, net during the year ended December 31, 2003 was not significant. Under the terms of the Lease Swap, the Company must provide collateral to match any mark-to-market exposure on the Lease Swap. As of December 31, 2003, collateral of approximately \$8 million was included in other long-term assets.

**Note 8- Balance Sheet Detail**

	December 31,	
	2003	2002
(In thousands)		
<b>Inventories:</b>		
Raw materials	\$ 15,352	\$ 18,152
Work-in-process	116,340	65,052
Finished goods	66,825	111,262
	<u>\$ 198,517</u>	<u>\$ 194,466</u>
<b>Prepaid expenses and other current assets:</b>		
Current portion of assets and deposits	\$ 57,805	\$ 20,766
Assets held for sale	29,883	74,201
Prepaid expense and other current assets	50,843	86,643
	<u>\$ 138,531</u>	<u>\$ 181,610</u>
<b>Property and equipment:</b>		
Land	\$ 37,569	\$ 53,013
Buildings and improvements	359,402	470,028
Equipment	667,899	1,253,061
Furniture and fixtures	30,567	46,783
Leasehold improvements	34,226	37,151
Construction in progress	26,903	18,747
	<u>1,156,566</u>	<u>1,878,783</u>
Accumulated depreciation and amortization	(675,077)	(1,131,819)
	<u>\$ 481,489</u>	<u>\$ 746,964</u>
<b>Other accrued liabilities:</b>		
Accrued expenses	\$ 115,344	\$ 142,592
Sales tax payable	6,532	4,687
Interest payable	5,289	15,273
Restructuring reserves	26,692	22,285
	<u>\$ 153,857</u>	<u>\$ 184,837</u>
<b>Accumulated other comprehensive income:</b>		
Unrealized gains on available-for-sale securities, net of tax of \$4,190 and \$1,401	\$ 7,782	\$ 2,599
Unrealized gain on cash-flow hedges, net of tax of \$698 and \$-	1,995	
Foreign currency translation adjustments	24,436	3,127
	<u>\$ 34,213</u>	<u>\$ 5,726</u>

The Company recorded, as a component of cost of revenues, additional excess inventory and related charges of \$46 million and \$211 million for the years ended December 31, 2002 and 2001, respectively. The charges were due to underutilization related to a temporary idling of the Company's fabrication facilities due to reduced demand, inventory production in anticipation of closing the Company's Colorado Springs manufacturing facility during 2001 (see Note 4), and a sudden and significant decrease in forecasted revenue. The charges were calculated in accordance with the Company's policy, which is primarily based on inventory levels in excess of 12 months' judged demand for each specific product.



Edgar Filing: LSI LOGIC CORP - Form 10-K

An allocation of interest costs incurred on borrowings during a period required to complete construction of the asset was capitalized as part of the historical cost of acquiring certain assets. Gross capitalized interest included in property and equipment totaled \$29 million at December 31, 2003 and 2002. Accumulated amortization of capitalized interest was \$22 million and \$20 million at December 31, 2003 and 2002, respectively. No interest was capitalized during 2003 and 2002.

**Note 9- Debt**

	Maturity	Interest Rate *	Conversion Price	December 31,	
				2003	2002
(In thousands)					
2003 Convertible Subordinated Notes	2010	4.00%	\$ 13.4200	\$ 350,000	\$
2001 Convertible Subordinated Notes	2006	4.00%	\$ 26.3390	490,000	\$ 490,000
2000 Convertible Subordinated Notes	2005	4.00%	\$ 70.2845		385,000
1999 Convertible Subordinated Notes	2004	4.25%	\$ 15.6765		324,935
Change in fair value of interest rate risk on Convertible Subordinated Notes					36,724
Deferred gain on terminated swap				25,416	4,025
Capital lease obligations				567	894
				865,983	1,241,578
Current portion of long-term debt and capital lease obligations				(377)	(361)
Long-term debt and capital lease obligations				\$ 865,606	\$ 1,241,217

\* The interest rate on a portion of the Convertible Subordinated Notes ( Convertible Notes ) was converted to floating rates through interest rate swaps. Interest rate swaps with a notional amount of \$740 million were terminated in the second quarter of 2003 (see Note 7). The weighted average interest rate on the Convertible Subordinated Notes, after adjusting for the impact of the interest rate swaps, for the years ended December 31, 2003 and 2002, was 3.30% and 3.02%, respectively.

On December 24, 2003, the Company redeemed the balance of the 2000 Convertible Subordinated Notes (the 2000 Convertible Notes ) that were outstanding on that date. Cash of \$258 million was paid to redeem the remaining 2000 Convertible Notes at a total redemption price of \$1,030.33 per \$1,000 principal amount of the notes consisting of \$1,016.00 principal amount plus accrued interest of \$14.33. A net pre-tax loss of approximately \$1 million was recognized, in interest income and other, net, on the redemption of the 2000 Convertible Notes. The pre-tax loss is net of the write-off of debt issuance costs and the remaining deferred gain on the terminated Swap (see Note 7).

On September 18, 2003, the Company redeemed the balance of the 1999 Convertible Subordinated Notes (the 1999 Convertible Notes ) that were outstanding on that date. Cash of \$173 million was paid to redeem the remaining 1999 Convertible Notes at a total redemption price of \$1,008.86 per \$1,000 principal amount of the notes consisting of \$1,008.50 principal amount plus accrued interest of \$0.36. A net pre-tax loss of approximately \$1 million was recognized, in interest income and other, net, on the redemption of the 1999 Convertible Notes. The pre-tax loss is net of the write-off of debt issuance costs and the remaining deferred gain on the terminated Swap (see Note 7).

On May 12, 2003, the Company issued \$350 million of 4% Convertible Subordinated Notes (the 2003 Convertible Notes ) due in 2010. The 2003 Convertible Notes are subordinated to all existing and future senior debt, are convertible at the holder's option at any time prior to the maturity date of such notes, into shares of the Company's common stock at a conversion price of \$13.42 per share. The Company cannot

elect to redeem the 2003 Convertible Notes prior to maturity. However, each holder of the 2003 Convertible Notes has the right to cause the Company to repurchase all of such holder's convertible notes at 100% of their principal amount plus accrued interest upon the occurrence of any fundamental change, which includes a transaction or event such as an exchange offer, liquidation, tender offer, consolidation, merger or combination. Interest is payable semiannually. The Company paid approximately \$11 million in debt issuance costs that are being amortized using the interest method.

Approximately \$28 million of the proceeds from issuance of the 2003 Convertible Notes were used to purchase call spread options on LSI's common stock (the Call Spread Options). The Call Spread Options, including fees and costs, have been accounted for as capital transactions in accordance with Emerging Issues Task Force No. 00-19, Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company's Own Stock. The Call Spread Options cover approximately 26.1 million shares of Company common stock, which is the number of shares that are initially issuable upon conversion of the 2003 Convertible Notes in full. The Call Spread Options are designed to mitigate dilution from conversion of the 2003 Convertible Notes in the event that the market price per share of the Company's common stock upon exercise of the Call Spread Options is greater than \$13.42 and is less than or equal to \$23.875. The Call Spread Options may be settled at the Company's option in either net shares or in cash and expire in 2010. Settlement of the Call Spread Options in net shares on the expiration date would result in the Company receiving a number of shares, not to exceed 26.1 million shares, of our common stock with a value equal to the amount otherwise receivable on cash settlement. Should there be an early unwinding of the Call Spread Options, the amount of cash or net shares potentially receivable by the Company will be dependent upon then existing overall market conditions, and on the Company's stock price, the volatility of the Company's stock and the amount of time remaining on the Call Spread Options.

The proceeds from the 2003 Convertible Notes were used to repurchase \$153 million of the 1999 Convertible Subordinated Notes and \$135 million of the 2000 Convertible Subordinated Notes during the second quarter of 2003. A net pre-tax loss of approximately \$2 million was recognized, in interest income and other, net, on the repurchases of the 1999 and 2000 Convertible Notes. The pre-tax loss is net of the write-off of debt issuance costs and a portion of the deferred gain on the terminated Swaps (see Note 7). —

The 2001 Convertible Notes are subordinated to all existing and future senior debt and are convertible at the holder's option at any time after 60 days following issuance. They are redeemable at the Company's option, in whole or in part, on at least 30 days notice at any time on or after the call date, which is two years before the due date. Each holder of the Convertible Notes has the right to cause the Company to repurchase all of such holder's Convertible Notes at 100% of their principal amount plus accrued interest upon the occurrence of any fundamental change, which includes a transaction or event such as an exchange offer, liquidation, tender offer, consolidation, merger or combination. Interest is payable semiannually. The net proceeds from the 2001 Convertible Notes were used to repay bank debt outstanding with a balance of approximately \$200 million. The Company paid approximately \$14 million for debt issuance costs related to the 2001 Convertible Notes that are being amortized using the interest method. As of December 31, 2003 and 2002, total debt issuance costs, net of accumulated amortization was \$17 million and \$19 million, respectively, are included in other long-term assets.

At December 31, 2003, the estimated fair values of the 2003 and 2001 Convertible Notes were \$390 million and \$480 million, respectively.

Aggregate principal payments required on outstanding capital lease and debt obligations are \$0.4 million, \$0.2 million, and \$490 million for the years ended December 31, 2004, 2005 and 2006, respectively and \$350 million in 2010.

The Company paid \$42 million, \$47 million and \$38 million in interest during 2003, 2002 and 2001, respectively.

**Note 10- Common Stock**

**Stock option plans.** The Company has stock option plans to grant options to officers, employees and consultants. Under these plans, the Company may grant stock options with an exercise price that is no less than the fair market value of the stock on the date of grant. The term of each option is determined by the Board of Directors and has generally been ten years. Options generally vest in annual increments of 25% per year commencing one year from the date of grant. As of December 31, 2003, the 1999 Nonstatutory Stock Option Plan ( 1999 plan ) and 1991 Equity Incentive Plan ( 1991 plan ) have 19 million and 30 million shares available for future grants, respectively. In May 2003, the stockholders approved the adoption of the 2003 Equity Incentive Plan ( 2003 Plan ) under which 11 million shares of common stock were reserved for issuance. Under the terms of the 2003 Plan, the Company may grant stock options or restricted stock awards to employees with an exercise price that is no less than the fair market value of the stock on the date of grant. No participant shall be granted options covering more than 2 million shares in any year. The term of each option is determined by the Board of Directors. Options generally vest in annual increments of 25% per year commencing one year from the date of grant. Under the 2003 Plan, the Company may also grant restricted stock awards. No participant may be granted more than 0.5 million shares of restricted stock in any year. The vesting requirements for the restricted stock awards are determined by the Board of Directors. As of December 31, 2003, there were 11 million shares available for future grants under the 2003 Plan. Options granted on or after February 12, 2004 for the 1991, 1999 and 2003 Plans have a term of 7 years.

The 1995 Director Option Plan, as amended ( 1995 Director Plan ), provides for an initial grant to new directors of options to purchase 30,000 shares of common stock and subsequent automatic grants of options to purchase 30,000 shares of common stock each year thereafter. The initial grants vest in annual increments of 25% per year, commencing one year from the date of grant. Subsequent option grants become exercisable in full six months after the grant date. The exercise price of the options granted is equal to the fair market value of the stock on the date of grant. In May 2003, the stockholders approved an amendment to the 1995 Director Plan to increase the number of shares of common stock reserved for issuance thereunder by 1 million. As of December 31, 2003, there are 1 million shares available for future grants under the 1995 Director Plan.

There are a total of 130 million shares of common stock reserved for issuance upon exercise of options, including options available for future grants, outstanding under all stock option plans.

**Stock option exchange program.** On August 20, 2002, the Company filed with the Securities and Exchange Commission an offer to exchange stock options outstanding under the 1991 Equity Incentive Plan and the 1999 Nonstatutory Stock Option Plan for new options. Under the exchange offer, eligible employees had the opportunity to exchange eligible stock options for the promise to grant new options under the 1999 Nonstatutory Stock Option Plan. Directors and executive officers of the Company were not eligible to participate in this program. The exchange offer expired on September 18, 2002, and the Company accepted options to purchase an aggregate of 16,546,370 shares for exchange. On March 20, 2003, the Company granted a new option that covered two shares of LSI Logic common stock for every three shares covered by an option that an employee had elected to exchange. The exercise price per share of the new options was equal to the fair market value of the Company's common stock on the grant date. The Company granted options to purchase 10,691,139 shares at an exercise price of \$5.06 per share. The exchange program did not result in the recording of any compensation expense in the statement of operations.

Edgar Filing: LSI LOGIC CORP - Form 10-K

The following table summarizes the Company's stock options for each of the years ended December 31, 2003, 2002 and 2001 (share amounts in thousands):

	2003		2002		2001	
	Number of Shares	Weighted Average Exercise Price Per Share	Number of Shares	Weighted Average Exercise Price Per Share	Number of Shares	Weighted Average Exercise Price Per Share
Options outstanding at January 1,	57,065	\$ 18.24	73,997	\$ 22.44	55,164	\$ 24.09
Options assumed in acquisitions					10,617	15.26
Options canceled	(7,282)	(16.39)	(23,751)	(30.57)	(7,257)	(25.89)
Options granted	20,191	6.56	8,425	14.21	18,911	20.79
Options exercised	(808)	(5.94)	(1,606)	(8.57)	(3,438)	(10.22)
Options outstanding at December 31,	69,166	\$ 15.17	57,065	\$ 18.24	73,997	\$ 22.44
Options exercisable at December 31,	38,936	\$ 18.03	34,333	\$ 17.02	30,766	\$ 18.81

Significant option groups outstanding as of December 31, 2003 are as follows (share amounts in thousands):

Options with exercise prices ranging from:	Outstanding			Exercisable		
	Number of Shares	Remaining Contractual Life (years)	Weighted Average Exercise Price Per Share	Number of Shares	Weighted Average Exercise Price Per Share	
\$0.06 to \$5.00	650	6.97	\$ 3.21	468	\$ 2.83	
\$5.01 to \$10.00	27,011	7.74	7.10	9,451	8.45	
\$10.01 to \$15.00	13,121	5.49	12.37	9,282	12.57	
\$15.01 to \$20.00	11,156	6.54	17.25	6,941	17.34	
\$20.01 to \$25.00	8,966	6.96	22.07	5,388	22.02	
\$25.01 to \$30.00	3,577	5.62	29.13	3,401	29.14	
\$30.01 to \$72.25	4,685	6.19	42.31	4,005	41.41	
	69,166	6.80	\$ 15.17	38,936	\$ 18.03	

All options were granted at an exercise price equal to the market value of the Company's common stock at the date of grant, with the exception of the options assumed under the stock plans of companies acquired during 2001. No further options may be granted under the assumed plans.

**Stock purchase plan.** The Company has an Employee Stock Purchase Plan under which rights are granted to all employees to purchase shares of common stock at 85% of the lesser of the fair market value of such shares at the beginning of a 12-month offering period or the end of each six-month purchase period within such an offering period. The maximum number of shares that can be purchased in a single purchase period is 1,000 shares per employee. Sales under the Employee Stock Purchase Plan in 2003, 2002 and 2001 were approximately 5.6 million, 4.8 million and 2.9 million shares of common stock at an average price of \$4.85, \$7.67 and \$16.39 per share, respectively. There were approximately 11 million shares of common stock reserved for issuance under the Employee Stock Purchase Plan as of December 31, 2003.

**Stock-based compensation.** The Company accounts for stock-based compensation, including stock options granted and shares issued under the Employee Stock Purchase Plan, using the intrinsic value method as prescribed in APB No. 25, Accounting for Stock Issued to Employees, and related interpretations. The Company provides pro forma disclosures to illustrate the effects on the results of



operations as if the Company had recorded compensation costs based on the estimated grant date fair value, as defined by SFAS No. 123, for awards granted under its stock option plans and stock purchase plan (see Note 1). The estimated weighted average grant date fair value, as defined by SFAS No. 123, was calculated using the Black-Scholes model. The Black-Scholes model was developed to estimate the fair value of freely tradable, fully transferable options without vesting restrictions, which significantly differ from the Company's stock option awards. This model also requires highly subjective assumptions, including future stock price volatility and expected time until exercise, which greatly affect the calculated grant date fair value. The following weighted average assumptions were used in determining the estimated grant date fair values:

#### Employee stock options granted

	<u>2003</u>	<u>2002</u>	<u>2001</u>
Weighted average estimated grant date fair value	\$ 4.95	\$ 8.29	\$ 12.06
Assumptions in calculation:			
Expected life (years)	3.85	3.84	3.79
Risk-free interest rate	2.73%	3.97%	4.70%
Volatility	81.56%	77.00%	76.00%
Dividend yield			

#### Employee Stock Purchase Plan right to purchase stock

	<u>2003</u>	<u>2002</u>	<u>2001</u>
<b>Weighted average estimated grant date fair value</b>	<b>\$ 3.09</b>	<b>\$ 3.44</b>	<b>\$ 7.95</b>
Assumptions in calculation:			
Expected life (years)	0.87	0.87	0.88
Risk-free interest rate	1.18%	1.69%	3.29%
Volatility	88.59%	80.39%	82.07%
Dividend yield			

**Stock repurchase program.** On July 28, 2000, the Company's Board of Directors authorized a new stock repurchase program in which up to 5 million shares of the Company's common stock were authorized to be repurchased in the open market from time to time. The Company repurchased 1.5 million shares of its common stock in the open market under this program in 2000. There were no stock repurchases in 2003, 2002 or 2001.

**Stock purchase rights.** In November 1988, the Company implemented a plan to protect stockholders' rights in the event of a proposed takeover of the Company. The plan was amended and restated in November 1998. Under the plan, each share of the Company's outstanding common stock carries one Preferred Share Purchase Right. Each Preferred Share Purchase Right entitles the holder, under certain circumstances, to purchase one-thousandth of a share of Preferred Stock of the Company or its acquirer at a discounted price. The Preferred Share Purchase Rights are redeemable by the Company and will expire in 2008.

**Note 11- Income Taxes**

The provision for /(benefit from) taxes consisted of the following:

	Year ended December 31,		
	2003	2002	2001
	(In thousands)		
<b>Current:</b>			
Federal	\$ 8,679	\$ (83,885)	\$
State	600		
Foreign	15,056	24,250	6,073
<b>Total</b>	<b>24,335</b>	<b>(59,635)</b>	<b>6,073</b>
<b>Deferred:</b>			
Federal		36,775	(28,688)
State		8,006	(6,192)
Foreign	(335)	16,604	(10,391)
<b>Total</b>	<b>(335)</b>	<b>61,385</b>	<b>(45,271)</b>
<b>Total</b>	<b>\$ 24,000</b>	<b>\$ 1,750</b>	<b>\$ (39,198)</b>

The domestic and foreign components of loss before income taxes and minority interest were as follows:

	Year ended December 31,		
	2003	2002	2001
	(In thousands)		
Domestic	\$ (42,382)	\$ (69,078)	\$ (605,797)
Foreign	(242,004)	(221,326)	(424,558)
<b>Loss before income taxes and minority interest</b>	<b>\$ (284,386)</b>	<b>\$ (290,404)</b>	<b>\$ (1,030,355)</b>

Significant components of the Company's deferred tax assets and liabilities as of December 31, 2003 and 2002 were as follows:

	December 31,	
	2003	2002
	(In thousands)	
<b>Deferred tax assets:</b>		
Net operating loss carryforwards	\$ 23,244	\$ 46,233
Tax credit carryovers	203,027	52,598
Future deductions for purchased intangible assets	81,334	100,281
Future deductions for reserves and other	77,174	12,191
Future deductions for inventory reserves	26,265	46,721
<b>Total deferred tax assets</b>	<b>411,044</b>	<b>258,024</b>
Valuation allowance	(366,197)	(178,734)
<b>Net deferred tax assets</b>	<b>44,847</b>	<b>79,290</b>

Edgar Filing: LSI LOGIC CORP - Form 10-K

**Deferred tax liabilities:**

Depreciation and amortization	(29,247)	(64,315)
	<u>          </u>	<u>          </u>
Total net deferred tax assets	\$ 15,600	\$ 14,975
	<u>          </u>	<u>          </u>

85

## Edgar Filing: LSI LOGIC CORP - Form 10-K

In accordance with SFAS No. 109, current and long-term net deferred taxes have been netted to the extent they are in the same tax jurisdiction. Valuation allowances reduce the deferred tax assets to the amount that, based upon all available evidence, is more likely than not to be realized. The deferred tax assets valuation allowance is attributed to U.S. federal, state and certain foreign deferred tax assets primarily consisting of reserves, other one-time charges, purchased intangible assets, tax credit carryovers and net operating loss carryovers that could not be benefited under existing carry-back rules. Approximately \$91 million of the valuation allowance at December 31, 2003 relates to tax benefits of stock option deductions, which will be credited to equity if and when realized.

At December 31, 2003, the Company had federal, state and foreign net operating loss carryovers of approximately \$31 million, \$110 million and \$45 million, respectively. The federal and state net operating losses will expire beginning in 2004 through 2023. The foreign net operating losses will carry forward indefinitely. Approximately \$11 million of the federal net operating loss carryover and \$12 million of the state net operating loss carryover relate to recent acquisitions and are subject to certain limitations under Internal Revenue Code of 1986, as amended, Section 382. As of December 31, 2003, the Company had tax credits of approximately \$191 million, which will expire beginning in 2004.

Differences between the Company's effective tax rate and the federal statutory rate were as follows:

	Year ended December 31,					
	2003		2002		2001	
	(In thousands)					
Federal statutory rate	\$ (99,535)	(35)%	\$ (101,642)	(35)%	\$ (360,624)	(35)%
State taxes, net of federal benefit	390		8,006	3%	(4,025)	
Difference between U.S. and foreign tax rates	79,820	28%	74,858	26%	136,366	13%
Foreign earnings taxed in the U.S.	59,539	21%				
Foreign tax credits	(27,469)	(10)%				
Research and development tax credit	(15,905)	(6)%			(8,963)	(1)%
Net operating loss and future deductions not currently benefited	19,590	7%	46,526	16%	130,714	13%
Alternative minimum tax	8,679	3%				
Nondeductible expenses	7,055	3%	33,733	12%	65,878	6%
Benefit of net operating losses and deferred tax assets not previously recognized	(5,378)	(2)%				
Release of income taxes previously accrued			(61,386)	(21)%		
Other	(2,786)	(1)%	1,655		1,456	
Effective tax rate	\$ 24,000	8%	\$ 1,750	1%	\$ (39,198)	(4)%

The Company received (refunds)/paid (\$2 million), \$16 million and \$22 million for income taxes in 2003, 2002 and 2001, respectively.

In 2003, the Internal Revenue Service ( IRS ) began an income tax audit of the Company's 2001 federal income tax return. Management of the Company believes that this income tax audit will not have a material impact on the consolidated financial statements.

In December 2002, the IRS concluded their audit of the Company's federal income tax returns for the fiscal years 1995 through 1996. As part of the final closing agreement, the IRS and the Company agreed to expand the scope of the audit for the years 1995 and 1996 to all fiscal years up to and including 2000. All adjustments for the fiscal years up to and including 2000 are final and have been reflected in the Company's income tax expense for 2002. Upon conclusion of the audit, the Company reassessed its reserve requirements and consequently reversed approximately \$61 million of previously accrued income taxes.

## Edgar Filing: LSI LOGIC CORP - Form 10-K

Undistributed earnings of the Company's foreign subsidiaries aggregate approximately \$22 million at December 31, 2003, and are indefinitely reinvested in foreign operations or will be remitted substantially free of additional tax. No material provision has been made for taxes that might be payable upon remittance of such earnings, nor is it practicable to determine the amount of this liability.

### Note 12- Segment and Geographic Information

The Company operates in two reportable segments: the Semiconductor segment and the Storage Systems segment. In the Semiconductor segment, the Company uses advanced process technology and comprehensive design methodologies to design, develop, manufacture and market highly complex integrated circuits. These system-on-a-chip solutions include both application specific integrated circuits, commonly referred to as ASICs, and application specific standard products in silicon, or ASSPs. Semiconductor segment product offerings also include RAID host bus adapters and related products, and services. In the Storage Systems segment, the Company provides modular, high-performance, disk storage systems and sub-assemblies to server and storage original equipment manufacturers. The Storage Systems products are sold as complete storage systems or sub-assemblies configured from modular components, including our disk array controller boards and related enclosures, disk drive enclosures and related management software.

**Information about profit or loss and assets.** The following is a summary of operations by segment for the years ended December 31, 2003, 2002 and 2001:

	Year ended December 31,		
	2003	2002	2001
	(In thousands)		
<b>Revenues:</b>			
Semiconductor	\$ 1,269,708	\$ 1,481,386	\$ 1,573,618
Storage Systems	423,362	335,552	211,305
	<b>Total</b>	<b>\$ 1,816,938</b>	<b>\$ 1,784,923</b>
<b>Income (loss) from operations:</b>			
Semiconductor	\$ (295,710)	\$ (290,017)	\$ (947,156)
Storage Systems	23,094	25,204	(58,452)
	<b>Total</b>	<b>\$ (264,813)</b>	<b>\$ (1,005,608)</b>

Intersegment revenues for the periods presented above were not significant. Restructuring of operations and other items were included in both segments.

The following is a summary of total assets by segment as of December 31, 2003, 2002 and 2001:

	December 31,		
	2003	2002	2001
	(In thousands)		
<b>Total assets:</b>			
Semiconductor	\$ 3,115,610	\$ 3,721,282	\$ 4,200,631
Storage Systems	332,291	291,454	324,446
	<b>Total</b>	<b>\$ 4,012,736</b>	<b>\$ 4,525,077</b>

Edgar Filing: LSI LOGIC CORP - Form 10-K

**Significant Customers.** The following table summarizes the number of our significant customers, each of whom accounted for 10% or more of our revenues, along with the percentage of revenues they individually represent on a consolidated basis and by segment:

	Year ended December 31,		
	2003	2002	2001
<b>Semiconductor segment:</b>			
Number of significant customers	1	1	1
Percentage of segment revenues	18%	22%	21%
<b>Storage Systems segment:</b>			
Number of significant customers	3	3	3
Percentage of segment revenues	52%, 14%, 11%	36%, 20%, 15%	21%, 21%, 13%
<b>Consolidated:</b>			
Number of significant customers	2	1	1
Percentage of consolidated revenues	15%, 13%	18%	18%

**Information about geographic areas.** The Company's significant operations outside the United States include sales offices in Europe, Asia and Japan. The following is a summary of operations by entities located within the indicated geographic areas.

	Year ended December 31,		
	2003	2002	2001
(In thousands)			
<b>Revenues:</b>			
North America	\$ 863,620	\$ 905,323	\$ 880,779
Asia, including Japan	677,266	748,906	630,708
Europe	152,184	162,709	273,436
<b>Total</b>	<b>\$ 1,693,070</b>	<b>\$ 1,816,938</b>	<b>\$ 1,784,923</b>

	December 31,		
	2003	2002	2001
(In thousands)			
<b>Long-lived assets:</b>			
North America	\$ 1,571,320	\$ 1,740,407	\$ 2,014,950
Asia, including Japan	474,348	633,477	679,679
Europe	4,712	5,648	7,438
<b>Total</b>	<b>\$ 2,050,380</b>	<b>\$ 2,379,532</b>	<b>\$ 2,702,067</b>

Long-lived assets consist of net property and equipment, goodwill, other intangible assets, capitalized software and other long-term assets, excluding long-term deferred tax assets.

**Note 13- Commitments and Contingencies**

*Operating Leases*

The Company uses operating leases to finance certain equipment used in its wafer fabrication facilities. As of December 31, 2003, the Company had two such operating leases.

## Edgar Filing: LSI LOGIC CORP - Form 10-K

On March 28, 2003, the Company entered into two lease and security agreements, each with Bank of America, National Association ( BANA ), acting as the Lessor, and Wells Fargo Bank Northwest, as the Agent, for a total of \$395 million for certain wafer fabrication equipment (the Equipment ). The leases qualify for operating lease accounting treatment. As of December 31, 2003, the amount under both leases was fully drawn. Each lease has a term of 3.5 years with no option for renewal. The Company may, at the end of the lease term, return or purchase, at a pre-determined amount, all of the Equipment. The first lease was for \$235 million and was for equipment that was previously on lease immediately prior to closing this transaction. In October 2003, BANA, with the Company's approval, assigned its rights as Lessor on the first lease to Bank of the West. The second lease was for \$160 million and was for Equipment that was sold to BANA and then immediately leased back in a transaction commonly referred to as a sale-leaseback. The Equipment sold had a book value of approximately \$103 million. The resulting \$57 million gain on the sale of the Equipment will be deferred until the end of the lease term and has been recorded as a non-current liability as of December 31, 2003. The Company has \$359 million in cash that is posted as collateral for the new leases. The lessor has access to the Company's cash collateral only in the event of a default. Of this cash collateral, \$58 million, representing the amount of cash collateral to be released in the next 12 months, is reflected in other current assets and the remaining cash collateral of \$301 million is recorded in other non-current assets. In addition, the Company is required to maintain unrestricted cash and short-term investments in an amount no less than \$350 million. The Company was in compliance with this requirement as of December 31, 2003.

The Company guarantees residual values related to leased equipment. As of December 31, 2003, its maximum potential exposure to residual value guarantees was approximately \$163 million and the Company does not expect to have a loss on such guarantees.

In November 2002, the FASB issued FASB Interpretation No. 45 ( FIN 45 ), Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others. FIN 45 requires that a liability be recorded in the guarantor's balance sheet upon issuance of a guarantee. In addition, FIN 45 requires disclosures about the guarantees that an entity has issued, including a reconciliation of changes in the entity's product warranty liabilities. The initial recognition and initial measurement provisions of FIN 45 were applicable on a prospective basis to guarantees issued or modified after December 31, 2002, irrespective of the guarantor's fiscal year-end. The disclosure requirements of FIN 45 were effective for financial statements of interim or annual periods ending after December 15, 2002. The guaranteed residual values for the equipment under the Company's operating leases are subject to FIN 45. The fair value of the guarantee of the residual value of the equipment was determined using management estimates and was recorded as a non-current asset and liability each in the amount of \$7 million as of December 31, 2003.

In connection with the equipment operating leases described above, the Company entered into standby letters of credit for \$63 million which will expire at the end of the lease term. These instruments are off-balance sheet commitments to extend financial guarantees. The fair value of the letters of credit approximates the contract amount.

No officer, director or employee of the Company has any financial interest in these leasing arrangements. The minimum lease payments, excluding the residual value guarantees, under the two lease agreements are \$64 million, \$62 million and \$45 million in 2004, 2005 and 2006, respectively.

The Company leases the majority of its facilities, certain equipment, and software under non-cancelable operating leases, which expire through 2011. The facilities lease agreements typically provide for base rental rates that are increased at various times during the terms of the lease and for renewal options at the fair market rental value. Future minimum payments under these operating lease agreements are \$68 million, \$61 million, \$44 million, \$18 million, \$13 million and \$27 million for the years ending December 31, 2004, 2005, 2006, 2007, 2008 and thereafter, respectively.

Rental expense under all operating leases was \$121 million, \$125 million and \$150 million for the years ended December 31, 2003, 2002 and 2001, respectively.

*Indemnifications*

The Company is a party to a variety of agreements pursuant to which it may be obligated to indemnify the other party with respect to certain matters. Typically, these obligations arise in connection with contracts and license agreements or the sale of assets, under which the Company customarily agrees to hold the other party harmless against losses arising from a breach of warranties, representations and covenants related to such matters as title to assets sold, validity of certain intellectual property rights, non-infringement of third-party rights, and certain income tax-related matters. In each of these circumstances, payment by the Company is typically subject to the other party making a claim to and cooperating with the Company pursuant to the procedures specified in the particular contract. This usually allows the Company to challenge the other party's claims or, in case of breach of intellectual property representations or covenants, to control the defense or settlement of any third-party claims brought against the other party. Further, the Company's obligations under these agreements may be limited in terms of activity (typically to replace or correct the products or terminate agreement with a refund to the other party), duration and/or amounts. In some instances, the Company may have recourse against third parties and/or insurance covering certain payments made by the Company.

*Guarantees****Product warranties.***

	<b>Years ended December 31,</b>	
	<b>2003</b>	<b>2002</b>
	(in thousands)	
Balance at the beginning of the period	\$ 6,328	\$ 3,756
Accruals for warranties issued during the period	9,399	10,796
Accruals related to pre-existing warranties (including changes in estimates)	3,802	702
Settlements made during the period (in cash or in kind)	(10,055)	(8,926)
Balance at the end of the period	\$ 9,474	\$ 6,328

***Standby letters of credit.*** At December 31, 2003 and 2002, the Company had outstanding standby letters of credit of \$14 million and \$15 million, respectively, that are in addition to the ones mentioned above entered into in conjunction with the equipment lease. These instruments are off-balance sheet commitments to extend financial guarantees for certain self-insured risks, import/export taxes and performance under contracts, and generally have one-year terms. The fair value of the letters of credit approximates the contract amount.

***Purchase commitments.*** The Company maintains certain purchase commitments primarily for raw materials with suppliers and for some non-production items. Purchase commitments for inventory materials are generally restricted to a forecasted time-horizon as mutually agreed upon between the parties. This forecasted time-horizon can vary among different suppliers.

*Legal Matters*

In February 1999, a lawsuit alleging patent infringement was filed in the United States District Court for the District of Arizona by the Lemelson Medical, Education & Research Foundation, Limited Partnership (Lemelson) against 88 electronics industry companies, including us. The case number is CIV990377PHXRGS. The patents involved in this lawsuit are alleged to relate to semiconductor manufacturing and computer imaging, including the use of bar coding for automatic identification of articles. The plaintiff sought an infringement judgment, an injunction, treble damages, attorneys' fees and further relief as the court may provide. In September 1999, the Company filed an answer denying infringement, raising affirmative defenses and asserting a counterclaim for declaratory judgment of non-infringement, invalidity and unenforceability of Lemelson's patents. As of December 31, 2003, the discovery phase was continuing. Initial patent claim construction briefs are due in March 2004. As of this



time, no claim construction hearing or trial date has been set. While the Company cannot make any assurance regarding the eventual resolution of this matter, the Company does not believe it will have a material adverse effect on the consolidated results of operations or financial condition.

On June 14, 2002, Plasma Physics Corporation ( Plasma Physics ) filed suit against the Company in the Eastern District of New York, alleging that the Company is willfully and deliberately infringing two U.S. patents. LSI was served with the lawsuit in December of 2002. The case is number CV 02-3462 (LDW) (WDW). The two Plasma Physics patent numbers are 5,470,784 and 6,245,648. No specific Company products were identified in the complaint. The plaintiff sought an infringement judgment, an injunction, treble damages, attorneys' fees and further relief as the court may provide. Similar lawsuits were also filed at the same time against several other corporations. In January 2003, the Company answered the complaint denying infringement, asserting affirmative defenses and asserting counterclaims for judgments declaring patent non-infringement, declaring patent invalidity, and declaring the patents unenforceable. The parties currently are to be prepared for trial by April 30, 2004. While the Company cannot make any assurance regarding the eventual resolution of this matter, the Company does not believe it will have a material adverse effect on the consolidated results of operations or financial condition.

The Company is a party to other litigation matters and claims that are normal in the course of its operations, and while the results of such litigation and claims cannot be predicted with certainty, the Company believes that the final outcome of such matters is not expected to have a material adverse effect on the Company's consolidated results of operations and financial condition.

**NOTE 14 Separation of LSI Logic Storage Systems, Inc.**

In November 2003, the Company announced its intention to separate its wholly-owned subsidiary, LSI Logic Storage Systems, Inc. ( Storage Systems ) from the Company and create an independent storage systems company. The separation of the Storage Systems from the Company, including the transfer of related assets, liabilities and intellectual property rights, was substantially completed in December 2003. The Company has entered into agreements to address various arrangements between Storage Systems and the Company as discussed below. The following are the major separation agreements.

**Master Separation Agreement.** The master separation agreement contains the framework with respect to Storage Systems separation from the Company and provides for the execution of various ancillary agreements summarized herein that further specify the terms of the separation.

**General Assignment and Assumption Agreement.** The general assignment and assumption agreement governs the transfer of assets and assumption of liabilities relating to Storage Systems' business, to the extent that the other separation ancillary agreements do not provide for the specific transfer of those assets or the assumption of those liabilities. The agreement also describes when and how these transfers and assumptions will occur.

**Intellectual Property Agreement.** The intellectual property agreement provides mechanisms by which, the technology and intellectual property rights that relate only to Storage System's business (but to which the Company has legal title or that are licensed by the Company) reside with Storage Systems. This technology and intellectual property includes software and other technology, the copyrights on that software and technology, the applications, trademarks and domain names. The intellectual property agreement provides that, where legal title to technology and intellectual property allocated to Storage Systems is owned by the Company, the Company will transfer and assign to Storage Systems the legal title in that technology and intellectual property.

In addition to the allocations of technology and intellectual property, pursuant to the intellectual property agreement, the Company grants Storage Systems non-exclusive licenses under patents and other intellectual property rights included in Storage Systems' products or used in Storage Systems' business. The Company also grants Storage Systems a right to use, for a limited time, specified Company trademarks related to or used to identify Storage Systems' business or products but not owned by Storage Systems. Storage Systems

grants the Company a non-exclusive license, under Storage Systems' patent and other intellectual property rights, to operate and conduct the Company's retained businesses.

**Employee Matters Agreement.** Storage Systems has entered into an employee matters agreement with the Company to allocate assets, liabilities, and responsibilities relating to Storage Systems' current and former U.S. employees as well as certain designated non-U.S. employees assigned to Storage Systems' business and their participation in the employee benefits plans that the Company currently sponsors and maintains.

Storage Systems' eligible employees generally will remain able to participate in the Company's benefit plans for a period of time. Storage Systems intends to have its own benefit plans established by the time its employees no longer are eligible to participate in the Company's benefit plans. Once Storage Systems' own benefit plans are established, the Company will have the ability to modify or terminate each plan in accordance with the terms of those plans and its policies.

**Indemnification and Insurance Matters Agreement.** This agreement provides that, effective as of the separation date, Storage Systems and the Company will each release the other from any liabilities arising from events occurring on or before the separation date. The agreement also contains provisions governing indemnification. In general, Storage Systems and the Company will each indemnify the other for all liabilities arising from their respective businesses, liabilities, contracts or breaches of the separation agreement. In addition, Storage Systems has agreed to indemnify the Company with respect to any liability arising from any untrue statement of material fact or an omission of a material fact in the prospectus relating to Storage Systems' initial public offering. The agreement also contains cross-indemnification provisions regarding liabilities resulting from environmental conditions.

The Company and Storage Systems also intend to enter into a tax sharing agreement, a real estate matters agreement and a transition services agreement.

The Storage Systems Board of Directors adopted the 2004 Equity Incentive Plan in February 2004. The Equity Incentive Plan Provides for the grant of the following types of incentive awards: (1) stock options; (2) stock appreciation rights; (3) restricted stock; (4) performance units; and (5) performance shares. The Compensation Committee of the Storage Systems Board of Directors will administer the plan. There are 7.5 million shares of Storage Systems stock reserved for grant under the 2004 Equity Incentive Plan. On February 12, 2004, 1,675,000 options to purchase Class A common stock of Storage Systems were granted to several employees at an exercise price of \$10.00 per share representing the fair value on the grant date as determined by the Storage Systems Board of Directors. The options granted vest 25% at every anniversary from the date of grant.

On February 19, 2004, Storage Systems filed a registration statement on Form S-1 with the Securities and Exchange Commission. The Company currently plans to receive the net proceeds of the offering in the form of a dividend from Storage Systems. The Company may sell shares of Storage Systems' common stock in the public market or in private transactions, which may not include the sale of a controlling interest in Storage Systems.

The Company currently intends to distribute to its stockholders, by the summer of 2005, all remaining shares of Storage Systems' common stock held by the Company at such time. We will determine the timing, structure and all terms of the distribution taking into account factors such as market conditions. Completion of the distribution would also be contingent upon the receipt of a favorable tax ruling from the Internal Revenue Service and/or a favorable opinion from the Company's tax advisor as to the tax-free nature of the distribution for U.S. federal income tax purposes. The Company is not obligated to undertake the distribution, and the distribution may not occur by the contemplated time or at all.

**Report of Independent Auditors**

To the Board of Directors and Shareholders of LSI Logic Corporation:

In our opinion, the consolidated financial statements listed in the index appearing under Item 15(a)(1) on page 96 present fairly, in all material respects, the financial position of LSI Logic Corporation and its subsidiaries at December 31, 2003 and 2002, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2003 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the index appearing under Item 15(a)(2) presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. These financial statements and financial statement schedule are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements and financial statement schedule based on our audits. We conducted our audits of these statements in accordance with auditing standards generally accepted in the United States of America, which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

As discussed in Note 3 to the consolidated financial statements, effective January 1, 2002, the Company changed its method of accounting for goodwill in accordance with Statement of Financial Accounting Standards No. 142, Goodwill and Other Intangibles Assets.

PricewaterhouseCoopers LLP  
San Jose, California  
January 28, 2004, *except for Note 14, as to which the date is*  
February 19, 2004

*Supplementary Financial Data***Interim Financial Information (Unaudited)**

	Quarter			
	First	Second	Third	Fourth
(In thousands, except per share amounts)				
<b>Year Ended December 31, 2003</b>				
Revenues	\$ 372,785	\$ 407,213	\$ 450,227	\$ 462,845
Gross profit	124,717	168,744	184,984	198,760
Net (loss)/income	(122,425)	(162,084)	(31,652)	7,614
Basic (loss)/income per share:				
Net (loss)/income	\$ (0.33)	\$ (0.43)	\$ (0.08)	\$ 0.02
Diluted (loss)/income per share:				
Net (loss)/income	\$ (0.33)	\$ (0.43)	\$ (0.08)	\$ 0.02
<b>Year Ended December 31, 2002</b>				
Revenues	\$ 412,509	\$ 437,768	\$ 486,964	\$ 479,697
Gross profit	105,846	163,364	198,531	180,975
Net loss	(171,753)	(62,291)	(27,626)	(30,770)
Basic loss per share:				
Net loss	\$ (0.47)	\$ (0.17)	\$ (0.07)	\$ (0.08)
Diluted loss per share:				
Net loss	\$ (0.47)	\$ (0.17)	\$ (0.07)	\$ (0.08)

During the first, second, third and fourth quarters of 2003, the Company recorded charges for restructuring of operations and other items of approximately \$36 million, \$125 million, \$24 million and \$(4) million, respectively. See Note 4 of the Notes.

During the first and second quarters of 2002, the Company recorded additional excess inventory and related charges of approximately \$41 million and \$5 million, respectively. During the first, second, third and fourth quarters of 2002, the Company recorded charges for restructuring of operations and other items of approximately \$65 million, \$(6) million, \$13 million and \$(5) million, respectively. See Note 4 and 8 of the Notes.

**Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure**

Not applicable.

**Item 9A. Controls and Procedures.**

Our management evaluated, with the participation of our chief executive officer and our chief financial officer, the effectiveness of our disclosure controls and procedures pursuant to Rule 13a-15 promulgated under the Securities Exchange Act as of December 31, 2003. Based on this evaluation, our chief executive officer and our chief financial officer have concluded that our disclosure controls and procedures are effective to ensure that information we are required to disclose in reports that we file or submit under the Securities Exchange Act of 1934 is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms.

There was no change in our internal control over financial reporting that occurred during the period covered by this Annual Report on Form 10-K that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting. We are aware that any system of control, however well designed and operated, can only provide reasonable, and not absolute, assurance that the objectives of this system are met, and that maintenance of disclosure controls and procedures is an ongoing process that may change over time.

## PART III

Certain information required by Part III is omitted from this Report in that the Company will file a definitive proxy statement within 120 days after the end of its fiscal year pursuant to Regulation 14A (the

Proxy Statement ) for its Annual Meeting of Stockholders to be held May 6, 2004, and certain of the information to be included therein is incorporated by reference herein.

**Item 10. Directors and Executive Officers of the Registrant**

The information regarding the Company's executive officers required by this Item is incorporated by reference from the section entitled Executive Officers of the Company in Part I of this Form 10-K.

The information regarding the Company's directors is incorporated by reference from Election of Directors in the Company's Proxy Statement.

The information concerning Section 16(a) reporting is incorporated by reference from Section 16(a) Beneficial Ownership Reporting Compliance in the Company's Proxy Statement.

The Company has adopted a Code of Ethics for principal executive and senior financial officers. A copy of this Code of Ethics is located on the Company website at [www.lsillogic.com](http://www.lsillogic.com).

**Item 11. Executive Compensation**

The information required by this Item is incorporated by reference from Executive Compensation in the Company's Proxy Statement.

**Item 12. Security Ownership of Certain Beneficial Owners and Management**

The information required by this Item is incorporated by reference from Equity Compensation Plan Information in the Company's Proxy Statement.

The information required by this Item is incorporated by reference from Security Ownership in the Company's Proxy Statement.

**Item 13. Certain Relationships and Related Transactions**

The information required by this Item is incorporated by reference to Certain Transactions in the Company's Proxy Statement.

**Item 14. Principal Accountant Fees and Services**

The information required by this Item is incorporated by reference to the report of the Audit Committee of the Board of Directors in the Company's Proxy Statement.

PART IV

**Item 15. Exhibits, Financial Statement Schedules, and Reports on Form 8-K**

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

1. FINANCIAL STATEMENTS. The following Consolidated Financial Statements of LSI Logic Corporation and Report of Independent Accountants are contained in this Form 10-K:

	<b>PAGE IN THE FORM 10-K</b>
Consolidated Balance Sheets As of December 31, 2003 and 2002	<b>55</b>
Consolidated Statements of Operations For the Three Years Ended December 31, 2003, 2002 and 2001	<b>56</b>
Consolidated Statements of Stockholders Equity For the Three Years Ended December 31, 2003, 2002 and 2001	<b>57</b>
Consolidated Statements of Cash Flows For the Three Years Ended December 31, 2003, 2002 and 2001	<b>58</b>
Notes to Consolidated Financial Statements	<b>59</b>
Report of Independent Auditors	<b>93</b>
Fiscal years 2003, 2002 and 2001 were 52-week years with a December 31 fiscal year end.	

2. FINANCIAL STATEMENT SCHEDULES.

**SCHEDULE II  
VALUATION AND QUALIFYING ACCOUNTS  
(in millions)**

<b>Column A Description</b>	<b>Column B Balance at beginning of period</b>	<b>Column C Additions charged to costs, expenses or other accounts</b>	<b>Column D Deductions *</b>	<b>Column E Balance at end of period</b>
<b>2003</b>				
Allowance for doubtful accounts	\$ 7	\$ 5	\$ (5)	\$ 7
<b>2002</b>				
Allowance for doubtful accounts	\$ 20	\$ 9	\$ (22)	\$ 7
<b>2001</b>				
Allowance for doubtful accounts	\$ 8	\$ 15	\$ (3)	\$ 20

\* Deductions include write-offs of uncollectable accounts and collections of amounts previously reserved.

## Edgar Filing: LSI LOGIC CORP - Form 10-K

### 3. EXHIBITS:

- 2.1 Agreement and Plan of Reorganization and Merger dated February 21, 1999, by and between the Registrant, Stealth Acquisition Corporation and SEEQ Technology Inc. Incorporated by reference to Exhibit 99.1 filed with the Registrant's Current Report on Form 8-K filed on February 23, 1999.
- 2.2 Agreement and Plan of Reorganization dated May 20, 2000 by and among Registrant, Diamond Acquisition Corporation, DataPath Systems, Inc., and certain individuals named therein. Incorporated by reference to exhibits filed with Registrant's Form 8-K filed on May 24, 2000.
- 2.3 Agreement and Plan of Reorganization dated March 26, 2001 by and between Registrant, Clover Acquisition Corporation and C-Cube Microsystems Inc. Incorporated by reference to exhibits filed with the Registrant's Registration Statement on Form S-4 (No. 333-58862) on April 13, 2001.
- 2.4 Master Separation Agreement between Registrant and LSI Logic Storage Systems, Inc., effective as of December 31, 2003. Said document is included as an Exhibit to this Annual Report on Form 10-K for the year ended December 31, 2003.
- 2.5 General Assignment and Assumption Agreement between Registrant and LSI Logic Storage Systems, Inc., effective as of December 31, 2003. Said document is included as an Exhibit to this Annual Report on Form 10-K for the year ended December 31, 2003.
- 2.6 Intellectual Property Agreement between Registrant and LSI Logic Storage Systems, Inc., effective as of December 31, 2003. Said document is included as an Exhibit to this Annual Report on Form 10-K for the year ended December 31, 2003.
- 2.7 Indemnification and Insurance Matters Agreement between Registrant and LSI Logic Storage Systems, Inc., effective as of December 31, 2003. Said document is included as an Exhibit to this Annual Report on Form 10-K for the year ended December 31, 2003.
- 2.8 Employee Matters Agreement between Registrant and LSI Logic Storage Systems, Inc., effective as of December 31, 2003. Said document is included as an exhibit to this Annual Report on Form 10-K for the year ended December 31, 2003.
- 3.1 Restated Certificate of Incorporation of Registrant. Incorporated by reference to exhibits filed with the Registrant's Registration Statement on Form S-8 (No. 333-46436) on September 22, 2000.
- 3.2 Amended and Restated By-laws of Registrant. Incorporated by reference to exhibits filed with the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 30, 2003.
- 4.1 Amended and Restated Preferred Shares Rights Agreement dated as of November 20, 1998, between LSI Logic Corporation and BankBoston N.A. Incorporated by reference to exhibits filed with the Registrant's Form 8-A12G/A on December 8, 1998.
- 4.2 Indenture dated March 15, 1999 between LSI Logic Corporation and State Street Bank and Trust Company of California, N.A., Trustee, covering \$345,000,000 principal amount of 4 ¼% Convertible Subordinated Notes due 2004. Incorporated by reference to exhibits filed with the Registrant's Registration Statement on Form S-3 (No. 333-80611), on June 14, 1999.
- 4.3 Indenture dated February 15, 2000 between LSI Logic Corporation and State Street Bank and Trust Company of California, N.A., as Trustee. Incorporated by reference to exhibits filed with the Registrant's Current Report on Form 8-K on February 24, 2000.
- 4.4 Indenture dated as of October 30, 2001, between LSI Logic Corporation and State Street Bank and Trust Company of California, N.A., as Trustee. Incorporated by reference to exhibits filed with Registrant's Registration Statement on Form S-3 (No. 333-81434) on January 25, 2002.
- 4.5 Indenture dated as of May 16, 2003, between LSI Logic Corporation and U.S. Bank, N.A., as Trustee. Incorporated by reference to exhibits filed with Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2003.
- 4.6 See Exhibit 3.1.
- 10.1 Registrant's 1982 Incentive Stock Option Plan, as amended, and forms of Stock Option Agreement. Incorporated by reference to exhibits filed with the Registrant's Annual Report on Form 10-K for the year ended December 31, 1988.\*
- 10.2 Lease Agreement dated November 22, 1983, for 48580 Kato Road, Fremont, California between the Registrant and BankAmerica Realty Investors. Incorporated by reference to exhibits filed with the Registrant's Annual Report on Form 10-K for the year ended December 31, 1983.
- 10.3 Form of Indemnification Agreement between Registrant and our officers, directors and certain key employees. Incorporated by reference to exhibits filed with the Registrant's Annual Report on Form 10-K for the year ended December 31, 1987.\*

## Edgar Filing: LSI LOGIC CORP - Form 10-K

- 10.4 Amended and Restated LSI Logic Corporation 1991 Equity Incentive Plan. Incorporated by reference to exhibits filed with Registrant's Registration Statement on Form S-8 (No. 333-96543) on July 16, 2002.\*
- 10.5 Lease Agreement dated February 28, 1991 for 765 Sycamore Drive, Milpitas, California between the Registrant and the Prudential Insurance Company of America. Incorporated by reference to exhibits filed with the Registrant's Annual Report on Form 10-K for the year ended December 31, 1991.
- 10.6 Stock Purchase Agreement dated as of January 20, 1995; Promissory Note dated January 26, 1995; Note Purchase Agreement dated as of January 26, 1995 in connection with our purchase of the minority interest in one of our Japanese subsidiaries. Incorporated by reference to exhibits filed with the Registrant's Annual Report on Form 10-K for the year ended December 31, 1995.
- 10.7 1995 Director Option Plan. Incorporated by reference to exhibits filed with the Registrant's Registration Statement on Form S-8 (No. 333-106205) on June 17, 2003.\*
- 10.8 LSI Logic Corporation International Employee Stock Purchase Plan. Incorporated by reference to exhibits filed with the Registrant's Registration Statement on Form S-8 (No. 333-98807) on August 27, 2002.\*
- 10.9 Form of LSI Logic Corporation Change in Control Severance Agreement between LSI Logic Corporation and each of its executive officers. Said document is included as an Exhibit to this Form 10-K for the year ended December 31, 2003. \*
- 10.10 Technology Transfer Agreement between LSI Logic Corporation and Wafer Technology (Malaysia) Sdn. Bhd., dated September 8, 1999. Incorporated by reference to exhibits filed with the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 1999.
- 10.11 Mint Technology, Inc. Amended 1996 Stock Option Plan. Incorporated by reference to exhibits filed with the Registrant's Registration Statement on Form S-8 (No. 333-34285) on August 25, 1997.
- 10.12 Registrant's Amended and Restated Employee Stock Purchase Plan. Incorporated by reference to exhibits filed with the Registrant's Registration Statement on Form S-8 (No. 333-96555) on July 16, 2002.\*
- 10.13 Symbios Logic, Inc. 1995 Stock Plan. Incorporated by reference to exhibits filed with the Registrant's Form S-8 (No. 333-62159) on August 25, 1998.
- 10.14 LSI Logic Corporation 1999 Nonstatutory Stock Option Plan. Incorporated by reference to exhibits filed with the Registrant's Registration Statement on Form S-8 (No. 333-96549) on July 16, 2002.
- 10.15 SEEQ Technology, Inc. Amended and Restated 1982 Stock Option Plan. Incorporated by reference to exhibits filed with the Registrant's Registration Statement on Form S-8 (No. 333-81435) on June 24, 1999.
- 10.16 SEEQ Technology, Inc. 1989 Non-Employee Director Stock Option Plan. Incorporated by reference to exhibits filed with the Registrant's Registration Statement on Form S-8 (No. 333-81435) filed on June 24, 1999.
- 10.17 Amended and Restated Participation Agreement by and among Registrant, ABN AMRO Bank N.V., ABN AMRO Bank N.V. as agent for Lessors and Participants dated April 18, 2000. Incorporated by reference to exhibits with Registrant's Quarterly Report on Form 10-Q for the quarter ended April 2, 2000.
- 10.18 Second Amended and Restated Credit Agreement dated as of April 21, 2000, by and among Registrant, LSI Logic Japan Semiconductor, ABN AMRO Bank and Lenders. Incorporated by reference to exhibits filed with the Registrant's Annual Report on Form 10-K for the year ended December 31, 2000.
- 10.19 IntraServer Technology, Inc. 1998 Stock Option Plan. Incorporated by reference to exhibits filed with Registrant's Registration Statement on Form S-8 (No. 333-38746) on June 7, 2000.
- 10.20 DataPath Systems, Inc. Amended 1994 Stock Option Plan. Incorporated by reference to exhibits filed with Registrant's Registration Statement on Form S-8 (No. 333-42888) on August 2, 2000.
- 10.21 DataPath Systems, Inc. Amended and Restated 1997 Stock Option Plan. Incorporated by reference to exhibits filed with Registrant's Registration Statement on Form S-8 (No. 333-42888) on August 2, 2000.
- 10.22 Syntax Systems, Inc. Restated Stock Option Plan of January 5, 1999. Incorporated by reference to exhibits filed with Registrant's Registration Statement on Form S-8 (No. 333-52050) on December 18, 2000.
- 10.23 C-Cube Microsystems Inc. Director Stock Option Plan. Incorporated by reference to exhibits filed with Registrant's Registration Statement on Form S-8 (No. 333-62960) on June 14, 2001.
- 10.24 C-Cube Microsystems Inc. 2000 Stock Plan. Incorporated by reference to exhibits filed with Registrant's Registration Statement on Form S-8 (No. 333-62960) on June 14, 2001.
- 10.25 Wilfred J. Corrigan Employment Agreement dated as of September 20, 2001. Incorporated by reference to exhibits filed with the Annual Report on Form 10-K for the year ended December 31, 2001.\*
- 10.26 First Amendment to Amended and Restated Participation Agreement by and among LSI Logic, ABN Amro Bank N.V., Keybank National Association, FBTC Leasing Corp. as Lessor, ABN Amro Bank N.V., as agent for Lessors and Participants, dated as of August 2, 2001. Incorporated by reference to exhibits filed with Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2001.
- 10.27 Second Amendment to Amended and Restated Participation Agreement by and among LSI Logic, ABN



## Edgar Filing: LSI LOGIC CORP - Form 10-K

- Amro Bank N.V., Keybank National Association, FBTC Leasing Corp. as Lessor, ABN Amro Bank N.V., as agent for Lessors and Participants, dated as of August 17, 2001. Incorporated by reference to exhibits filed with Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2001.
- 10.28 Third Amendment to Participation Agreement and Omnibus Amendment by and among LSI Logic, Banc of America Leasing & Capital LLC, as Lessor, Fleet National Bank, as Lessor Agent and as Agent and Participants, dated as of September 28, 2001. Incorporated by reference to exhibits filed with Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2001.
- 10.29 Participation Agreement by and among LSI Logic, First Security Bank, N.A. as Certificate Trustee, First Security Trust Company of Nevada, as Agent and Participants, dated as of April 20, 2001. Incorporated by reference to exhibits filed with Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2001.
- 10.30 First Amendment to Participation Agreement by and among LSI Logic, Wells Fargo Bank Northwest, N.A. (f/k/a First Security Bank, N.A.), as Certificate Trustee, First Security Trust Company of Nevada, as Agent and Participants, dated as of August 2, 2001. Incorporated by reference to exhibits filed with Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2001.
- 10.31 Second Amendment to Participation Agreement by and among LSI Logic, Wells Fargo Bank Northwest, N.A. (f/k/a First Security Bank, N.A.), as Certificate Trustee, First Security Trust Company of Nevada, as Agent and Participants, dated as of August 17, 2001. Incorporated by reference to exhibits filed with Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2001.
- 10.32 Third Amendment to Participation Agreement and Omnibus Amendment by and among LSI Logic, Wells Fargo Bank Northwest, N.A., (f/k/a First Security Bank, N.A.), as Certificate Trustee, Wells Fargo Bank Nevada, National Association (f/k/a First Security Trust Company of Nevada), as Agent and Participants, dated as of September 28, 2001. Incorporated by reference to exhibits filed with Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2001.
- 10.33 Manufacturing Technology Joint Development and Foundry Supply Agreement dated as of March 30, 2001 by and between the Registrant and Taiwan Semiconductor Manufacturing Co., Ltd. Incorporated by reference to exhibits filed with Registrant's Annual Report on Form 10-K for the year ended December 31, 2002.
- 10.34 LSI Logic Corporation 2003 Equity Incentive Plan. Incorporated by reference to exhibits filed with the Registrant's Registration Statement on Form S-8 (No. 333-106206) on June 17, 2003.\*
- 10.35 Lease and Security Agreement (Lease A) among Wells Fargo Bank Northwest, N.A., as Agent, LSI Logic Corporation as Lessee and Bank of America, N.A., as Lessor, Fleet National Bank as Documentation Agent and Societe Generale Financial Corporation, as Syndication Agent, dated as of March 28, 2003. Incorporated by reference to exhibits filed with Registrant's Quarterly Report on Form 10-Q for the quarter ended March 30, 2003.
- 10.36 Lease and Security Agreement (Lease B) among Wells Fargo Bank Northwest, N.A., as Agent, LSI Logic Corporation as Lessee and Bank of America, N.A., as Lessor, Fleet National Bank as Documentation Agent and Societe Generale Financial Corporation, as Syndication Agent, dated as of March 28, 2003. Incorporated by reference to exhibits filed with Registrant's Quarterly Report on Form 10-Q for the quarter ended March 30, 2003.
- 10.37 Assignment of Cash Collateral Accounts (Lease A) by and between LSI Logic Corporation as Pledgor and Bank of America, N.A., as Lessor, dated as of March 28, 2003. Incorporated by reference to exhibits filed with Registrant's Quarterly Report on Form 10-Q for the quarter ended March 30, 2003.
- 10.38 Assignment of Cash Collateral Accounts (Lease B) by and between LSI Logic Corporation as Pledgor and Bank of America, N.A., as Lessor, dated as of March 28, 2003. Incorporated by reference to exhibits filed with Registrant's Quarterly Report on Form 10-Q for the quarter ended March 30, 2003.
- 10.39 Letter of Credit and Reimbursement Agreement, between LSI Logic as Applicant, and Wachovia Bank, N.A., dated as of March 28, 2003. Incorporated by reference to exhibits filed with Registrant's Quarterly Report on Form 10-Q for the quarter ended March 30, 2003.
- 10.40 First Amendment to Lease and Security Agreement (Lease A) among Wells Fargo Bank Northwest, N.A., as Agent, LSI Logic Corporation as Lessee and Bank of America, N.A., as Lessor, Fleet National Bank as Documentation Agent and Societe Generale Financial Corporation, as Syndication Agent, dated as of March 31, 2003. Incorporated by reference to exhibits filed with Registrant's Quarterly Report on Form 10-Q for the quarter ended March 30, 2003.
- 10.41 First Amendment to Lease and Security Agreement (Lease B) among Wells Fargo Bank Northwest, N.A., as

## Edgar Filing: LSI LOGIC CORP - Form 10-K

- Agent, LSI Logic Corporation as Lessee and Bank of America, N.A., as Lessor, Fleet National Bank as Documentation Agent and Societe Generale Financial Corporation, as Syndication Agent, dated as of March 31, 2003. Incorporated by reference to exhibits filed with Registrant's Quarterly Report on Form 10-Q for the quarter ended March 30, 2003.
- 10.42 Form of Control Agreement among LSI Logic Corporation, as Lessee, Bank of America, N.A., as Lessor and various entities, as Securities Intermediaries, dated as of March 28, 2003. Incorporated by reference to exhibits filed with Registrant's Quarterly Report on Form 10-Q for the quarter ended March 30, 2003.
- 10.43 Amendment No. 1 to Amended and Restated Preferred Shares Rights Agreement between LSI Logic Corporation, Fleet Bank f/k/a BankBoston, N.A., dated as of August 16, 2001. Incorporated by reference to exhibits filed with Registrant's Quarterly Report on Form 10-Q for the quarter ended March 30, 2003.
- 10.44 Amendment to Amended and Restated Preferred Shares Rights Agreement between LSI Logic Corporation, Fleet Bank, f/k/a BankBoston, N.A., dated as of August 16, 2001. Incorporated by reference to exhibits filed with Registrant's Quarterly Report on Form 10-Q for the quarter ended March 30, 2003.
- 10.45 Registration Rights Agreement between LSI Logic Corporation and Morgan Stanley & Co., Inc., dated May 16, 2003. Incorporated by reference to exhibits filed with Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2003.
- 10.46 Change of Control Severance Agreement between the Registrant and Thomas Georgens, dated as of November 20, 2003. Said document is included as an exhibit to this Form 10-K for the year ended December 31, 2003.\*
- 21.1 List of Subsidiaries.
- 23.1 Consent of Independent Accountants.
- 24.1 Power of Attorney (See page 102).
- 31.1 Certification of the Chief Executive Officer pursuant to Securities and Exchange Act Rules 13a-15(e) and 15d-1(e), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- 31.2 Certification of the Chief Financial Officer pursuant to Securities and Exchange Act Rules 13a-15(e) and 15de-1(e), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- 32.1 Certification of the Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.\*\*
- 32.2 Certification of the Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.\*\*

---

\* Denotes management contract or compensatory plan or arrangement

\*\* Furnished, not filed.

(b) REPORTS ON FORM 8-K.

During the fourth quarter ended December 31, 2003, we filed the following Current Reports on Form 8-K:

On October 22, 2003, we filed a Current Report on Form 8-K pursuant to Items 5 and furnished it pursuant to Items 7 and 12 to report financial results set forth in the Registrant's news release dated October 21, 2003.

On November 13, 2003, we filed a Current Report on Form 8-K pursuant to Items 5, 7 and 9 to report the events set forth in the Registrant's news release dated November 13, 2003.

(c) EXHIBITS.

See Item 14(a)(3), above.

(d) FINANCIAL STATEMENT SCHEDULES

See Item 15(a)(2), above.

TRADEMARK ACKNOWLEDGMENTS

## Edgar Filing: LSI LOGIC CORP - Form 10-K

The LSI Logic logo design, ATMizer, CoreWare, G10, GigaBlaze, HyperPHY, MegaRAID, MetaStor, MiniRISC, and SeriaLink are registered trademarks of LSI Logic Corporation; Cablestream, ContinuStor, FusionMPT, G11, G12, Gflx, HotScale, LogicStor, Merlin, RapidChip, RapidSlices, Right First Time, On Time, StreamSlice, SANtricity, and SANshare are trademarks of LSI Logic Corporation.

ARM is a registered Trademark of Advanced RISC Machines Limited, used under license. All other brand and product names appearing in this report are the trademarks of their respective companies.



Edgar Filing: LSI LOGIC CORP - Form 10-K

<b>Signature</b>	<b>Title</b>	<b>Date</b>
<hr/> <i>/s/ GREGORIO REYES</i> <hr/> <b>(Gregorio Reyes)</b>	Director	March 15, 2004
<hr/> <i>/s/ LARRY W. SONSINI</i> <hr/> <b>(Larry W. Sonsini)</b>	Director	March 15, 2004

103

## Edgar Filing: LSI LOGIC CORP - Form 10-K

### INDEX TO EXHIBITS

- 2.1 Agreement and Plan of Reorganization and Merger dated February 21, 1999, among the Registrant, Stealth Acquisition Corporation and SEEQ Technology Inc. Incorporated by reference to Exhibit 99.1 filed with the Registrant's Current Report on Form 8-K as of February 23, 1999.
- 2.2 Agreement and Plan of Reorganization dated May 20, 2000 by and among Registrant, Diamond Acquisition Corporation, DataPath Systems, Inc., and certain individuals named therein. Incorporated by reference to exhibits filed with Registrant's Form 8-K filed on May 24, 2000.
- 2.3 Agreement and Plan of Reorganization dated March 26, 2001 by and among Registrant, Clover Acquisition Corporation and C-Cube Microsystems Inc. Incorporated by reference to exhibits filed with the Registrant's Registration Statement on Form S-4 (No. 333-58862) on April 13, 2001.
- 2.4 Master Separation Agreement between Registrant and LSI Logic Storage Systems, Inc., effective as of December 31, 2003. Said document is included as an Exhibit to this Annual Report on Form 10-K for the year ended December 31, 2003.
- 2.5 General Assignment and Assumption Agreement between Registrant and LSI Logic Storage Systems, Inc., effective as of December 31, 2003. Said document is included as an Exhibit to this Annual Report on Form 10-K for the year ended December 31, 2003.
- 2.6 Intellectual Property Agreement between Registrant and LSI Logic Storage Systems, Inc., effective as of December 31, 2003. Said document is included as an Exhibit to this Annual Report on Form 10-K for the year ended December 31, 2003.
- 2.7 Indemnification and Insurance Matters Agreement between Registrant and LSI Logic Storage Systems, Inc., effective as of December 31, 2003. Said document is included as an Exhibit to this Annual Report on Form 10-K for the year ended December 31, 2003.
- 2.8 Employee Matters Agreement between Registrant and LSI Logic Storage Systems, Inc., effective as of December 31, 2003. Said document is included as an exhibit to this Annual Report on Form 10-K for the year ended December 31, 2003.
- 3.1 Restated Certificate of Incorporation of Registrant. Incorporated by reference to exhibits filed with the Registrant's Registration Statement on Form S-8 (No. 333-46436) on September 22, 2000.
- 3.2 By-laws of Registrant. Incorporated by reference to exhibits filed with the Registrant's Quarterly Report on Form 10-Q for the year ended March 30, 2003.
- 4.1 Amended and Restated Preferred Shares Rights Agreement dated as of November 20, 1998, between LSI Logic Corporation and BankBoston N.A. Incorporated by reference to exhibits filed with the Registrant's Form 8-A12G/A on December 8, 1998.
- 4.2 Indenture dated March 15, 1999 between LSI Logic Corporation and State Street Bank and Trust Company of California, N.A., Trustee, covering \$345,000,000 principal amount of 4 ¼% Convertible Subordinated Notes due 2004. Incorporated by reference to exhibits filed with the Registrant's Registration Statement on Form S-3 (No. 333-80611), on June 14, 1999.
- 4.3 Indenture dated February 15, 2000 between LSI Logic Corporation and State Street Bank and Trust Company of California, N.A., as Trustee. Incorporated by reference to exhibits filed with the Registrant's Current Report on Form 8-K on February 24, 2000.
- 4.4 Indenture dated as of October 30, 2001, between LSI Logic Corporation and State Street Bank and Trust Company of California, N.A., as Trustee. Incorporated by reference to exhibits filed with Registrant's Registration Statement on Form S-3 (No. 333-81434) on January 25, 2002.
- 4.5 Indenture dated as of May 16, 2003, between LSI Logic Corporation and U.S. Bank, N.A., as Trustee. Incorporated by reference to exhibits filed with Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2003.
- 4.6 See Exhibit 3.1.
- 10.1 Registrant's 1982 Incentive Stock Option Plan, as amended, and forms of Stock Option Agreement. Incorporated by reference to exhibits filed with the Registrant's Annual Report on Form 10-K for the year ended December 31, 1988.\*
- 10.2 Lease Agreement dated November 22, 1983, for 48580 Kato Road, Fremont, California between the Registrant and BankAmerica Realty Investors. Incorporated by reference to exhibits filed with the Registrant's Annual Report on Form 10-K for the year ended December 31, 1983.

## Edgar Filing: LSI LOGIC CORP - Form 10-K

- 10.3 Form of Indemnification Agreement between Registrant and our officers, directors and certain key employees. Incorporated by reference to exhibits filed with the Registrant's Annual Report on Form 10-K for the year ended December 31, 1987.\*
- 10.4 Amended and Restated LSI Logic Corporation 1991 Equity Incentive Plan. Incorporated by reference to exhibits filed with Registrant's Registration Statement on Form S-8 (No. 333-96543) on July 16, 2002.\*
- 10.5 Lease Agreement dated February 28, 1991 for 765 Sycamore Drive, Milpitas, California between the Registrant and the Prudential Insurance Company of America. Incorporated by reference to exhibits filed with the Registrant's Annual Report on Form 10-K for the year ended December 31, 1991.
- 10.6 Stock Purchase Agreement dated as of January 20, 1995; Promissory Note dated January 26, 1995; Note Purchase Agreement dated as of January 26, 1995 in connection with our purchase of the minority interest in one of our Japanese subsidiaries. Incorporated by reference to exhibits filed with the Registrant's Annual Report on Form 10-K for the year ended December 31, 1995.
- 10.7 1995 Director Option Plan. Incorporated by reference to exhibits filed with the Registrant's Registration Statement on Form S-8 (No. 333-106205) on June 17, 2003.\*
- 10.8 LSI Logic Corporation International Employee Stock Purchase Plan. Incorporated by reference to exhibits filed with the Registrant's Registration Statement on Form S-8 (No. 333-98807) on August 27, 2002.\*
- 10.9 Form of LSI Logic Corporation Change in Control Severance Agreement between LSI Logic Corporation and each of its executive officers. Said document is included as an Exhibit to this Annual Report on Form 10-K for the year ended December 31, 2003\*
- 10.10 Technology Transfer Agreement between LSI Logic Corporation and Wafer Technology (Malaysia) Sdn. Bhd., dated September 8, 1999. Incorporated by reference to exhibits filed with the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 1999.
- 10.11 Mint Technology, Inc. Amended 1996 Stock Option Plan. Incorporated by reference to exhibits filed with the Registrant's Registration Statement on Form S-8 (No. 333-34285) on August 25, 1997.
- 10.12 Registrant's Amended and Restated Employee Stock Purchase Plan. Incorporated by reference to exhibits filed with the Registrant's Registration Statement on Form S-8 (No. 333-96555) on July 16, 2002.\*
- 10.13 Symbios Logic, Inc. 1995 Stock Plan. Incorporated by reference to exhibits filed with the Registrant's Form S-8 (No. 333-62159) on August 25, 1998.
- 10.14 LSI Logic Corporation 1999 Nonstatutory Stock Option Plan. Incorporated by reference to exhibits filed with the Registrant's Registration Statement on Form S-8 (No. 333-96549) on July 16, 2002.
- 10.15 SEEQ Technology, Inc. Amended and Restated 1982 Stock Option Plan. Incorporated by reference to exhibits filed with the Registrant's Registration Statement on Form S-8 (No. 333-81435) on June 24, 1999.
- 10.16 SEEQ Technology, Inc. 1989 Non-Employee Director Stock Option Plan. Incorporated by reference to exhibits filed with the Registrant's Registration Statement on Form S-8 (No. 333-81435) filed on June 24, 1999.
- 10.17 Amended and Restated Participation Agreement by and among Registrant, ABN AMRO Bank N.V., ABN AMRO Bank N.V. as agent for Lessors and Participants dated April 18, 2000. Incorporated by reference to exhibits with Registrant's Quarterly Report on Form 10-Q for the quarter ended April 2, 2000.
- 10.18 Second Amended and Restated Credit Agreement dated as of April 21, 2000, by and among Registrant, LSI Logic Japan Semiconductor, ABN AMRO Bank and Lenders. Incorporated by reference to exhibits filed with the Registrant's Annual Report on Form 10-K for the year ended December 31, 2000.
- 10.19 IntraServer Technology, Inc. 1998 Stock Option Plan. Incorporated by reference to exhibits filed with Registrant's Registration Statement on Form S-8 (No. 333-38746) on June 7, 2000.
- 10.20 DataPath Systems, Inc. Amended 1994 Stock Option Plan. Incorporated by reference to exhibits filed with Registrant's Registration Statement on Form S-8 (No. 333-42888) on August 2, 2000.
- 10.21 DataPath Systems, Inc. Amended and Restated 1997 Stock Option Plan. Incorporated by reference to exhibits filed with Registrant's Registration Statement on Form S-8 (No. 333-42888) on August 2, 2000.
- 10.22 Syntax Systems, Inc. Restated Stock Option Plan of January 5, 1999. Incorporated by reference to exhibits filed with Registrant's Registration Statement on Form S-8 (No. 333-52050) on December 18, 2000.
- 10.23 C-Cube Microsystems Inc. Director Stock Option Plan. Incorporated by reference to exhibits filed with Registrant's Registration Statement on Form S-8 (No. 333-62960) on June 14, 2001.
- 10.24 C-Cube Microsystems Inc. 2000 Stock Plan. Incorporated by reference to exhibits filed with Registrant's Registration Statement on Form S-8 (No. 333-62960) on June 14, 2001.
- 10.25 Wilfred J. Corrigan Employment Agreement dated as of September 20, 2001. Incorporated by reference to exhibits to the Annual Report on Form 10-K for the year ended December 31, 2001.\*
- 10.26 First Amendment to Amended and Restated Participation Agreement by and among LSI Logic, ABN Amro Bank N.V., Keybank National Association, FBTC Leasing Corp. as Lessor, ABN Amro Bank N.V., as agent

## Edgar Filing: LSI LOGIC CORP - Form 10-K

- for Lessors and Participants, dated as of August 2, 2001. Incorporated by reference to exhibits filed with Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2001.
- 10.27 Second Amendment to Amended and Restated Participation Agreement by and among LSI Logic, ABN Amro Bank N.V., Keybank National Association, FBTC Leasing Corp. as Lessor, ABN Amro Bank N.V., as agent for Lessors and Participants, dated as of August 17, 2001. Incorporated by reference to exhibits filed with Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2001.
- 10.28 Third Amendment to Participation Agreement and Omnibus Amendment by and among LSI Logic, Banc of America Leasing & Capital LLC, as Lessor, Fleet National Bank, as Lessor Agent and as Agent and Participants, dated as of September 28, 2001. Incorporated by reference to exhibits filed with Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2001.
- 10.29 Participation Agreement by and among LSI Logic, First Security Bank, N.A. as Certificate Trustee, First Security Trust Company of Nevada, as Agent and Participants, dated as of April 20, 2001. Incorporated by reference to exhibits filed with Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2001.
- 10.30 First Amendment to Participation Agreement by and among LSI Logic, Wells Fargo Bank Northwest, N.A. (f/k/a First Security Bank, N.A.), as Certificate Trustee, First Security Trust Company of Nevada, as Agent and Participants, dated as of August 2, 2001. Incorporated by reference to exhibits filed with Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2001.
- 10.31 Second Amendment to Participation Agreement by and among LSI Logic, Wells Fargo Bank Northwest, N.A. (f/k/a First Security Bank, N.A.), as Certificate Trustee, First Security Trust Company of Nevada, as Agent and Participants, dated as of August 17, 2001. Incorporated by reference to exhibits filed with Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2001.
- 10.32 Third Amendment to Participation Agreement and Omnibus Amendment by and among LSI Logic, Wells Fargo Bank Northwest, N.A., (f/k/a First Security Bank, N.A.), as Certificate Trustee, Wells Fargo Bank Nevada, National Association (f/k/a First Security Trust Company of Nevada), as Agent and Participants, dated as of September 28, 2001. Incorporated by reference to exhibits filed with Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2001.
- 10.33 Manufacturing Technology Joint Development and Foundry Supply Agreement dated as of March 30, 2001 by and between the Registrant and Taiwan Semiconductor Manufacturing Co., Ltd. Incorporated by reference to exhibits filed with the Registrant's Annual Report on Form 10-K for the year ended December 31, 2002.
- 10.34 LSI Logic Corporation 2003 Equity Incentive Plan. Incorporated by reference to exhibits filed with the Registrant's Registration Statement on Form S-8 (No. 333-106206) on June 17, 2003.\*
- 10.35 Lease and Security Agreement (Lease A) among Wells Fargo Bank Northwest, N.A., as Agent, LSI Logic Corporation as Lessee and Bank of America, N.A., as Lessor, Fleet National Bank as Documentation Agent and Societe Generale Financial Corporation, as Syndication Agent, dated as of March 28, 2003. Incorporated by reference to exhibits filed with Registrant's Quarterly Report on Form 10-Q for the quarter ended March 30, 2003.
- 10.36 Lease and Security Agreement (Lease B) among Wells Fargo Bank Northwest, N.A., as Agent, LSI Logic Corporation as Lessee and Bank of America, N.A., as Lessor, Fleet National Bank as Documentation Agent and Societe Generale Financial Corporation, as Syndication Agent, dated as of March 28, 2003. Incorporated by reference to exhibits filed with Registrant's Quarterly Report on Form 10-Q for the quarter ended March 30, 2003.
- 10.37 Assignment of Cash Collateral Accounts (Lease A) by and between LSI Logic Corporation as Pledgor and Bank of America, N.A., as Lessor, dated as of March 28, 2003. Incorporated by reference to exhibits filed with Registrant's Quarterly Report on Form 10-Q for the quarter ended March 30, 2003.
- 10.38 Assignment of Cash Collateral Accounts (Lease B) by and between LSI Logic Corporation as Pledgor and Bank of America, N.A., as Lessor, dated as of March 28, 2003. Incorporated by reference to exhibits filed with Registrant's Quarterly Report on Form 10-Q for the quarter ended March 30, 2003.
- 10.39 Letter of Credit and Reimbursement Agreement, between LSI Logic as Applicant, and Wachovia Bank, N.A., dated as of March 28, 2003. Incorporated by reference to exhibits filed with Registrant's Quarterly Report on Form 10-Q for the quarter ended March 30, 2003.
- 10.40 First Amendment to Lease and Security Agreement (Lease A) among Wells Fargo Bank Northwest, N.A., as Agent, LSI Logic Corporation as Lessee and Bank of America, N.A., as Lessor, Fleet National Bank as Documentation Agent and Societe Generale Financial Corporation, as Syndication Agent, dated as of March 31, 2003. Incorporated by reference to exhibits filed with Registrant's Quarterly Report on Form 10-Q for



## Edgar Filing: LSI LOGIC CORP - Form 10-K

the quarter ended March 30, 2003.

- 10.41 First Amendment to Lease and Security Agreement (Lease B) among Wells Fargo Bank Northwest, N.A., as Agent, LSI Logic Corporation as Lessee and Bank of America, N.A., as Lessor, Fleet National Bank as Documentation Agent and Societe Generale Financial Corporation, as Syndication Agent, dated as of March 31, 2003. Incorporated by reference to exhibits filed with Registrant's Quarterly Report on Form 10-Q for the quarter ended March 30, 2003.
- 10.42 Form of Control Agreement among LSI Logic Corporation, as Lessee, Bank of America, N.A., as Lessor and various entities, as Securities Intermediaries, dated as of March 28, 2003. Incorporated by reference to exhibits filed with Registrant's Quarterly Report on Form 10-Q for the quarter ended March 30, 2003.
- 10.43 Amendment No. 1 to Amended and Restated Preferred Shares Rights Agreement between LSI Logic Corporation, Fleet Bank f/k/a BankBoston, N.A., dated as of August 16, 2001. Incorporated by reference to exhibits filed with Registrant's Quarterly Report on Form 10-Q for the quarter ended March 30, 2003.
- 10.44 Amendment to Amended and Restated Preferred Shares Rights Agreement between LSI Logic Corporation, Fleet Bank, f/k/a BankBoston, N.A., dated as of August 16, 2001. Incorporated by reference to exhibits filed with Registrant's Quarterly Report on Form 10-Q for the quarter ended March 30, 2003.
- 10.45 Registration Rights Agreement between LSI Logic Corporation and Morgan Stanley & Co., Inc., dated May 16, 2003. Incorporated by reference to exhibits filed with Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2003.
- 10.46 Change of Control Severance Agreement between the Registrant and Thomas Georgens, dated as of November 20, 2003. Said document is included as an exhibit to this Form10-K for the year ended December 31, 2003.\*
- 21.1 List of Subsidiaries.
- 23.1 Consent of Independent Accountants.
- 24.1 Power of Attorney (See page 102).
- 31.1 Certification of the Chief Executive Officer pursuant to Securities and Exchange Act Rules 13a-15(e) and 15d-1(e), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- 31.2 Certification of the Chief Financial Officer pursuant to Securities and Exchange Act Rules 13a-15(e) and 15de-1(e), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- 32.1 Certification of the Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.\*\*
- 32.2 Certification of the Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.\*\*

---

\* Denotes management contract or compensatory plan or arrangement

\*\* Furnished, not filed.