GSI TECHNOLOGY INC
Form 10-K
June 04, 2012
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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K

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

For the fiscal year ended March 31, 2012
or

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

For the transition period from to
Commission File Number 000-33387

GSI Technology, Inc.
(Exact name of registrant as specified in its charter)

Delaware	77-0398779
(State or other jurisdiction of incorporation or organization)	(IRS Employer Identification No.)

1213 Elko Drive
Sunnyvale, California 94089
(Address of principal executive offices, zip code)
(408) 331-8800
(Registrant's telephone number, including area code)
Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Name of Each Exchange on which Registered
Common Stock, $0.001 par value	The Nasdaq Stock Market LLC

Securities registered pursuant to Section 12(g) of the Act: None
Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes o No x
Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes o No x
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 x No o
Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes x No o
Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. o
Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See the definitions of "large accelerated filer," accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Act. (Check one):

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Large accelerated filer o Accelerated filer x Non-accelerated filer o Smaller reporting company o
Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes o No x
The aggregate market value of the registrant's voting stock held by non-affiliates of the registrant, based upon the closing sale price of the common stock on September 30, 2011, as reported on the Nasdaq Global Market, was approximately $102.0 million. Shares of the registrant's common stock held by each officer and director and each person who owns 10% or more of the outstanding common stock of the registrant 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 April 30, 2012, there were 27,396,363 shares of the registrant's common stock issued and outstanding.
DOCUMENTS INCORPORATED BY REFERENCE
Portions of the registrant's definitive proxy statement for its 2012 annual meeting of stockholders are incorporated by reference into Part III hereof.

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2012 FORM 10-K ANNUAL REPORT
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Forward-looking Statements

In addition to historical information, this Annual Report on Form 10-K includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). These forward-looking statements involve risks and uncertainties. Forward-looking statements are identified by words such as "anticipates," "believes," "expects," "intends," "may," "will," and other similar expressions. In addition, any statements which refer to expectations, projections, or other characterizations of future events, or circumstances, are forward-looking statements. Actual results could differ materially from those projected in the forward-looking statements as a result of a number of factors, including those set forth in this report under "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Risk Factors," those described elsewhere in this report, and those described in our other reports filed with the Securities and Exchange Commission ("SEC"). We caution you not to place undue reliance on these forward-looking statements, which speak only as of the date of this report, and we undertake no obligation to update these forward-looking statements after the filing of this report. You are urged to review carefully and consider our various disclosures in this report and in our other reports publicly disclosed or filed with the SEC that attempt to advise you of the risks and factors that may affect our business.

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PART I

Item 1. Business

Overview

We develop and market high performance memory products, including "Very Fast" static random access memory, or SRAM, and low latency dynamic random access memory, or LLDRAM, that are incorporated primarily in high-performance networking and telecommunications equipment, such as routers, switches, wide area network infrastructure equipment, wireless base stations and network access equipment. In addition, we serve the ongoing needs of the military, industrial, test equipment and medical markets for high-performance SRAMs. Based on the performance characteristics of our products and the breadth of our product portfolio, we consider ourselves to be a leading provider of Very Fast SRAMs.

We sell our products to leading original equipment manufacturer, or OEM, customers including Alcatel-Lucent, Cisco Systems and Huawei Technologies. We utilize a fabless business model, which allows us both to focus our resources on research and development, product design and marketing, and to gain access to advanced process technologies with only modest capital investment and fixed costs.

We were incorporated in California in 1995 under the name Giga Semiconductor, Inc. We changed our name to GSI Technology in December 2003 and reincorporated in Delaware in June 2004 under the name GSI Technology, Inc. Our principal executive offices are located at 1213 Elko Drive, Sunnyvale, California, 94089, and our telephone number is (408) 331-8800.

Industry Background

SRAM and LLDRAM Market Overview

Virtually all types of high-performance electronic systems incorporate some form of volatile memory. An SRAM is a memory device that retains data as long as power is supplied, without requiring any further user intervention. Dynamic random access memory, or DRAM, is a memory device that loses its charge when stored data is read from the memory and must be refreshed in order for the device to retain the data for future use. The act of reading a DRAM memory bit drains off the charge in the cell. This is known as a destructive read and it must be followed immediately by an automatic re-write of the cell in order for the DRAM cell to retain data for later use. A DRAM memory cell is much smaller than an SRAM memory cell. The fundamentally different characteristics of SRAM and DRAM memory cells have resulted in the emergence of markedly different architectures for SRAM-based and DRAM-based memory products, and the two types of memory serve different applications. Classically, SRAM-based products have served high performance requirements while DRAM-based products have been used in cost-optimized applications. Today, SRAM- and DRAM-based products serve both performance and cost-based applications. As the volatile memory market fragments into a variety of specialized products, more meaningful distinctions between volatile memory products can be made.

There is an increasingly broad variety of volatile memory products on the market, characterized by a number of attributes, such as speed, memory capacity, or density, and power consumption. There are several different industry measures of speed:

- latency, also referred to as random access time, which is the delay between the request for data and the delivery of such data for use and is measured in nanoseconds, or ns, or when used to describe performance of synchronous memory products may be described in terms of numbers of clock cycles required between the load of an address and the delivery of valid data;
- bandwidth, which is the rate at which data can be streamed to or from a device and is measured in gigabits per second, or Gb/s;
- clock frequency, which is the cycle rate of a clock within a synchronous device and is measured in megahertz, or MHz;
- transaction rate, which is the rate at which new commands can be executed by the memory device, and is measured in billions of transactions per second, or BT/s.

Historically, SRAMs have been utilized wherever other memory technologies have been inadequate.

SRAMs demonstrate lower latency and support not-destructive reads, resulting in faster random access times, relative to DRAMs and other types of

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memory technologies. Historically, the volatile memory market has had three price-performance nodes, DRAM at the low end, Fast SRAM at the high end and slow SRAM in the middle. Over the past few decades, less expensive alternatives have been introduced to address certain applications formerly using lower performance SRAMs. For example, new types of DRAM are now in the process of displacing lower performance SRAM products in applications such as cell phones. As a result, particularly in the networking memory market, a technology vacuum formed between Fast SRAMs on one end and DRAMs at the other with no high bandwidth, moderate latency, high transaction rate, moderate cost volatile memory product to fill the void. Low latency DRAMs, or LLDRAMs, are now poised to re-fill the substantial gap in the volatile memory market between commodity DRAMs that cannot meet the transaction rate requirement for many networking market applications and Fast SRAMs that cannot meet the density requirements for some networking applications. Like the Slow SRAMs that came before them, LLDRAMs have a much higher price-per-bit cost than commodity DRAMs (in order to deliver higher transaction rates) but demonstrate a significantly longer latency than Fast SRAMs. Interestingly, their value in the market seems to place them squarely in the price - performance range successfully occupied by Slow SRAMs a decade ago.

The need for increasingly greater bandwidth from commodity DRAMs and the need for higher and higher transaction rates and higher data bandwidth from Fast SRAMs continues unabated as the networking market begins to make preparations for Terabit networking in the latter half of the current decade. It is expected that both Fast SRAM and Low Latency DRAM optimized for networking applications will play an increasingly essential role in enabling continued improvements in network performance.

As a result of the displacement of low performance SRAMs, the total market size for SRAMs is diminishing. However, due to their inherent higher latency characteristics, DRAMs cannot match the random access speed of high-performance SRAMs. Gartner Dataquest divides the SRAM market into segments based on speed. The highest performance segment is comprised of SRAMs that operate at speeds of less than 10 nanoseconds, which we refer to as "Very Fast SRAMs." Very Fast SRAMs are predominantly utilized in high-performance networking and telecommunications equipment.

Increasing Need for Networking Memory Products

Growth in data, voice and video traffic has driven the need for both greater networking bandwidth and more complex routing and switching equipment, resulting in the continued expansion of the networking and telecommunications infrastructure. The continued growth in the level of Internet usage has led to the proliferation of a wide variety of equipment throughout the networking and telecommunications infrastructure, including routers, switches, wireless local area network infrastructure equipment, wireless base stations and network access equipment and a demand for new equipment with faster and higher performance. Moving data in and out of high performance volatile memory is the core task of every piece of networking equipment. The access patterns or workload seen by most of the memory arrays in networking equipment are often significantly different from those seen by memory devices used in the computer market, such as the DRAMs used for main storage in PCs. As a result, distinct classes of memory products optimized for the demands of the networking market have been emerging over the last ten years. The sharply rising demand for increasing worldwide network performance is expected to drive a continuing need for ever more specialized memory products. High-performance networking and telecommunications equipment require a variety of memory types; both SRAM-based and DRAM-based. Some of the required memory arrays are internal to specialized processors or ASICs but many tasks require more bits than can be accommodated on a processor or ASIC, and must be provided in some form of external volatile memory. SRAM-based and DRAM-based networking memory products address this requirement. For example, in a typical router or switch, multiple networking-optimized memory devices are required to temporarily store, or buffer, data traffic and to provide rapid lookup of information in data tables. As networking equipment must increasingly support advanced traffic content such as Voice over Internet Protocol, or VoIP, video streaming and bi-directional video, demand for even higher performance networking memory is expected to continue to increase.

Demanding Requirements for Success in the Networking Memory Market

The pressure on networking and telecommunications OEMs to bring higher performance equipment to market rapidly to support not only more traffic but also more advanced traffic content is compounded by the requirement that this

new equipment occupy no more space than the equipment it replaces, which results in increased circuit density and the need for low power operations. In response to these pressures, OEMs have increasingly relied on providers that are capable of rapidly developing and introducing advanced, higher density, low power networking memory. The variety of memory applications within the networking and telecommunications markets has also driven a need for more specialized products available in relatively low volumes. These specialized products include high-speed synchronous memory products implemented in both SRAM and DRAM memory technologies with different density, latency and bandwidth capabilities. In general, OEMs prefer to work with a supplier who can address the full range of their high-performance networking memory product requirements and, just as importantly, can offer the technical and logistic support necessary to sustain and accelerate their efforts.

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We believe the key success factors for a networking memory vendor are the ability to offer a broad catalog of high-performance, high-quality and high-reliability networking memory products, to continuously introduce new products with higher speeds, lower power and greater densities, to maintain timely availability of prior generations of products for several years after their introductions, and to provide effective logistic and technical support throughout their OEM customers' product development and manufacturing life cycles.

The GSI Solution

We endeavor to address the overall needs of our OEM customers, not only satisfying their immediate requirements for our latest generation, highest performance networking memory, but also providing them with the ongoing long-term support necessary during the entire lives of the systems in which our products are utilized. Accordingly, the key elements of our solution include:

Innovative Product Performance Leadership

High Speed. Through the use of advanced architectures, design methodologies and silicon process technologies, we have developed a wide variety of high-performance networking memories. Until recently, all of our products have been SRAM-based, but increased investment in high performance DRAM-based networking memory products has allowed us to increase our market share in the overall networking memory market. Our SRAM product line has evolved from BurstRAMs with an average transaction rate of about 0.125BT/s to our latest SigmaQuad™-IIIe+ SRAMs that deliver a 1.35 BT/s transaction rate, the fastest SRAMs currently available. Our Low Latency DRAMs currently deliver a transaction rate of 0.533 BT/s and LLDRAMs with faster transaction rates are under development. Our fastest SRAMs deliver over 102 Gb/s of raw data bandwidth per device, and our LLDRAMs deliver 38 Gb/s per device. Our SRAM products can produce data at latencies of less than 4 nanoseconds while LLDRAM latencies are as short as 15 ns. By providing higher performance networking memory, we enable our networking and telecommunications customers to continually design and develop higher performance products that support increasingly complex traffic content.

Low Power Consumption. Many of our products require significantly less power than comparable products offered by our principal competitors. Because these products utilize less power and generate less heat, the reliability of the networking or telecommunications equipment in which they are employed increases. Furthermore, the low power utilization of our products helps enable OEMs to add capabilities to their systems, which otherwise might not have been possible due to overall system power constraints.

Process Technology Leadership. We maintain our own process engineering capability and resources, which are located in close physical proximity to our SRAM wafer manufacturing partner, Taiwan Semiconductor Manufacturing Company, or "TSMC." This enhances our ability to work closely with TSMC to develop modifications of the advanced process technologies used in the manufacturing of our Very Fast SRAMs in order to maximize product performance, optimize yields, lower manufacturing costs and improve quality. Our most advanced 72 and 144 megabit, or Mb, synchronous Very Fast SRAMs are manufactured using 65 nanometer process technology. Our initial LLDRAMs are produced using 72 nanometer DRAM process technology at Powerchip Technology Corporation, or "Powerchip." in Taiwan. We are currently developing 144 megabit and 288 megabit synchronous Very Fast SRAMs using 40 nanometer process technology, which will allow us to further increase product performance, lower power consumption and reduce costs.

Product Innovation. We believe that we have established a position as a technology leader in the design and development of Very Fast SRAMs. We were the first supplier to introduce 72-bit-wide SRAMs as single monolithic ICs. During fiscal 2010, we further solidified our position as a technology leader by being the first vendor to ship 144 megabit monolithic SRAMs to customers and the first vendor to ship Type-IIIe SigmaQuad™ and SigmaDDR™ SRAMs, the fastest SRAMs ever to reach the open market. In addition, we are the only vendor to offer a full line of Very Fast Synchronous SRAMs that operate and interface at 1.8 to 3.3 volts, giving our OEM customers the ability to use the same product in systems of theirs that operate at any voltage within that range. Moreover, for certain Very Fast Synchronous SRAMs, we are the only vendor to offer a product that operates at 1.8 volts, which uses approximately one half to two-thirds the power of our competitors' 2.5 volt products. We intend to apply the same approaches we used to take the lead in SRAM-based networking memory to the continued development of our line of DRAM-based networking memory products.

Broad and Readily Available Product Portfolio

Extensive Product Catalog. The Very Fast SRAM market is highly fragmented in terms of product features and specifications. This is especially true of the networking segment of the fast SRAM market and is becoming true of the LLDRAM segment as well. To meet our OEM customers' diverse needs, we have what we believe is the broadest catalog of

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Very Fast SRAM products currently available, and our LLDRAM product line further expands our position in the networking market. Our product line includes a wide range of products with varying densities, features, clock speeds, and voltages, as well as several operating temperature ranges and numerous package options in both 5/6 (leaded) and 6/6 (lead-free) versions, which are compliant with the European Union's Restriction on the Use of Hazardous Substances Directive 2002/95/EC.

Advanced Feature Sets. Our products offer features that address a broad range of our networking and telecommunications OEMs' system requirements. Among these features is a JTAG test port, named for the IEEE Joint Test Action Group, which enables post-assembly verification of the connection between our product and an OEM customer's system board, thereby allowing an OEM customer of ours to develop, test and ship their products more rapidly. Additionally, we offer our FLXDrive™ feature, which allows system designers to optimize the signal integrity for any given requirement. We also provide OEMs the ability to employ certain of our products in various modes of operation by using our products' mode control pins, thus increasing the flexibility of those products and their ready availability from our inventory.

Superior Lifetime Availability of Products. Unlike the market for consumer electronics, the markets in which we compete, particularly the networking and telecommunications markets, generally are characterized by system designs that remain in production for extended periods of time, and maintenance of those systems in the field for even longer periods is critical to their success. Our foundry-based manufacturing strategy, our process technology selections, our master-die design strategy and the design of our packaging, burn-in and test work-flows all contribute to allow us to meet and exceed our guarantee of providing a product life of at least seven years for any new product family we bring to market. These techniques also allow us to keep our delivery lead-times relatively short even for specialized, infrequently ordered members of those product families. We believe our approach is better suited to address the needs of our target markets than attempts to apply mass market manufacturing strategies to networking memory products.

Multiple Temperature Grades. We offer both commercial and industrial temperature grades for all of our products. This ability to perform at specification throughout the industrial temperature range of -40°C to +85°C is critical for memory products used in a broad variety of networking and telecommunications applications, where the operating environments may be harsh. We now also offer a portfolio of off-the-shelf military temperature SRAM products and can also offer military customers additional and extended temperature grades upon request.

Master Die Methodology

Our master die methodology enables multiple product families, and variations thereof, to be manufactured from a single mask set. As a result, based upon the way available die from a wafer are metalized, wire bonded, packaged and tested, from 25 mask sets we have created over 15,000 different products. Using these mask sets, we produce wafers that can be further processed upon customer orders into the final specified product thereby significantly shortening the overall manufacturing time. For example, from a 72 megabit mask set, we can produce three families of 72 megabit SRAM products. Our unique methodology results in the following benefits:

Rapid Order Fulfillment. We maintain a common pool of wafers that incorporate all available master die. Because we can typically create several different products from a single master die, we can respond to unforecasted customer orders more quickly than our competitors.

Reduced Cost. Our master die methodology allows us to reduce our costs through the purchase of fewer mask sets by allowing faster and less expensive internal product qualifications, by enabling more cost-efficient use of engineering resources and by reducing the incidence of obsolete inventory.

Customer Responsiveness

Customer-driven Solutions. We work closely with leading networking and telecommunications OEMs, as well as their chip-set suppliers, to better anticipate their requirements and to rapidly develop and implement solutions that allow them to meet their specific product performance objectives. Customer demand drives our business. For example, to address near term needs, we offer critical specification variations, such as special operating ranges or wire bond options on currently available products, while we also design new families of products to meet their emerging long term needs. As a consequence, our portfolio not only includes the widest selection of catalog parts available, it also includes an extensive list of custom, customer-specific products. This degree of responsiveness enables us to provide our OEM customers with the exact products required for their applications.

Accelerated Time-to-market. Our extensive open libraries of design support tools as well as our ability to deliver the specific device required for system prototyping with very short notice enables networking and telecommunication OEMs to

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design and introduce differentiated products quickly as well as to reduce their development costs. Our open model libraries give designers access 24 hours a day, seven days a week to electrical and behavioral simulation models. Behavioral models are offered in both Verilog and very high speed integrated circuits hardware description language ("VHDL") format to better fit different customers' simulation environments, further streamlining the customers' development process.

Quality and Reliability. Networking and telecommunications equipment typically have long product lives, and the cost to repair or replace this equipment due to product failure at any time is prohibitively expensive. The high-quality and reliability of memory products incorporated in our OEM customers' products is, thus, critical. Every product family we offer is subjected to extensive long term reliability testing before receiving qualification certification, and every device shipped is first subjected to burn-in and then to final tests in which the device is operated beyond its specified operating voltage and temperature ranges.

The GSI Strategy

Our objective is to profitably increase our market share in the high performance memory market. Our strategy includes the following key elements:

Continue to Focus on the Networking and Telecommunications Markets. We intend to continue to focus on designing and developing high transaction rate, low latency, high bandwidth and feature-rich memory products targeted primarily at the networking and telecommunications markets. Increasing network complexity due to higher traffic volume and more advanced traffic content continues to drive OEMs' demand for high-performance networking memory. We believe our active high-performance memory product development and manufacturing expertise will continue to allow us to provide networking and telecommunications OEMs with the early access to next generation Very Fast SRAMs and Low Latency DRAMS that offer superior performance, advanced feature sets and continued high reliability, which they need to allow them to design and develop new products that support increasingly complex traffic content and to bring networking and telecommunications equipment to market quickly.

Strengthen and Expand Customer Relationships. We are focused on maintaining close relationships with industry leaders to facilitate rapid adoption of our products and to enhance our position as a leading provider of high-performance memory. We work with both our customers and with their non-memory IC suppliers that require high-performance memory support. We will continue to work with both groups at the pre-design and design stage of their projects in order to anticipate their future high-performance memory needs and to identify and respond to their immediate requests for currently available products and variants on currently available products. We plan to enhance our relationships with these leading OEMs and IC vendors and to develop similar relationships with additional OEMs and IC vendors.

Continue to Invest in Research and Development to Extend Our Technology Leadership. We believe we have established a position as a technology leader in the design and development of Very Fast SRAMs. Our Very Fast SRAM products most often provide the highest speed available at a given density for a given device configuration. We intend to maintain and advance our technology leadership through continual enhancement of our existing Very Fast SRAM products, particularly our SigmaQuad/SigmaDDR family of low latency, high-bandwidth synchronous SRAMs, while we continue to broaden our product line with the introduction of other new high performance memory technologies targeted to address the evolving needs of the high performance memory market.

Collaborate with Wafer Foundries to Leverage Leading-edge Process Technologies. We will continue to rely upon advanced complementary metal oxide semiconductor, or CMOS, technologies, the most commonly used process technologies for manufacturing semiconductor devices, from TSMC for SRAM-based products and from Powerchip for DRAM-based products. We provide our technology partners with the sort of in-depth feedback for yield and performance improvement that can best come from very large array structures like those found in our products. Our most advanced products currently in production were designed using 65 nanometer process technology on 300 millimeter wafers. We intend to continue to collaborate closely with TSMC in the refinement of 40 nanometer process technology.

Exploit New Market Opportunities. While we design our Very Fast SRAMs and LLDRAMs specifically for the networking and telecommunications markets, our products are often applicable across a wide range of industries and applications. We have recently experienced growth in both the defense and medical markets and intend to continue

penetrating these and other new markets with similar needs for high-performance memory technologies.

Products

We design, develop and market a broad range of high-performance memory products primarily for the networking and telecommunications markets. We specialize in high performance memory products featuring very high transaction rates, high

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density, low latency, high bandwidth, fast clock access times and low power consumption. We continue to offer products for longer periods of time than our competitors, typically seven years or more following their initial introduction. Accordingly, we continue to offer products in a variety of package types that have been discontinued by other suppliers.

We currently offer more than 30 families of SRAMs and two families of LLDRAMs. These basic product configurations are the basis for over 15,000 individual products that incorporate a variety of performance specifications and optional features. Our products can be found in a wide range of networking and telecommunications equipment, including multi-service access routers, universal gateways, enterprise edge routers, service provider edge routers, optical edge routers, fast Ethernet switches, multi-gigabit Ethernet switches, wireless base stations, Asymmetric Digital Subscriber Line ("ADSL") modems, wireless local area networks, Internet Protocol phones and OC192 layer 2 switches. We also sell our products to OEMs that manufacture products for defense applications such as radar and guidance systems, for professional audio applications such as sound mixing systems, for test and measurement applications such as high-speed testers, for automotive applications such as smart cruise control and voice recognition systems, and for medical applications such as ultrasound and CAT scan equipment.

Synchronous SRAM Products

Synchronous SRAMs are controlled by timing signals, referred to as clocks, which make them easier to use than older style asynchronous SRAMs with similar latency characteristics in applications requiring high bandwidth data transfers. Synchronous SRAMs that employ double data rate interface protocols can transfer data at much higher bandwidth than both single data rate and asynchronous SRAMs. Our single data rate synchronous SRAMs feature clock access times as short as 2 nanoseconds and our double data rate synchronous SRAMs have clock access times as fast as 0.45 nanoseconds. We currently supply synchronous SRAMs that can cycle at operating frequencies as high as 714 MHz.

BurstRAM™ and NBT™ SRAMs. We currently offer BurstRAMs and No Bus Turnaround, or NBT, SRAMs that implement a single data rate bus protocol. BurstRAMs were originally developed for microprocessor cache applications and have become the most widely used synchronous SRAMs on the market. They are used in applications where large amounts of data are read or written in single sessions, or bursts. NBT SRAMs are a variation on the BurstRAM theme that were developed to address the needs of moderate performance networking applications. NBT SRAMs feature a single data rate bus protocol designed to minimize or eliminate wasted data transfer time slots on the bus when BurstRAMs switch from read to write operations. Both families of products can perform burst data transfers or single cycle transfers at the discretion of the user.

Our BurstRAMs and NBT SRAMs are offered in both pipeline and flow-through modes. Flow-through SRAMs allow the shortest latency. Pipelined SRAMs break the access into discrete clock-controlled steps, allowing new access commands to be accepted while an access is already in progress. Therefore, while flow-through SRAMs offer lower latency, pipelined SRAMs offer greater data bandwidth. Our BurstRAM and NBT SRAM products incorporate a number of features that reduce our OEM customers' cost of ownership and increase their design flexibility, including a JTAG test port and our FLXDrive feature, which allows system designers to optimize signal integrity for a given application.

We currently offer BurstRAMs and NBT SRAMs with storage densities of up to 144 megabits with clock frequency of up to 333 MHz and clock access times as fast as 2 nanoseconds that operate at 3.3, 2.5 or 1.8 volts.

SigmaQuad and SigmaDDR Products. High-performance double data rate and quad data rate synchronous SRAMs have become the de facto standard for the networking and telecommunications industry. We offer a full line of quad data rate SRAMs, our SigmaQuad family as well as double data rate common I/O versions of the same products, our SigmaDDR family SRAMs. SigmaQuad SRAMs are separate input/output, or I/O, synchronous SRAMs that features two uni-directional (one input and one output) double data rate data ports (two data ports times double data rate transfers equals quad data rate), controlled via a single address and control port. We offer our SigmaQuad devices in two different bus protocol versions, two different power supply and interface voltage versions, with two different data burst length options, all under the name SigmaQuad or SigmaQuad-II. The common I/O (a single bi-directional data port) double data rate SRAMs in the same family of products are known as SigmaDDR SRAMs. There is also an additional variant in the family that is designed to address some segments of the market

currently served by dual-port SRAMs. These are known as SigmaSIO DDR SRAMs.

We currently offer SigmaQuad/SigmaDDR products in four storage densities, 18 megabits, 36 megabits, 72 megabits and a market leading 144 megabits, with clock frequency rates up to 675 MHz and clock access times as fast as 0.15 nanoseconds. These operate on main power supply voltages from 2.5 volts to 1.35 volts and interface at voltages that range from 1.5 volts to 1.2 volts.

SigmaRAM™ Products. We offer a family of high-performance, low voltage, synchronous SigmaRAM™ SRAM products designed for use in networking and telecommunications systems. Our SigmaRAM products include the full range of

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common I/O SRAM functionality, including late write and double late write protocols, pipelined read cycles, burst data transfers and double data rate read and write data transfers. We currently offer SigmaRAM products with storage density of 18 megabits, speeds of up to 350 MHz and clock access times as fast as 1.7 nanoseconds that operate at 1.8 volts.

Asynchronous SRAM Products

Unlike synchronous SRAMs, asynchronous SRAMs employ a clock-free control interface. They are widely used in support of high-end digital signal processors, or DSPs. We believe we have one of the broadest portfolios of 3.3 volt, high-speed asynchronous SRAMs. These products are designed to meet the stringent power and performance requirements of networking and telecommunications applications, such as VoIP, cellular base stations, DSL line cards and modems.

We currently offer asynchronous SRAM products with a variety of storage densities between 1 megabit and 8 megabits and random access times ranging from 7 nanoseconds to 15 nanoseconds. All of our asynchronous SRAMs operate at 3.3 volts.

We intend to regularly introduce new products with high-performance advanced features of increasing complexity. These product solutions will require us to achieve volume production in a rapid timeframe. We believe that by using the advanced technologies offered by our fabrication partner and its expertise in high-volume manufacturing, we can rapidly achieve volume production. However, lead times for materials and components we order vary significantly and depend on such factors as the specific supplier, contract terms and demand for a component at a given time.

Low Latency DRAM Products

Our low latency DRAM family fills an under-served market segment between commodity DRAMs and Fast SRAMs. Offering moderate density, moderate speed and moderate cost, LLDRAM technology gives system designers a middle choice when DRAMs are not good enough but Fast SRAMs are not necessary. LLDRAMs offer one-third the latency of commodity DRAMs and four times the density of Fast SRAMs, giving networking equipment designers another tool for solving difficult data management problems.

Our current LLDRAM portfolio includes both 288 Megabit and 576 Megabit devices that operate on a 1.8 volt power supply and support both 1.8 volt and 1.5 volt interfaces. Each family includes five distinct configurations including common I/O and separate I/O types and data bus widths of x36, x18 and x9. These devices serve as an alternate source for users of a popular, functionally equivalent device from a competing vendor.

Customers

Our primary sales and marketing strategy is to achieve design wins with OEM customers who are leading networking and telecommunications companies. The following is a representative list of our OEM customers that directly or indirectly purchased more than $600,000 of our products in the fiscal year ended March 31, 2012:

Alcatel-Lucent	Ciena	Cisco Systems
Ericsson	Huawei Technologies	Motorola
Tellabs	ZTE	

Many of our OEM customers use contract manufacturers to assemble their equipment. Accordingly, a significant percentage of our net revenues is derived from sales to these contract manufacturers and to consignment warehouses who purchase products from us for use by contract manufacturers. In addition, we sell our products to networking and telecommunications OEM customers indirectly through domestic and international distributors.

In the case of sales of our products to distributors and consignment warehouses, the decision to purchase our products is typically made by the OEM customers. In the case of contract manufacturers, OEM customers typically provide a list of approved products to the contract manufacturer, which then has discretion whether or not to purchase our products from that list.

Direct sales to contract manufacturers and consignment warehouses accounted for 45.1%, 39.5% and 39.2% of our net revenues for fiscal 2012, 2011 and 2010, respectively. Sales to foreign and domestic distributors accounted for 45.7%, 48.9% and 50.2% of our net revenues for fiscal 2012, 2011 and 2010, respectively.

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The following direct customers accounted for 10% or more of our net revenues in one or more of the following periods:

	Fiscal Year Ended March 31,		
	2012	2011	2010
Consignment warehouses:			
SMART Modular Technologies	11.4 %	5.8 %	20.8 %
Jabil Circuit	20.0	18.6	10.4
Flextronics	9.3	11.7	4.7
Distributors:			
Avnet Logistics	20.1	17.0	21.7
Nexcomm	11.2	10.8	9.6

Cisco Systems, our largest OEM customer, purchases our products primarily through its consignment warehouses, SMART Modular Technologies, Jabil Circuit and Flextronics Technology, and also purchases some products through its contract manufacturers and directly from us. Based on information provided to us by Cisco Systems' consignment warehouses and contract manufacturers, purchases by Cisco Systems represented approximately 41%, 37% and 35% of our net revenues in fiscal 2012, 2011 and 2010, respectively. To our knowledge, none of our other OEM customers accounted for more that 10% of our net revenues in any of these periods.

Sales, Marketing and Technical Support

We sell our products primarily through our worldwide network of independent sales representatives and distributors. As of March 31, 2012, we employed 19 sales and marketing personnel, and were supported by over 200 independent sales representatives. We believe that our relationship with our U.S. distributor, Avnet, puts us in a strong position to address the Very Fast SRAM and LLDRAM memory markets in the U.S. We currently have regional sales offices located in Canada, China, Italy and the United States. We believe this international coverage allows us to better serve our distributors and OEM customers by providing them with coordinated support. We believe that our customers' purchasing decisions are based primarily on product performance, availability, features, quality, reliability, price, manufacturing flexibility and service. Many of our OEM customers have had long-term relationships with us based on our success in meeting these criteria.

Our sales are generally made pursuant to purchase orders received between one and six months prior to the scheduled delivery date. Because industry practice allows customers to reschedule or cancel orders on relatively short notice, these orders are not firm and hence we believe that backlog is not a good indicator of our future sales. We typically provide a warranty of up to 36 months on our products. Liability for a stated warranty period is usually limited to replacement of defective products.

Our marketing efforts are focused on increasing brand name awareness and providing solutions that address our customers' needs. Key components of our marketing efforts include maintaining an active role in industry standards committees, such as the JEDEC Solid State Technology Association (formerly the Joint Electron Device Engineering Council), or JEDEC, which is responsible for establishing detailed specifications that can be utilized in future system designs. We believe that our participation in and sponsorship of numerous proposals within these committees have increased our profile among leading manufacturers in the networking and telecommunications segment of the Very Fast SRAM market. Our marketing group also provides technical, strategic and tactical sales support to our direct sales personnel, sales representatives and distributors. This support includes in-depth product presentations, datasheets, application notes, simulation models, sales tools, marketing communications, marketing research, trademark administration and other support functions.

We emphasize customer service and technical support in an effort to provide our OEM customers with the knowledge and resources necessary to successfully use our products in their designs. Our customer service organization includes a technical team of applications engineers, technical marketing personnel and, when required, product design engineers. We provide customer support throughout the qualification and sales process and continue providing follow-up service after the sale of our products and on an ongoing basis. In addition, we provide our OEM customers with comprehensive datasheets, application notes and reference designs.

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Manufacturing

We outsource our wafer fabrication, assembly and wafer sort testing, which enables us to focus on our design strengths, minimize fixed costs and capital expenditures and gain access to advanced manufacturing technologies. Our engineers work closely with our outsource partners to increase yields, reduce manufacturing costs, and help assure the quality of our products.

Currently, all of our wafers are manufactured by TSMC and Powerchip under individually negotiated purchase orders. We do not currently have a long-term supply contract with either of these foundries, and, therefore, neither of them is obligated to manufacture products for us for any specified period, in any specified quantity or at any specified price, except as may be provided in a particular purchase order. Our future success depends in part on our ability to secure sufficient capacity at TSMC, Powerchip or other independent foundries to supply us with the wafers we require.

Our newest, leading edge SRAM products are manufactured using 65 nanometer process technology at TSMC. The majority of our current SRAM products are manufactured using 0.13 micron and 90 nanometer process technologies on 300 millimeter wafers at TSMC. Our LLDRAM production at Powerchip uses 72 nanometer technology. We currently have seven separate product families in production. On-going development programs are underway to extend, expand and/or cost reduce most our product families, including two programs targeting 40 nanometer SRAM products and a project to extend the reach of our LLDRAM product line using a more aggressive DRAM process technology.

Our master die methodology enables multiple product families, and variations thereof, to be manufactured from a single mask set. As a result, based upon the way available die from a wafer are metalized, wire bonded, packaged and tested, we can create a number of different products. The manufacturing process consists of two phases, the first of which takes approximately eight to twelve weeks and results in wafers that have the potential to yield multiple products within a given product family. After the completion of this phase, the wafers are stored pending customer orders. Once we receive orders for a particular product, we perform the second phase, consisting of final wafer processing, assembly, burn-in and test, which takes approximately six to ten weeks to complete. This two-step manufacturing process enables us to significantly shorten our product lead times, providing flexibility for customization and to increase the availability of our products.

All of our manufactured wafers are tested for electrical compliance and most are packaged at Advanced Semiconductor Engineering, or ASE, which is located in Taiwan. Our test procedures require that all of our products be subjected to accelerated burn-in and extensive functional electrical testing which is performed in our Taiwan and U.S. test facilities.

Research and Development

The design process for our products is complex. As a result, we have made substantial investments in computer-aided design and engineering resources to manage our design process. Research and development expenses were $10.6 million in fiscal 2012, $10.6 million in fiscal 2011 and $9.1 million in fiscal 2010. Our research and development staff includes engineering professionals with extensive experience in the areas of SRAM design, DRAM design and systems level networking and telecommunications equipment design. Our current development focus is on the SigmaQuad SRAM family and our family of LLDRAM products.

We are also leveraging our advanced design capabilities to expand into other networking and telecommunications products, including a channelized OC-3 processor that incorporates over 90 embedded SRAM modules. When completed, this single chip solution will be capable of simultaneously processing multiple types of traffic at OC-3 bandwidth and, we believe, will offer power, chip count and cost advantages compared to traditional network processor solutions. We have established a design center in Norcross, Georgia to focus on the development of these products.

Competition

Our existing competitors include many large domestic and international companies, some of which have substantially greater resources, offer other types of memory and/or non-memory technologies and may have longer standing relationships with OEM customers than we do. Unlike us, some of our principal competitors maintain their own semiconductor fabs, which may, at times, provide them with capacity, cost and technical advantages.

Our principal competitors include Cypress Semiconductor, Integrated Device Technology, Integrated Silicon Solution, REC and Samsung Electronics. While some of our competitors offer a broad array of memory products and offer some of their products at lower prices than we do, we believe that our focus on and performance leadership in low latency, high density Very Fast SRAMs provide us with key competitive advantages.

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We believe that our ability to compete successfully in the rapidly evolving markets for memory products for the networking and telecommunications markets depends on a number of factors, including:

- product performance, features, quality, reliability and price;
- manufacturing flexibility, product availability and customer service throughout the lifetime of the product;
- the timing and success of new product introductions by us, our customers and our competitors; and
- our ability to anticipate and conform to new industry standards.

We believe we compete favorably with our competitors based on these factors. However, we may not be able to compete successfully in the future with respect to any of these factors. Our failure to compete successfully in these or other areas could harm our business.

The market for networking memory products is competitive and is characterized by technological change, declining average selling prices and product obsolescence. Competition could increase in the future from existing competitors and from other companies that may enter our existing or future markets with solutions that may be less costly or provide higher performance or more desirable features than our products. This increased competition may result in price reductions, reduced profit margins and loss of market share.

In addition, we are vulnerable to advances in technology by competitors, including new SRAM architectures as well as new forms of DRAM and other new memory technologies. Because we have limited experience developing IC products other than Very Fast SRAMs and LLDRAMs, any efforts by us to introduce new products based on a new memory technology may not be successful and, as a result, our business may suffer.

Intellectual Property

Our ability to compete successfully depends, in part, upon our ability to protect our proprietary technology and information. We rely on a combination of patents, copyrights, trademarks, trade secret laws, non-disclosure and other contractual arrangements and technical measures to protect our intellectual property. We currently hold eleven United States patents and have several patent applications pending. We do not consider our existing patents to be materially important to our business, and we cannot assure you that any patents will be issued as a result of our pending applications or that any patents issued will be valuable to our business. We believe that factors such as the technological and creative skills of our personnel and the success of our ongoing product development efforts are more important than our patent portfolio in maintaining our competitive position. We generally enter into confidentiality or license agreements with our employees, distributors, customers and potential customers and limit access to our proprietary information. Our intellectual property rights, if challenged, may not be upheld as valid, may not be adequate to prevent misappropriation of our technology or may not prevent the development of competitive products. Additionally, we may not be able to obtain patents or other intellectual property protection in the future. Furthermore, the laws of certain foreign countries in which our products are or may be developed, manufactured or sold, including various countries in Asia, may not protect our products or intellectual property rights to the same extent as do the laws of the United States and thus make the possibility of piracy of our technology and products more likely in these countries.

The semiconductor industry is characterized by vigorous protection and pursuit of intellectual property rights, which have resulted in significant and often protracted and expensive litigation. We or our foundry from time to time are notified of claims that we may be infringing patents or other intellectual property rights owned by third parties. We are currently involved in patent infringement litigation. See Item 3. Legal Proceedings. We have been subject to other intellectual property claims in the past and we may be subject to additional claims and litigation in the future. Litigation by or against us relating to allegations of patent infringement or other intellectual property matters could result in significant expense to us and divert the efforts of our technical and management personnel, whether or not such litigation results in a determination favorable to us. In the event of an adverse result in any such litigation, we could be required to pay substantial damages, cease the manufacture, use and sale of infringing products, expend significant resources to develop non-infringing technology, discontinue the use of certain processes or obtain licenses to the infringing technology. Licenses may not be offered or the terms of any offered licenses may not be acceptable to us. If we fail to obtain a license from a third party for technology used by us, we could incur substantial liabilities and be required to suspend the manufacture of products or the use by our foundry of certain processes.

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Employees

As of March 31, 2012, we had 137 full-time employees, including 74 engineers, of which 41 are engaged in research and development and 40 have PhD or MS degrees, 19 employees in sales and marketing, ten employees in general and administrative capacities and 66 employees in manufacturing. Of these employees, 57 are based in our Sunnyvale facility and 57 are based in our Taiwan facility. We believe that our future success will depend in large part on our ability to attract and retain highly-skilled, engineering, managerial, sales and marketing personnel. Our employees are not represented by any collective bargaining unit, and we have never experienced a work stoppage. We believe that our employee relations are good.

Investor Information

You can access financial and other information in the Investor Relations section of our website at www.gsitechnology.com. We make available, on our website, free of charge, copies of our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after filing such material electronically or otherwise furnishing it to the SEC.

The charters of our Audit Committee, our Compensation Committee, and our Nominating and Governance Committee, and our code of conduct (including code of ethics provisions that apply to our principal executive officer, principal financial officer, controller, and senior financial officers) are also available at our website under "Corporate Governance." These items are also available to any stockholder who requests them by calling (408) 331-8800. The contents of our website are not incorporated by reference in this report.

The SEC maintains an Internet site that contains reports, proxy statements and other information regarding issuers that file electronically with the SEC at www.sec.gov.

Executive Officers

The following table sets forth certain information concerning our executive officers as of June 1, 2011:

Name	Age	Title
Lee-Lean Shu	57	President, Chief Executive Officer and Chairman
David Chapman	56	Vice President, Marketing
Didier Lasserre	47	Vice President, Sales
Douglas Schirle	57	Chief Financial Officer
Bor-Tay Wu	60	Vice President, Taiwan Operations
Ping Wu	55	Vice President, U.S. Operations
Robert Yau	59	Vice President, Engineering, Secretary and Director

Lee-Lean Shu co-founded our company in March 1995 and has served as our President and Chief Executive Officer and as a member of our Board of Directors since inception. In October 2000, Mr. Shu became Chairman of our Board. From January 1995 to March 1995, Mr. Shu was Director, SRAM Design at Sony Microelectronics Corporation, a semiconductor company and a subsidiary of Sony Corporation, and from July 1990 to January 1995, he was a design manager at Sony Microelectronics Corporation.

David Chapman has served as our Vice President, Marketing since July 2002. From November 1998 to June 2002, Mr. Chapman served as our Director of Strategic Marketing and Applications Engineering. From February 1988 to November 1998, Mr. Chapman served in various product planning and applications engineering management capacities in the Memory Operation division and later the Fast SRAM division of Motorola Semiconductor Product Sector, Motorola, Inc., an electronics manufacturer. Mr. Chapman has been a member of JEDEC since 1985, and served as Chairman of its SRAM committee in 1999.

Didier Lasserre has served as our Vice President, Sales since July 2002. From November 1997 to July 2002, Mr. Lasserre served as our Director of Sales for the Western United States and Europe. From July 1996 to October 1997, Mr. Lasserre was an account manager at Solectron Corporation, a provider of electronics manufacturing services. From June 1988 to July 1996, Mr. Lasserre was a field sales engineer at Cypress Semiconductor, a semiconductor company.

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Douglas Schirle has served as our Chief Financial Officer since August 2000. From June 1999 to August 2000, Mr. Schirle served as our Corporate Controller. From March 1997 to June 1999, Mr. Schirle was the Corporate Controller at Pericom Semiconductor Corporation, a provider of digital and mixed signal integrated circuits. From November 1996 to February 1997, Mr. Schirle was Vice President, Finance for Paradigm Technology, a manufacturer of SRAMs, and from December 1993 to October 1996, he was the Controller for Paradigm Technology. Mr. Schirle was formerly a certified public accountant.

Bor-Tay Wu has served as our Vice President, Taiwan Operations since January 1997. From January 1995 to December 1996, Mr. Wu was a design manager at Atalent, an IC design company in Taiwan.

Ping Wu has served as our Vice President, U.S. Operations since September 2006. He served in the same capacity from February 2004 to April 2006. From April 2006 to August 2006, Mr. Wu was Vice President of Operations at QPixel Technology, a semiconductor company. From July 1999 to January 2004, Mr. Wu served as our Director of Operations. From July 1997 to June 1999, Mr. Wu served as Vice President of Operations at Scan Vision, a semiconductor manufacturer.

Robert Yau co-founded our company in March 1995 and has served as our Vice President, Engineering and as a member of our Board of Directors since inception. From December 1993 to February 1995, Mr. Yau was design manager for specialty memory devices at Sony Microelectronics Corporation. From 1990 to 1993, Mr. Yau was design manager at MOSEL/VITELIC, a semiconductor company.

Item 1A. Risk Factors

Our future performance is subject to a variety of risks. If any of the following risks actually occur, our business, financial condition and results of operations could suffer and the trading price of our common stock could decline. Additional risks that we currently do not know about or that we currently believe to be immaterial may also impair our business operations. You should also refer to other information contained in this report, including our consolidated financial statements and related notes.

Unpredictable fluctuations in our operating results could cause our stock price to decline.

Our quarterly and annual revenues, expenses and operating results have varied significantly and are likely to vary in the future. For example, in the twelve fiscal quarters ended March 31, 2012, we recorded net revenues of as much as $26.7 million and as little as $14.2 million and quarterly operating income of as much as $6.7 million and, in one quarter, an operating loss of $83,000. We therefore believe that period-to-period comparisons of our operating results are not a good indication of our future performance, and you should not rely on them to predict our future performance or the future performance of our stock price. In future periods, we may not have any revenue growth, or our revenues could decline. Furthermore, if our operating expenses exceed our expectations, our financial performance could be adversely affected. Factors that may affect periodic operating results in the future include:

- our ability to anticipate and conform to new industry standards.
- unpredictability of the timing and size of customer orders, since most of our customers purchase our products on a purchase order basis rather than pursuant to a long term contract;
- changes in our customers' inventory management practices;
- fluctuations in availability and costs associated with materials needed to satisfy customer requirements;
- manufacturing defects, which could cause us to incur significant warranty, support and repair costs, lose potential sales, harm our relationships with customers and result in write-downs;
- changes in our product pricing policies, including those made in response to new product announcements and pricing changes of our competitors; and
- our ability to address technology issues as they arise, improve our products' functionality and expand our product offerings.

Our expenses are, to a large extent, fixed, and we expect that these expenses will increase in the future. We will not be able to adjust our spending quickly if our revenues fall short of our expectations. If this were to occur, our operating results would be harmed. If our operating results in future quarters fall below the expectations of market analysts and investors, the

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price of our common stock could fall.

Cisco Systems, our largest OEM customer, accounts for a significant percentage of our net revenues. If Cisco Systems, or any of our other major customers reduce the amount they purchase or stop purchasing our products, our operating results will suffer.

Cisco Systems, our largest OEM customer, purchases our products through SMART Modular Technologies, Jabil Circuit and Flextronics Technology, its consignment warehouses, through its contract manufacturers and directly from us. Based on information provided to us by its consignment warehouses and contract manufacturers, purchases by Cisco Systems represented approximately 41%, 37% and 35% of our net revenues in fiscal 2012, 2011 and 2010, respectively. We expect that our operating results in any given period will continue to depend significantly on orders from our key OEM customers, particularly Cisco Systems, and our future success is dependent to a large degree on the business success of these OEMs over which we have no control. We do not have long-term contracts with Cisco Systems or any of our other major OEM customers, distributors or contract manufacturers that obligate them to purchase our products. We expect that future direct and indirect sales to Cisco Systems will continue to fluctuate significantly on a quarterly basis and that such fluctuations may significantly affect our operating results in future periods. If we fail to continue to sell to our key OEM customers, distributors or contract manufacturers in sufficient quantities, our business could be harmed.

We have incurred significant losses in prior periods and may incur losses in the future.

We have incurred significant losses in prior periods. For example, in fiscal 2003 and 2004, we incurred losses of $7.4 million and $670,000, respectively. Although we have operated profitably during the last eight fiscal years, there can be no assurance that our Very Fast SRAMs will continue to receive broad market acceptance or that we will be able to sustain revenue growth or profitability. Our failure to do so may result in additional losses in the future. In addition, we expect our operating expenses to increase as we expand our business. If our revenues do not grow to offset these expected increased expenses, our business will suffer.

We depend upon the sale of our Very Fast SRAMs for most of our revenues, and a downturn in demand for these products could significantly reduce our revenues and harm our business.

We derive most of our revenues from the sale of Very Fast SRAMs, and we expect that sales of these products will represent the substantial majority of our revenues for the foreseeable future. Our business depends in large part upon continued demand for our products in the markets we currently serve, and adoption of our products in new markets. Market adoption will be dependent upon our ability to increase customer awareness of the benefits of our products and to prove their high-performance and cost-effectiveness. We may not be able to sustain or increase our revenues from sales of our products, particularly if the networking and telecommunications markets were to experience another significant downturn in the future. Any decrease in revenues from sales of our products could harm our business more than it would if we offered a more diversified line of products.

We are subject to the highly cyclical nature of the networking and telecommunications markets.

Our products are incorporated into routers, switches, wireless local area network infrastructure equipment, wireless base stations and network access equipment used in the highly cyclical networking and telecommunications markets. Our operating results declined sharply in fiscal 2002 and 2003 as a result of the severe contraction in demand for networking and telecommunications equipment in which our products are incorporated. Prior to this period of contraction, the networking and telecommunications markets experienced a period of rapid growth, which resulted in a significant increase in demand for our products. We expect that the networking and telecommunications markets will continue to be highly cyclical, characterized by periods of rapid growth and contraction. Our business and our operating results are likely to fluctuate, perhaps quite severely, as a result of this cyclicality.

We are subject to pending patent infringement litigation.

In March 2011, Cypress Semiconductor Corporation, a semiconductor manufacturer, filed a lawsuit against us alleging that our products, including our Sigma DDR and Sigma Quad families of Fast SRAMs, infringe five patents held by Cypress. The complaint seeks unspecified damages for past infringement and a permanent injunction against future infringement. On June 10, 2011, Cypress filed a complaint against GSI with the ITC. The ITC complaint, as subsequently amended, alleges infringement by GSI of three of the five patents involved in the District Court case and one additional patent and also alleges infringement by three of our distributors and 11 of our customers who allegedly

incorporate our SRAMs in their products. The ITC complaint seeks a limited exclusion order excluding the allegedly infringing SRAMs, and products containing them, from

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entry into the United States and permanent orders directing GSI and the other respondents to cease and desist from selling or distributing such products in the United States. On July 21, 2011, the ITC formally instituted an investigation in response to Cypress's complaint. The evidentiary hearing took place during the week of March 12, 2012, and the initial determination of the administrative law judge will be issued on or before July 28, 2012. The District Court case has been stayed pending the conclusion of the ITC proceeding. We believe that we have strong defenses against Cypress's patent infringement claims and we intend to continue to defend ourselves vigorously in both proceedings. However, the litigation process is inherently uncertain, and we may not prevail. Patent litigation is particularly complex and can extend for a protracted period of time, which can substantially increase the cost of such litigation. We have incurred and expect to continue to incur substantial legal fees and expenses in connection with this litigation, and related antitrust litigation that we have commenced against Cypress, and we also expect the litigation to continue to divert the efforts and attention of some of our key management and technical personnel. As a result, the litigation, regardless of its eventual outcome, will be costly and time consuming. In addition, uncertainty regarding the outcome of the litigation may cause some of our customers and potential customers to reduce their purchases of our products and/or seek alternative or second sources of supply, which could adversely affect our revenues. Should the outcome of the ITC proceeding be adverse to us, we and the other respondents could be prohibited from selling or distributing those of our products found to be infringing Cypress's patents, or end products containing them, in the United States, unless and until we are able to negotiate a license from Cypress. Should the District Court case resume and its outcome be adverse to us, we could be required to pay significant monetary damages to Cypress and could be enjoined from selling those of our products found to infringe Cypress's patents unless and until we are able to negotiate a license from Cypress. Any such license arrangement with Cypress would likely require the payment of royalties which would increase our costs of revenues and reduce our gross profit. If we and the other respondents are prohibited from selling our products, or end-products containing them, in the United States, or if we are required to pay significant monetary damages, are enjoined from selling any of our products or are required to make substantial royalty payments pursuant to any such license arrangement, our business would be significantly harmed.

The average selling prices of our products are expected to decline, and if we are unable to offset these declines, our operating results will suffer.

Historically, the average unit selling prices of our products have declined substantially over the lives of the products, and we expect this trend to continue. A reduction in overall average selling prices of our products could result in reduced revenues and lower gross margins. Our ability to increase our net revenues and maintain our gross margins despite a decline in the average selling prices of our products will depend on a variety of factors, including our ability to introduce lower cost versions of our existing products, increase unit sales volumes of these products, and introduce new products with higher prices and greater margins. If we fail to accomplish any of these objectives, our business will suffer. To reduce our costs, we may be required to implement design changes that lower our manufacturing costs, negotiate reduced purchase prices from our independent foundries and our independent assembly and test vendors, and successfully manage our manufacturing and subcontractor relationships. Because we do not operate our own wafer foundry or assembly facilities, we may not be able to reduce our costs as rapidly as companies that operate their own foundries or facilities.

Current unfavorable economic and market conditions, domestically and internationally, may adversely affect our business, financial condition, results of operations and cash flows.

We have significant customer sales both in the United States and internationally. We are also reliant upon U.S. and international suppliers, manufacturing partners and distributors. We are therefore susceptible to adverse U.S. and international economic and market conditions, including the challenging economic conditions that have prevailed and continue to prevail in the United States and worldwide. The recent turmoil in the financial markets has resulted in higher borrowing costs and tightened credit markets which have made it more difficult (in some cases, prohibitively so) for many companies to fund their working capital obligations. If any of our manufacturing partners, customers, distributors or suppliers experiences serious financial difficulties or ceases operations, our business could be adversely affected. In addition, the adverse impact of the credit crisis on consumers, including higher unemployment rates, is expected to adversely impact consumer spending, which will adversely impact demand for consumer products such as certain end products in which our SRAMs are embedded. As a result of the difficulty that businesses (including our

customers) may have in obtaining credit and the decreased consumer spending that may result from the credit market crisis, high unemployment rates and continued global economic and market turmoil are likely to have an adverse impact on our business, financial condition, results of operations and cash flows.

We are dependent on a number of single source suppliers, and if we fail to obtain adequate supplies, our business will be harmed and our prospects for growth will be curtailed.

We currently purchase several key components used in the manufacture of our products from single sources and are

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dependent upon supply from these sources to meet our needs. If any of these suppliers cannot provide components on a timely basis, at the same price or at all, our ability to manufacture our products will be constrained and our business will suffer. Most significantly, we obtain wafers for our Very Fast SRAM products from a single foundry, TSMC, and most of them are packaged at ASE. Wafers for our LLDRAM products are obtained from Powerchip. If we are unable to obtain an adequate supply of wafers from TSMC or Powerchip or find alternative sources in a timely manner, we will be unable to fulfill our customer orders and our operating results will be harmed. We do not have supply agreements with TSMC, Powerchip, ASE or any of our other independent assembly and test suppliers, and instead obtain manufacturing services and products from these suppliers on a purchase-order basis. Our suppliers, including TSMC, have no obligation to supply products or services to us for any specific product, in any specific quantity, at any specific price or for any specific time period. As a result, the loss or failure to perform by any of these suppliers could adversely affect our business and operating results.

Should any of our single source suppliers experience manufacturing failures or yield shortfalls, be disrupted by natural disaster or political instability, choose to prioritize capacity or inventory for other uses or reduce or eliminate deliveries to us, we likely will not be able to enforce fulfillment of any delivery commitments and we would have to identify and qualify acceptable replacements from alternative sources of supply. In particular, if TSMC is unable to supply us with sufficient quantities of wafers to meet all of our requirements, we would have to allocate our products among our customers, which would constrain our growth and might cause some of them to seek alternative sources of supply. Since the manufacturing of wafers and other components is extremely complex, the process of qualifying new foundries and suppliers is a lengthy process and there is no assurance that we would be able to find and qualify another supplier without materially adversely affecting our business, financial condition and results of operations. Because we outsource our wafer manufacturing and independent wafer foundry capacity is limited, we may be required to enter into costly long-term supply arrangements to secure foundry capacity.

We do not have long-term supply agreements with TSMC or Powerchip, but instead obtain our wafers on a purchase order basis. In order to secure future wafer supply from TSMC or Powerchip or from other independent foundries, we may be required to enter into various arrangements with them, which could include:

- contracts that commit us to purchase specified quantities of wafers over extended periods;
- investments in and joint ventures with the foundries; or
- non-refundable deposits with or prepayments or loans to foundries in exchange for capacity commitments.

We may not be able to make any of these arrangements in a timely fashion or at all, and these arrangements, if any, may not be on terms favorable to us. Moreover, even if we are able to secure independent foundry capacity, we may be obligated to use all of that capacity or incur penalties. These penalties may be expensive and could harm our financial results.

If we are unable to offset increased wafer fabrication costs by increasing the average selling prices of our products, our gross margins will suffer.

If there is a significant upturn in the networking and telecommunications markets that results in increased demand for our products and competing products, the available supply of wafers may be limited. As a result, we could be required to obtain additional manufacturing capacity in order to meet increased demand. Securing additional manufacturing capacity may cause our wafer fabrication costs to increase. If we are unable to offset these increased costs by increasing the average selling prices of our products, our gross margins will decline.

We rely heavily on distributors and our success depends on our ability to develop and manage our indirect distribution channels.

A significant percentage of our sales are made to distributors and to contract manufacturers who incorporate our products into end products for OEMs. For example, in fiscal 2012, 2011 and 2010, our distributor Avnet Logistics accounted for 20.1%, 17.0% and 21.7%, respectively, of our net revenues. Avnet Logistics and our other existing distributors may choose to devote greater resources to marketing and supporting the products of other companies. Since we sell through multiple channels and distribution networks, we may have to resolve potential conflicts between these channels. For example, these conflicts may result from the different discount levels offered by multiple channel distributors to their customers or, potentially, from our direct sales force targeting the same equipment manufacturer accounts as our indirect channel distributors. These conflicts may harm our business or reputation.

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We may be unable to accurately predict future sales through our distributors, which could harm our ability to efficiently manage our resources to match market demand.

Our financial results, quarterly product sales, trends and comparisons are affected by fluctuations in the buying patterns of the OEMs that purchase our products from our distributors. While we attempt to assist our distributors in maintaining targeted stocking levels of our products, we may not consistently be accurate or successful. This process involves the exercise of judgment and use of assumptions as to future uncertainties, including end user demand. Inventory levels of our products held by our distributors may exceed or fall below the levels we consider desirable on a going-forward basis. This could result in distributors returning unsold inventory to us, or in us not having sufficient inventory to meet the demand for our products. If we are not able to accurately predict sales through our distributors or effectively manage our relationships with our distributors, our business and financial results will suffer.

A small number of customers generally account for a significant portion of our accounts receivable in any period, and if any one of them fails to pay us, our operating results will suffer.

At March 31, 2012, five customers accounted for 19%, 16%, 13%, 12% and 11% of our accounts receivable, respectively. If any of these customers do not pay us, our operating results will be harmed. Generally, we do not require collateral from our customers.

Our acquisition of companies or technologies could prove difficult to integrate, disrupt our business, dilute stockholder value and adversely affect our operating results.

In August 2009, we consummated the acquisition of substantially all of the assets related to the SRAM memory device product line of Sony Corporation. In the future, we may make additional acquisitions or investments in companies, assets or technologies that we believe are complementary or strategic. Prior to the Sony acquisition, we had not made any such acquisitions or investments, and therefore our experience as an organization in making such acquisitions and investments is limited. In connection with future acquisitions or investments we may make, we face numerous risks, including:

- difficulties in integrating operations, technologies, products and personnel;
- diversion of financial and managerial resources from existing operations;
- risk of overpaying for or misjudging the strategic fit of an acquired company, asset or technology;
- problems or liabilities stemming from defects of an acquired product or intellectual property litigation that may result from offering the acquired product in our markets;
- challenges in retaining key employees to maximize the value of the acquisition or investment;
- inability to generate sufficient return on investment;
- incurrence of significant one-time write-offs; and
- delays in customer purchases due to uncertainty.

If we proceed with additional acquisitions or investments, we may be required to use a considerable amount of our cash, or to finance the transaction through debt or equity securities offerings, which may decrease our financial liquidity or dilute our stockholders and affect the market price of our stock. As a result, if we fail to properly evaluate and execute acquisitions or investments, our business and prospects may be harmed.

Claims that we infringe third party intellectual property rights could seriously harm our business and require us to incur significant costs.

In recent years, there has been significant litigation in the semiconductor industry involving patents and other intellectual property rights. We are currently involved in patent infringement litigation. See "We are subject to pending patent infringement litigation" above. We could become subject to additional claims or litigation in the future as a result of allegations that we infringe others' intellectual property rights or that our use of intellectual property otherwise violates the law. Claims that our products infringe the proprietary rights of others would force us to defend ourselves and possibly our customers, distributors or manufacturers against the alleged infringement. Any such litigation regarding intellectual property could result

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in substantial costs and diversion of resources and could have a material adverse effect on our business, financial condition and results of operations. Similarly, changing our products or processes to avoid infringing the rights of others may be costly or impractical. If any claims received in the future were to be upheld, the consequences to us would be severe and could require us to:

- stop selling our products that incorporate the challenged intellectual property;
- obtain a license to sell or use the relevant technology, which license may not be available on reasonable terms or at all;
- pay damages; or
- redesign those products that use the disputed technology.

Although patent disputes in the semiconductor industry have often been settled through cross-licensing arrangements, we may not be able in any or every instance to settle an alleged patent infringement claim through a cross-licensing arrangement. We have a more limited patent portfolio than many of our competitors. If a successful claim is made against us or any of our customers and a license is not made available to us on commercially reasonable terms or we are required to pay substantial damages or awards, our business, financial condition and results of operations would be materially adversely affected.

Our business will suffer if we are unable to protect our intellectual property.

Our success and ability to compete depends in large part upon protecting our proprietary technology. We rely on a combination of patent, trade secret, copyright and trademark laws and non-disclosure and other contractual agreements to protect our proprietary rights. These agreements and measures may not be sufficient to protect our technology from third-party infringement, or to protect us from the claims of others. Monitoring unauthorized use of our products is difficult and we cannot be certain that the steps we have taken will prevent unauthorized use of our technology, particularly in foreign countries where the laws may not protect our proprietary rights as fully as in the United States. Our attempts to enforce our intellectual property rights could be time consuming and costly. Litigation may be necessary in order to enforce our intellectual property rights, to protect our trade secrets, to determine the validity and scope of the proprietary rights of others or to defend against claims of infringement. If competitors are able to use our technology without our approval or compensation, our ability to compete effectively could be harmed.

The market for Very Fast SRAMs is highly competitive.

The market for Very Fast SRAMs, which are used primarily in networking and telecommunications equipment, is characterized by price erosion, rapid technological change, cyclical market patterns and heightened foreign and domestic competition. Several of our competitors offer a broad array of memory products and have greater financial, technical, marketing, distribution and other resources than we have. Some of our competitors maintain their own semiconductor fabrication facilities, which may provide them with capacity, cost and technical advantages over us. We cannot assure you that we will be able to compete successfully against any of these competitors. Our ability to compete successfully in this market depends on factors both within and outside of our control, including:

- real or perceived imbalances in supply and demand of Very Fast SRAMs;
- the rate at which OEMs incorporate our products into their systems;
- the success of our customers' products;
- our ability to develop and market new products; and
- the supply and cost of wafers.

In addition, we are vulnerable to advances in technology by competitors, including new SRAM architectures and new forms of DRAM, or the emergence of new memory technologies that could enable the development of products that feature higher performance, lower cost or lower power capabilities. Additionally, the trend toward incorporating SRAM into other chips in the networking and telecommunications markets has the potential to reduce future demand for Very Fast SRAM products. There can be no assurance that we will be able to compete successfully in the future. Our failure to compete successfully in these or other areas could harm our business.

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We may experience difficulties in transitioning to smaller geometry process technologies and other more advanced manufacturing process technologies, which may result in reduced manufacturing yields, delays in product deliveries and increased expenses.

In order to remain competitive, we expect to continue to transition the manufacture of our products to smaller geometry process technologies. This transition will require us to migrate to new manufacturing processes for our products and redesign certain products. The manufacture and design of our products is complex, and we may experience difficulty in transitioning to smaller geometry process technologies or new manufacturing processes. These difficulties could result in reduced manufacturing yields, delays in product deliveries and increased expenses. We are dependent on our relationships with TSMC and Powerchip to transition successfully to smaller geometry process technologies and to more advanced manufacturing processes. We cannot assure you that TSMC or Powerchip will be able to effectively manage the transition or that we will be able to maintain our relationship with them. If we or TSMC or Powerchip experience significant delays in this transition or fail to implement these transitions, our business, financial condition and results of operations could be materially and adversely affected.

Manufacturing process technologies are subject to rapid change and require significant expenditures for research and development.

We continuously evaluate the benefits of migrating to smaller geometry process technologies in order to improve performance and reduce costs. Historically, these migrations to new manufacturing processes have resulted in significant initial design and development costs associated with pre-production mask sets for the manufacture of new products with smaller geometry process technologies. For example, in fiscal 2010 and 2011, we incurred $650,000 and $727,000, respectively, in research and development expense associated with pre-production mask sets, which were not later used in production as part of the transition to our new 65 nanometer SRAM process technology and 72 nanometer DRAM process technology, respectively. We will incur similar expenses in the future as we continue to transition our products to smaller geometry processes. The transition costs inherent in the transition to new manufacturing process technologies will adversely affect our operating results and our gross margin.

Our products are complex to design and manufacture and could contain defects, which could reduce revenues or result in claims against us.

We develop complex products. Despite testing by us and our OEM customers, design or manufacturing errors may be found in existing or new products. These defects could result in a delay in recognition or loss of revenues, loss of market share or failure to achieve market acceptance. These defects may also cause us to incur significant warranty, support and repair costs, divert the attention of our engineering personnel from our product development efforts, result in a loss of market acceptance of our products and harm our relationships with our OEM customers. Our OEM customers could also seek and obtain damages from us for their losses. A product liability claim brought against us, even if unsuccessful, would likely be time consuming and costly to defend.

Defects in wafers and other components used in our products and arising from the manufacturing of these products may not be fully recoverable from TSMC or other suppliers. For example, in the quarter ended December 31, 2005, we incurred a charge of approximately $900,000 related to the write-off of inventory resulting from an error in the assembly process at one of our suppliers. This write-off adversely affected our operating results for fiscal 2006.

Demand for our products may decrease if our OEM customers experience difficulty manufacturing, marketing or selling their products.

Our products are used as components in our OEM customers' products. For example, Cisco Systems, our largest OEM customer, incorporates our products in a number of its networking routers and switches. Accordingly, demand for our products is subject to factors affecting the ability of our OEM customers to successfully introduce and market their products, including:

- capital spending by telecommunication and network service providers and other end users who purchase our OEM customers' products;
- the competition our OEM customers face, particularly in the networking and telecommunications industries;
- the technical, manufacturing, sales and marketing and management capabilities of our OEM customers;
- the financial and other resources of our OEM customers; and

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- the inability of our OEM customers to sell their products if they infringe third-party intellectual property rights.

As a result, if OEM customers reduce their purchases of our products, our business will suffer.

Downturns in the semiconductor industry may harm our revenues and margins.

The semiconductor industry is highly cyclical. The industry has experienced significant downturns, often in connection with, or in anticipation of, maturing product cycles of both semiconductor companies' and their customers' products and declines in general economic conditions. These downturns have been characterized by production overcapacity, high inventory levels and accelerated erosion of average selling prices. From time to time, the semiconductor industry also has experienced periods of increased demand and production capacity constraints. Our operating results may suffer during the down portion of these cycles. Downturns in the semiconductor industry could cause our stock price to be volatile, and a prolonged decline in the industry could adversely affect our revenues. If we are unable to control our inventory levels or expenses adequately in response to reduced net sales, our results of operations would be negatively impacted.

If we do not successfully develop new products to respond to rapid market changes due to changing technology and evolving industry standards, particularly in the networking and telecommunications markets, our business will be harmed.

If we fail to offer technologically advanced products and respond to technological advances and emerging standards, we may not generate sufficient revenues to offset our development costs and other expenses, which will hurt our business. The development of new or enhanced products is a complex and uncertain process that requires the accurate anticipation of technological and market trends. In particular, the networking and telecommunications markets are rapidly evolving and new standards are emerging. We are vulnerable to advances in technology by competitors, including new SRAM architectures, new forms of DRAM and the emergence of new memory technologies that could enable the development of products that feature higher performance or lower cost. We may experience development, marketing and other technological difficulties that may delay or limit our ability to respond to technological changes, evolving industry standards, competitive developments or end-user requirements. For example, because we have limited experience developing integrated circuits, or IC, products other than Very Fast SRAMs, our efforts to introduce new products may not be successful and our business may suffer. Other challenges that we face include:

- our products may become obsolete upon the introduction of alternative technologies;
- we may incur substantial costs if we need to modify our products to respond to these alternative technologies;
- we may not have sufficient resources to develop or acquire new technologies or to introduce new products capable of competing with future technologies;
- new products that we develop may not successfully integrate with our end-users' products into which they are incorporated;
- we may be unable to develop new products that incorporate emerging industry standards;
- we may be unable to develop or acquire the rights to use the intellectual property necessary to implement new technologies; and
- when introducing new or enhanced products, we may be unable to manage effectively the transition from older products.

Our products have lengthy sales cycles that make it difficult to plan our expenses and forecast results.

Our products are generally incorporated in our OEM customers' products at the design stage. However, their decisions to use our products often require significant expenditures by us without any assurance of success, and often precede volume sales, if any, by a year or more. If an OEM customer decides at the design stage not to incorporate our products into their products, we will not have another opportunity for a design win with respect to that customer's product for many months or years, if at all. Our sales cycle can take up to 24 months to complete, and because of this lengthy sales cycle, we may experience a delay between increasing expenses for research and development and our sales and marketing efforts and the generation of volume production revenues, if any, from these expenditures. Moreover, the value of any design win will largely depend on the commercial success of our OEM customers' products. There can be no assurance that we will continue to achieve design wins or that any design win will result in future revenues.

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Any significant order cancellations or order deferrals could adversely affect our operating results.

We typically sell products pursuant to purchase orders that customers can generally cancel or defer on short notice without incurring a significant penalty. Any significant cancellations or deferrals in the future could materially and adversely affect our business, financial condition and results of operations. Cancellations or deferrals could cause us to hold excess inventory, which could reduce our profit margins, increase product obsolescence and restrict our ability to fund our operations. We generally recognize revenue upon shipment of products to a customer. If a customer refuses to accept shipped products or does not pay for these products, we could miss future revenue projections or incur significant charges against our income, which could materially and adversely affect our operating results.

As our business grows, such growth may place a significant strain on our management and operations and, as a result, our business may suffer.

We plan to continue expanding our business, and our expected growth could place a significant strain on our management systems, infrastructure and other resources. To manage the expected growth of our operations and increases in the number of our personnel, we will need to invest the necessary capital to improve our operational, financial and management controls and our reporting systems and procedures. Our controls, systems and procedures might not be adequate to support a growing public company. In addition, we may not have sufficient administrative staff to support our operations. For example, we currently have only five employees in our finance department in the United States, including our Chief Financial Officer. Furthermore, our officers have limited experience in managing large or rapidly growing businesses and the majority of our management had no previous experience in managing a public company or communicating with securities analysts and public company investors prior to the initial public offering of our common stock in 2007. If our management fails to respond effectively to changes in our business, our business may suffer.

Our international business exposes us to additional risks.

Products shipped to destinations outside of the United States accounted for 76.5%, 70.3% and 68.9% of our net revenues in fiscal 2012, 2011 and 2010, respectively. Moreover, a substantial portion of our products is manufactured and tested in Taiwan. We intend to continue expanding our international business in the future. Conducting business outside of the United States subjects us to additional risks and challenges, including:

- heightened price sensitivity from customers in emerging markets;
- compliance with a wide variety of foreign laws and regulations;
- legal uncertainties regarding taxes, tariffs, quotas, export controls, competition, export licenses and other trade barriers;
- political and economic instability in, or foreign conflicts that involve or affect, the countries of our customers;
- difficulties in collecting accounts receivable and longer accounts receivable payment cycles;
- difficulties in staffing and managing personnel, distributors and representatives;
- limited protection for intellectual property rights in some countries; and
- fluctuations in freight rates and transportation disruptions.

Moreover, our reporting currency is the U.S. dollar. However, a portion of our cost of revenues and our operating expenses is denominated in currencies other than the U.S. dollar, primarily the New Taiwanese dollar. As a result, appreciation or depreciation of other currencies in relation to the U.S. dollar could result in transaction gains or losses that could impact our operating results. We do not currently engage in currency hedging activities to reduce the risk of financial exposure from fluctuations in foreign exchange rates.

TSMC and Powerchip, as well as our other independent suppliers and many of our OEM customers have operations in the Pacific Rim, an area subject to significant earthquake risk and adverse consequences related to the potential outbreak of contagious diseases such as the H1N1 Flu.

The foundries that manufactures our Fast SRAM and LLDRAM products, TSMC and Powerchip, and all of the principal

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independent suppliers that assemble and test our products are located in Taiwan. Many of our customers are also located in the Pacific Rim. The risk of an earthquake in these Pacific Rim locations is significant. The occurrence of an earthquake or other natural disaster near the fabrication facilities of TSMC or our other independent suppliers could result in damage, power outages and other disruptions that impair their production and assembly capacity. Any disruption resulting from such events could cause significant delays in the production or shipment of our products until we are able to shift our manufacturing, assembling, packaging or production testing from the affected contractor to another third-party vendor. In such an event, we may not be able to obtain alternate foundry capacity on favorable terms, or at all.

The outbreak of SARS in 2003 curtailed travel to and from certain countries, primarily in the Asia-Pacific region, and limited travel within those countries. If there were to be another outbreak of a contagious disease, such as SARS or the H1N1 Flu, that significantly affected the Asia-Pacific region, the operations of our key suppliers could be disrupted. In addition, our business could be harmed if such an outbreak resulted in travel being restricted, as it was during parts of 2003, or if it adversely affected the operations of our suppliers or our OEM customers or the demand for our products or our OEM customers' products.

Changes in Taiwan's political, social and economic environment may affect our business performance.

Because much of the manufacturing and testing of our products is conducted in Taiwan, our business performance may be affected by changes in Taiwan's political, social and economic environment. For example, any political instability resulting from the relationship among the United States, Taiwan and the People's Republic of China could damage our business. Moreover, the role of the Taiwanese government in the Taiwanese economy is significant. Taiwanese policies toward economic liberalization, and laws and policies affecting technology companies, foreign investment, currency exchange rates, taxes and other matters could change, resulting in greater restrictions on our ability and our suppliers' ability to do business and operate facilities in Taiwan. If any of these changes were to occur, our business could be harmed and our stock price could decline.

We are substantially dependent on the continued services and performance of our senior management and other key personnel.

Our future success is substantially dependent on the continued services and continuing contributions of our senior management who must work together effectively in order to design our products, expand our business, increase our revenues and improve our operating results. Members of our senior management team have long-standing and important relationships with our key customers and suppliers. The loss of services of Lee-Lean Shu, our President and Chief Executive Officer, Robert Yau, our Vice President of Engineering, any other executive officer or other key employee could significantly delay or prevent the achievement of our development and strategic objectives. We do not have employment contracts with, nor maintain key person insurance on, any of our executive officers.

If we are unable to recruit or retain qualified personnel, our business and product development efforts could be harmed.

We must continue to identify, recruit, hire, train, retain and motivate highly skilled technical, managerial, sales and marketing and administrative personnel. Competition for these individuals is intense, and we may not be able to successfully recruit, assimilate or retain sufficiently qualified personnel. We may encounter difficulties in recruiting and retaining a sufficient number of qualified engineers, which could harm our ability to develop new products and adversely impact our relationships with existing and future end-users at a critical stage of development. The failure to recruit and retain necessary technical, managerial, sales, marketing and administrative personnel could harm our business and our ability to obtain new OEM customers and develop new products.

We may need to raise additional capital in the future, which may not be available on favorable terms or at all, and which may cause dilution to existing stockholders.

We may need to seek additional funding in the future. We do not know if we will be able to obtain additional financing on favorable terms, if at all. If we cannot raise funds on acceptable terms, if and when needed, we may not be able to develop or enhance our products, take advantage of future opportunities or respond to competitive pressures or unanticipated requirements, and we may be required to reduce operating costs, which could seriously harm our business. In addition, if we issue equity securities, our stockholders may experience additional dilution or the new equity securities may have rights, preferences or privileges senior to those of our common stock.

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Our products are incorporated into advanced military electronics, and changes in international geopolitical circumstances and domestic budget considerations may hurt our business.

Some of our products are incorporated into advanced military electronics such as radar and guidance systems. Military expenditures and appropriations for such purchases have risen significantly in recent years. However, should the current conflict in Afghanistan and the general war on terror subside, our operating results would likely suffer. Domestic budget considerations may also adversely affect our operating results. For example, if governmental appropriations for military purchases of electronic devices that include our products are reduced, our revenues will likely decline.

If we fail to maintain proper and effective internal controls, our ability to produce accurate financial statements could be impaired, which could adversely affect our operating results, our ability to operate our business and investors' views of us.

Ensuring that we have adequate internal financial and accounting controls and procedures in place so that we can produce accurate financial statements on a timely basis is a costly and time-consuming process. On a continuous basis, we update our internal controls documentation and, where appropriate, improve our internal controls and procedures. Section 404 of the Sarbanes-Oxley Act of 2002 requires annual management assessments of the effectiveness of our internal control over financial reporting and a report by our independent registered public accounting firm addressing the effectiveness of our internal control over financial reporting. Both we and our independent registered public accounting firm test our internal controls and, as part of that documentation and testing process, identify areas for further attention and improvement. Implementing any appropriate changes to our internal controls may entail substantial costs in order to modify our existing financial and accounting systems, take a significant period of time to complete, and distract our officers, directors and employees from the operation of our business. These changes may not, however, be effective in maintaining the adequacy of our internal controls. Any failure to maintain that adequacy, or a consequent inability to produce accurate financial statements on a timely basis, could increase our operating costs, materially impair our ability to operate our business, and adversely affect our stock price.

Our operations involve the use of hazardous and toxic materials, and we must comply with environmental laws and regulations, which can be expensive, and may affect our business and operating results.

We are subject to federal, state and local regulations relating to the use, handling, storage, disposal and human exposure to hazardous and toxic materials. If we were to violate or become liable under environmental laws in the future as a result of our inability to obtain permits, human error, accident, equipment failure or other causes, we could be subject to fines, costs, or civil or criminal sanctions, face property damage or personal injury claims or be required to incur substantial investigation or remediation costs, which could be material, or experience disruptions in our operations, any of which could have a material adverse effect on our business. In addition, environmental laws could become more stringent over time imposing greater compliance costs and increasing risks and penalties associated with violations, which could harm our business.

We also face increasing complexity in our product design as we adjust to new and future requirements relating to the materials composition of our products, including the restrictions on lead and other hazardous substances applicable to specified electronic products placed on the market in the European Union (Restriction on the Use of Hazardous Substances Directive 2002/95/EC, also known as the RoHS Directive). We also expect that our operations will be affected by other new environmental laws and regulations on an ongoing basis. Although we cannot predict the ultimate impact of any such new laws and regulations, they will likely result in additional costs, and could require that we change the design and/or manufacturing of our products, any of which could have a material adverse effect on our business.

The trading price of our common stock is subject to fluctuation and is likely to be volatile.

The trading price of our common stock may fluctuate significantly in response to a number of factors, some of which are beyond our control, including:

- actual or anticipated declines in operating results;
- changes in financial estimates or recommendations by securities analysts;
- the institution of legal proceedings against us or significant developments in such proceedings;

- announcements by us or our competitors of financial results, new products, significant technological innovations, contracts, acquisitions, strategic relationships, joint ventures, capital commitments or other events;

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- changes in industry estimates in demand for Very Fast SRAM products;
- the gain or loss of significant orders or customers;
- recruitment or departure of key personnel; and
- market conditions in our industry, the industries of our customers and the economy as a whole.

In recent years the stock market in general, and the market for technology stocks in particular, have experienced extreme price fluctuations, which have often been unrelated to the operating performance of affected companies. The market price of our common stock might experience significant fluctuations in the future, including fluctuations unrelated to our performance. These fluctuations could materially adversely affect our business relationships, our ability to obtain future financing on favorable terms or otherwise harm our business. In addition, in the past, securities class action litigation has often been brought against a company following periods of volatility in the market price of its securities. This risk is especially acute for us because the extreme volatility of market prices of technology companies has resulted in a larger number of securities class action claims against them. Due to the potential volatility of our stock price, we may in the future be the target of similar litigation. Securities litigation could result in substantial costs and divert management's attention and resources. This could harm our business and cause the value of our stock to decline.

Our executive officers, directors and entities affiliated with them hold a substantial percentage of our common stock.

As of April 30, 2012, our executive officers, directors and entities affiliated with them beneficially owned approximately 25% of our outstanding common stock. As a result, these stockholders will be able to exercise substantial influence over, and may be able to effectively control, matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions, which could have the effect of delaying or preventing a third party from acquiring control over or merging with us.

The provisions of our charter documents might inhibit potential acquisition bids that a stockholder might believe are desirable, and the market price of our common stock could be lower as a result.

Our Board of Directors has the authority to issue up to 5,000,000 shares of preferred stock. Our Board of Directors can fix the price, rights, preferences, privileges and restrictions of the preferred stock without any further vote or action by our stockholders. The issuance of shares of preferred stock might delay or prevent a change in control transaction. As a result, the market price of our common stock and the voting and other rights of our stockholders might be adversely affected. The issuance of preferred stock might result in the loss of voting control to other stockholders. We have no current plans to issue any shares of preferred stock. Our charter documents also contain other provisions, which might discourage, delay or prevent a merger or acquisition, including:

- our stockholders have no right to remove directors without cause;
- our stockholders have no right to act by written consent;
- our stockholders have no right to call a special meeting of stockholders; and
- stockholders must comply with advance notice requirements to nominate directors or submit proposals for consideration at stockholder meetings.

These provisions could also have the effect of discouraging others from making tender offers for our common stock. As a result, these provisions might prevent the market price of our common stock from increasing substantially in response to actual or rumored takeover attempts. These provisions might also prevent changes in our management.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our executive offices, our principal administration, marketing and sales operations and a portion of our research and

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development operations are located in approximately 44,277 square feet of space in Sunnyvale, California, which we acquired in fiscal 2010. In addition, we occupy approximately 25,250 square feet in a facility located in Hsin Chu, Taiwan under a lease expiring in August 2012. This facility supports our manufacturing activities. We believe that we will be able to renew the lease of our Taiwan facility on commercially reasonable terms and that both our Sunnyvale and Taiwan facilities are adequate for our needs for the foreseeable future. We also lease space in Georgia and Texas. The aggregate annual gross rent for our facilities was approximately $371,000 in fiscal 2012.

Item 3. Legal Proceedings

In March 2011, Cypress Semiconductor Corporation, a semiconductor manufacturer, filed a lawsuit against us in the United States District Court for the District of Minnesota alleging that our products, including our Sigma DDR and Sigma Quad families of Fast SRAMs, infringe five patents held by Cypress. The complaint seeks unspecified damages for past infringement and a permanent injunction against future infringement.

On June 10, 2011, Cypress filed a complaint against GSI with the United States International Trade Commission (the "ITC"). The ITC complaint, as subsequently amended, alleges infringement by GSI of three of the five patents involved in the District Court case and one additional patent and also alleges infringement by three of our distributors and 11 of our customers who allegedly incorporate our SRAMs in their products. The ITC complaint seeks a limited exclusion order excluding the allegedly infringing SRAMs, and products containing them, from entry into the United States and permanent orders directing GSI and the other respondents to cease and desist from selling or distributing such products in the United States. On July 21, 2011, the ITC formally instituted an investigation in response to Cypress's complaint. Two of the distributor-respondents and ten of the customer-respondents were subsequently dismissed from the investigation. The evidentiary hearing took place during the week of March 12, 2012, and the initial determination of the administrative law judge will be issued on or before July 28, 2012. The District Court case has been stayed pending the conclusion of the ITC proceeding.

On July 22, 2011, we filed a complaint against Cypress in the United States District Court for the Northern District of California. Our complaint alleges that Cypress has conducted an unlawful combination and conspiracy to monopolize the market for certain high-performance SRAM devices, known as fast synchronous Quad Data Rate (or QDR) SRAMs and Double Data Rate (or DDR) SRAMs. The complaint alleges that the anti-competitive, collusive and conspiratorial conduct of Cypress and certain co-conspirators has violated Section 1 of the Sherman Act and also constitutes unlawful restraint of trade and unfair competition under applicable provisions of California law. The complaint seeks treble damages, in an amount to be determined at trial, a preliminary and permanent injunction prohibiting the continuation of the unfair and illegal business practices and recovery of GSI's attorneys' fees and costs. Cypress has moved to dismiss the complaint, we have opposed the motion and it is pending a decision by the court.

We believe that we have strong defenses against Cypress's patent infringement claims, and we intend to continue to defend ourselves vigorously in in both patent infringement proceedings while vigorously prosecuting our antitrust claims against Cypress. However, the litigation process is inherently uncertain, and we may not prevail. Patent litigation is particularly complex and can extend for a protracted period of time, which can substantially increase the cost of such litigation. We have incurred and expect to continue to incur substantial legal fees and expenses in connection with the Cypress patent and antitrust litigation, and we also expect the litigation to continue to divert the efforts and attention of some of our key management and technical personnel. As a result, the litigation, regardless of its eventual outcome, will be costly and time consuming. In addition, uncertainty regarding the outcome of the litigation may cause some of our customers and potential customers to reduce purchases of our products and/or seek second sources of supply, which could adversely affect our revenues. Should the outcome of the ITC proceeding be adverse to us, we and the other respondents could be prohibited from selling or distributing those of our products found to be infringing Cypress's patents, or end products containing them, in the United States, unless and until we are able to negotiate a license from Cypress. Should the District Court case resume and its outcome be adverse to us, we could be required to pay significant monetary damages to Cypress and could be enjoined from selling those of our products found to infringe Cypress's patents unless and until we are able to negotiate a license from Cypress. Any such license arrangement with Cypress would likely require the payment of royalties which would increase our cost of revenues and reduce our gross profit. If we and the other respondents are prohibited from selling our products, or end

products containing them, in the United States, or if we are required to pay significant monetary damages, are enjoined from selling any of our products or are required to make substantial royalty payments pursuant to any such license arrangement, our business would be significantly harmed.

Item 4. Mine Safety Disclosures

Not applicable.

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PART II

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

Market Information

Our common stock has traded on the Nasdaq Global Market under the symbol "GSIT" since our initial public offering on March 29, 2007. The following table sets forth, for the periods indicated, the high and low sales prices for our common stock on such market.

Fiscal Year Ended March 31, 2011	High	Low
First quarter	$6.93	$4.65
Second quarter	$7.08	$5.50
Third quarter	$8.24	$5.61
Fourth quarter	$10.20	$8.02
Fiscal Year Ended March 31, 2012		
First quarter	$9.20	$6.17
Second quarter	$7.39	$4.55
Third quarter	$5.21	$4.55
Fourth quarter	$5.09	$4.18

Holders of Common Stock

On May 24, 2012, the closing price of our common stock on the Nasdaq Global Market was $4.20, and there were 43 holders of record of our common stock. Because many of such shares are held by brokers and other institutions on behalf of stockholders, we are unable to estimate the total number of stockholders represented by these record holders.

Dividend Policy

We have never declared or paid cash dividends on our common stock. We currently intend to retain future earnings to finance the growth and development of our business, and we do not anticipate declaring or paying any cash dividends in the foreseeable future.

Securities Authorized for Issuance under Equity Compensation Plans

Please see Part III, Item 12 of this report for information regarding securities authorized for issuance under our equity compensation plans. Such information is incorporated by reference from our definitive proxy statement for our 2011 annual meeting of stockholders.

Issuer Purchases of Equity Securities

On November 6, 2008, our Board of Directors authorized us to repurchase, at management's discretion, up to $10 million of our common stock. On January 25, 2012, the Board authorized the repurchase of additional shares having an aggregate purchase price of up to $10 million. Under the repurchase program, we may repurchase shares from time to time on the open market or in private transactions. The specific timing and amount of the repurchases will be dependent on market conditions, securities law limitations and other factors. The repurchase program may be suspended or terminated at any time without prior notice. Below is a summary of our common stock repurchases during the quarter ended March 31, 2012.

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Period	Shares Repurchased	Average Price Per Share	Value of Shares that May Yet Be Repurchased Under the Program
Beginning approximate dollar value available to be repurchased as of December 31, 2011			$1,381,510
Dollar value available reflecting January 25, 2012 increase			$11,381,510
January 1 to January 31, 2012	94,038	4.67	10,942,765
February 1 to February 29, 2012	130,043	4.87	10,309,159
March 1 to March 31, 2012	178,492	4.45	9,515,550
Total shares repurchased	402,573		
Ending approximate dollar value that may be repurchased under the program as of March 31, 2012			$9,515,550

Item 6. Selected Financial Data

You should read the following selected consolidated financial data in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and the related notes included elsewhere in this report. The selected consolidated statement of operations data set forth below for the fiscal years ended March 31, 2012, 2011 and 2010 and the selected consolidated balance sheet data as of March 31, 2012 and 2011 are derived from, and are qualified by reference to, our audited consolidated financial statements included elsewhere in this report. The selected consolidated statement of operations data set forth below for the fiscal years ended March 31, 2009 and 2008 and the selected consolidated balance sheet data as of March 31, 2010, 2009 and 2008 are derived from audited consolidated financial statements not included in this report.

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	Fiscal Year Ended March 31,				
	2012	2011	2010	2009	2008
	(In thousands, except per share amounts)				
Consolidated Statement of Operations Data:					
Net revenues	$82,540	$97,763	$67,558	$62,108	$53,170
Cost of revenues	45,891	53,009	38,342	35,552	31,847
Gross profit	36,649	44,754	29,216	26,556	21,323
Operating expenses:					
Research and development	10,637	10,632	9,069	5,737	4,365
Selling, general and administrative	19,356	10,722	9,534	9,295	9,464
Total operating expenses	29,993	21,354	18,603	15,032	13,829
Income from operations	6,656	23,400	10,613	11,524	7,494
Interest and other income (expense), net	525	461	1,965	1,363	1,784
Income before income taxes	7,181	23,861	12,578	12,887	9,278
Provision for income taxes	425	4,985	2,195	3,598	2,505
Net income	$6,756	$18,876	$10,383	$9,289	$6,773
Basic and diluted net income per share available to common stockholders:					
Basic	$0.24	$0.67	$0.38	$0.33	$0.25
Diluted	$0.23	$0.64	$0.38	$0.33	$0.24
Weighted average shares used in per share calculations:					
Basic	28,497	28,013	27,105	27,735	27,537
Diluted	29,496	29,685	27,688	28,836	28,624
	March 31,				
	2012	2011	2010	2009	2008
	(In thousands)				
Consolidated Balance Sheet Data:					
Cash, cash equivalents and short-term investments	$58,678	$51,985	$46,778	$47,337	$39,565
Working capital	82,684	80,035	63,047	59,754	55,070
Total assets	143,117	141,917	113,128	92,673	88,315
Total stockholders' equity	128,779	124,680	98,719	84,705	77,140

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

The following discussion contains forward-looking statements that involve risks and uncertainties. Our actual results could differ substantially from those anticipated in these forward-looking statements as a result of many factors, including those set forth under "Risk Factors" and elsewhere in this report. The following discussion should be read together with our consolidated financial statements and the related notes included elsewhere in this report.

Overview

We are a fabless semiconductor company that designs, develops and markets Very Fast static random access memories, or SRAMs, and low latency dynamic random access memories, or LLDRAMs, primarily for the networking and telecommunications markets. We are subject to the highly cyclical nature of the semiconductor industry, which has experienced significant fluctuations, often in connection with fluctuations in demand for the products in which semiconductor devices are used. Beginning in fiscal 2001, the networking and telecommunications markets experienced an extended period of severe contraction, during which our operating results sharply declined. Between fiscal 2004 and fiscal 2006, demand for networking and telecommunications equipment recovered. During the first three quarters of fiscal 2007, demand for such equipment accelerated and, as a result, our operating results improved. In the fourth quarter of fiscal 2007 and the first quarter of fiscal 2008, revenues again declined due, in part, to the implementation of a “lean manufacturing” program by our largest customer,

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Cisco Systems. Our revenues have been substantially impacted by the fluctuations in sales to Cisco Systems, and we expect that future direct and indirect sales to Cisco Systems will continue to fluctuate significantly on a quarterly basis. The worldwide financial crisis and the resulting economic impact on the end markets we serve adversely impacted our financial results since the second half of fiscal 2009, and we expect that the unsettled global economic environment will continue to affect our operating results in future periods. However, with no debt, substantial liquidity and a history of positive cash flows from operations, we believe we are in a better financial position than many other companies of our size.

Revenues. Our revenues are derived primarily from sales of our Very Fast SRAM products. Sales to networking and telecommunications OEMs accounted for 75% to 80% of our net revenues during our last three fiscal years. We also sell our products to OEMs that manufacture products for defense applications such as radar and guidance systems, for professional audio applications such as sound mixing systems, for test and measurement applications such as high-speed testers, for automotive applications such as smart cruise control and voice recognition systems, and for medical applications such as ultrasound and CAT scan equipment.

As is typical in the semiconductor industry, the selling prices of our products generally decline over the life of the product. Our ability to increase net revenues, therefore, is dependent upon our ability to increase unit sales volumes of existing products and to introduce and sell new products with higher average selling prices in quantities sufficient to compensate for the anticipated declines in selling prices of our more mature products. Although we expect the average selling prices of individual products to decline over time, we believe that, over the next several quarters, our overall average selling prices will increase due to a continuing shift in product mix to a higher percentage of higher price, higher density products. Our ability to increase unit sales volumes is dependent primarily upon increases in customer demand but, particularly in periods of increasing demand, can also be affected by our ability to increase production through the availability of increased wafer fabrication capacity from TSMC and Powerchip, our wafer suppliers, and our ability to increase the number of good integrated circuit die produced from each wafer through die size reductions and yield enhancement activities.

We may experience fluctuations in quarterly net revenues for a number of reasons. Historically, orders on hand at the beginning of each quarter are insufficient to meet our revenue objectives for that quarter and are generally cancelable up to 30 days prior to scheduled delivery. Accordingly, we depend on obtaining and shipping orders in the same quarter to achieve our revenue objectives. In addition, the timing of product releases, purchase orders and product availability could result in significant product shipments at the end of a quarter. Failure to ship these products by the end of the quarter may adversely affect our operating results. Furthermore, our customers may delay scheduled delivery dates and/or cancel orders within specified timeframes without significant penalty.

We sell our products through our direct sales force, international and domestic sales representatives and distributors. Revenues from product sales, except for sales to distributors, are generally recognized upon shipment, net of sales returns and allowances. Sales to consignment warehouses, who purchase products from us for use by contract manufacturers, are recorded upon delivery to the contract manufacturer. Sales to distributors are recorded as deferred revenues for financial reporting purposes and recognized as revenues when the products are resold by the distributors to the OEM. Sales to distributors are made under agreements allowing for returns or credits under certain circumstances. We therefore defer recognition of revenue on sales to distributors until products are resold by the distributor.

Historically, a small number of OEM customers have accounted for a substantial portion of our net revenues, and we expect that significant customer concentration will continue for the foreseeable future. Many of our OEMs use contract manufacturers to manufacture their equipment. Accordingly, a significant percentage of our net revenues is derived from sales to these contract manufacturers and to consignment warehouses. In addition, a significant portion of our sales are made to foreign and domestic distributors who resell our products to OEMs, as well as their contract manufacturers. Direct sales to contract manufacturers and consignment warehouses accounted for 45.1%, 39.5% and 39.2% of our net revenues for fiscal 2012, 2011 and 2010, respectively. Sales to foreign and domestic distributors accounted for 45.7%, 48.9% and 50.2% of our net revenues for fiscal 2012, 2011 and 2010, respectively. The following direct customers accounted for 10% or more of our net revenues in one or more of the following periods:

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	Fiscal Year Ended March 31,		
	2012	2011	2010
Consignment warehouses:			
SMART Modular Technologies	11.4 %	5.8 %	20.8 %
Jabil Circuit	20.0 %	18.6 %	10.4 %
Flextronics	9.3 %	11.7 %	4.7 %
Distributors:			
Avnet Logistics	20.1 %	17.0 %	21.7 %
Nexcomm	11.2 %	10.8 %	9.6 %

Cisco Systems, our largest OEM customer, purchases our products primarily through its consignment warehouses, SMART Modular Technologies, Jabil Circuit and Flextronics Technology, and also purchases some products through its contract manufacturers and directly from us. Historically, purchases by Cisco Systems have fluctuated from period to period. Based on information provided to us by Cisco Systems' consignment warehouses and contract manufacturers, purchases by Cisco Systems represented approximately 41%, 37% and 35% of our net revenues in fiscal 2012, 2011 and 2010, respectively. Our revenues have been substantially impacted by the fluctuations in sales to Cisco Systems, and we expect that future direct and indirect sales to Cisco Systems will continue to fluctuate significantly on a quarterly basis and that such fluctuations may significantly affect our operating results in future periods. To our knowledge, none of our other OEM customers accounted for more than 10% of our net revenues in fiscal 2012, 2011 or 2010.

Cost of Revenues. Our cost of revenues consists primarily of wafer fabrication costs, wafer sort, assembly, test and burn-in expenses, the amortized cost of production mask sets, stock-based compensation and the cost of materials and overhead from operations. All of our wafer manufacturing and assembly operations, and a significant portion of our wafer sort testing operations, are outsourced. Accordingly, most of our cost of revenues consists of payments to TSMC and independent assembly and test houses. Because we do not have long-term, fixed-price supply contracts, our wafer fabrication and other outsourced manufacturing costs are subject to the cyclical fluctuations in demand for semiconductors. Cost of revenues also includes expenses related to supply chain management, quality assurance, and final product testing and documentation control activities conducted at our headquarters in Sunnyvale, California and our branch operations in Taiwan.

Gross Profit. Our gross profit margins vary among our products and are generally greater on our higher density products and, within a particular density, greater on our higher speed and industrial temperature products. We expect that our overall gross margins will fluctuate from period to period as a result of shifts in product mix, changes in average selling prices and our ability to control our cost of revenues, including costs associated with outsourced wafer fabrication and product assembly and testing.

Research and Development Expenses. Research and development expenses consist primarily of salaries and related expenses for design engineers and other technical personnel, the cost of developing prototypes, stock-based compensation and fees paid to consultants. We charge all research and development expenses to operations as incurred. We charge mask costs used in production to costs of revenues over a 12-month period. However, we charge costs related to pre-production mask sets, which are not used in production, to research and development expenses at the time they are incurred. These charges often arise as we transition to new process technologies and, accordingly, can cause research and development expenses to fluctuate on a quarterly basis. We believe that continued investment in research and development is critical to our long-term success, and we expect to continue to devote significant resources to product development activities. Accordingly, we expect that our research and development expenses will increase in future periods, although such expenses as a percentage of net revenues may fluctuate.

Selling, General and Administrative Expenses. Selling, general and administrative expenses consist primarily of commissions paid to independent sales representatives, salaries, stock-based compensation and related expenses for personnel engaged in sales, marketing, administrative, finance and human resources activities, professional fees, costs associated with the promotion of our products and other corporate expenses. We expect that our sales and marketing expenses will increase in absolute dollars in future periods as we continue to grow and expand our sales force but that,

to the extent our revenues increase in future periods, these expenses will generally decline as a percentage of net revenues. We also expect that, in support of our continued growth and our operations as a public company, general and administrative expenses will continue to increase in absolute dollars for the foreseeable future. General and administrative expenses increased significantly in fiscal 2012, primarily as a result of substantial legal expense related to our pending patent infringement and antitrust litigation with Cypress Semiconductor Corporation. Although we expect these expenses to be substantially reduced during the quarter ending June 30,

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2012, pending the anticipated issuance in July of an initial determination in the ITC proceeding, legal expenses may again become substantial in future quarters if the litigation continues.

Acquisition

On August 28, 2009, we acquired substantially all of the assets related to the SRAM memory device product line of Sony Corporation and its subsidiaries (collectively, "Sony"). As part of the transaction, we also entered into an Intellectual Property Agreement with Sony under which we acquired certain patents and license rights to other intellectual property used in connection with the acquired product line.

The acquisition was undertaken in order to increase our market share in the SRAM memory business, expand our relationships with our major customers and expand our product portfolio. The acquisition resulted in a bargain purchase as Sony had been incurring significant losses on an annual basis, had a minimal product offering, had only one customer and declining annual revenues at the time of the acquisition and was therefore motivated to sell the assets of its SRAM product line.

We adopted authoritative guidance for business combinations as a result of this acquisition. The acquisition has been accounted for as a purchase under authoritative guidance for business combinations. Acquisition related costs of approximately $533,000 incurred in connection with this acquisition have been expensed in accordance with the authoritative guidance and are included in selling, general and administrative expenses in the Consolidated Statement of Operations for the year ended March 31, 2010. Contingent consideration was recognized at the date of the acquisition and recorded at its fair value. Changes to the fair value of the contingent consideration subsequent to September 30, 2009 have been recorded in general and administrative expense and amounted to $105,000, $64,000 and $47,000 in fiscal 2010, 2011 and 2012, respectively.

The purchase price of the acquisition has been preliminarily allocated to the net tangible and intangible assets acquired, with the excess of the fair value of assets acquired over the purchase price recorded as a bargain purchase gain.

The results of operations and estimated fair value of assets acquired and liabilities assumed were included in our consolidated financial statements beginning August 29, 2009.

The total purchase consideration was approximately $7.1 million in cash, of which approximately $5.2 million was paid at the closing, $1.2 million was paid in October 2009 following a post-closing adjustment to reflect actual product inventory on hand at the closing and $727,000 consisted of contingent consideration that was payable on the basis of sales of certain acquired SRAM products over an eight quarter period commencing with the quarter ended September 30, 2009, the quarter in which we first derived revenue from shipments of such products.

The allocation of the purchase price to acquired tangible and identifiable intangible assets was based on their estimated fair values at the date of acquisition.

Prior to the closing of the acquisition, there were no material relationships between us and Sony or any related parties or affiliates of Sony.

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Results of Operations

The following table sets forth statement of operations data as a percentage of net revenues for the periods indicated:

	Fiscal Year Ended March 31,		
	2012	2011	2010
Net revenues	100.0 %	100.0 %	100.0 %
Cost of revenues	55.6	54.2	56.8
Gross profit	44.4	45.8	43.2
Operating expenses:			
Research and development	12.9	10.9	13.4
Selling, general and administrative	23.5	11.0	14.1
Total operating expenses	36.4	21.9	27.5
Income from operations	8.0	23.9	15.7
Interest and other income (expense), net	0.6	0.5	2.9
Income before income taxes	8.6	24.4	18.6
Provision for income taxes	0.5	5.1	3.2
Net income	8.1 %	19.3 %	15.4 %

Fiscal Year Ended March 31, 2012 Compared to Fiscal Year Ended March 31, 2011

Net Revenues. Net revenues decreased by 15.6% from $97.8 million in fiscal 2011 to $82.5 million in fiscal 2012 largely as a result of excess inventories accumulated by our customers in fiscal 2011 and drawn down in fiscal 2012. Direct and indirect sales to Cisco Systems, our largest customer, decreased by $2.8 million from $36.2 million in fiscal 2011 to $33.4 million in fiscal 2012. Net revenues in fiscal 2012 included $20.7 million from the sale to Cisco of products acquired in our August 28, 2009 acquisition of the Sony SRAM memory device product line, compared to $14.6 million in fiscal 2011. Shipments of our SigmaQuad product line accounted for 34.5% of total shipments in fiscal 2012 compared to 31.7% of total shipments in fiscal 2011. We believe net revenues in the third and fourth quarters of fiscal 2012 were negatively impacted by uncertainty regarding the outcome of our pending patent litigation with Cypress Semiconductor and that this uncertainty will continue to affect our revenues over the next several quarters.

Cost of Revenues. Cost of revenues decreased by 13.4% from $53.0 million in fiscal 2011 to $45.9 million in fiscal 2012. This decrease was primarily due to the decrease in net revenues, partially offset by increases in manufacturing overhead expenses as we prepared to support expected increases in the production levels of new and existing products, including our low latency DRAMs. Fiscal 2011 cost of revenues included approximately $252,000 related to masks valued at approximately $604,000 that were acquired in the Sony acquisition and that were amortized over four quarters. Cost of revenues included stock-based compensation expense of $321,000 and $300,000, respectively, in fiscal 2012 and fiscal 2011.

Gross Profit. Gross profit decreased by 18.1% from $44.8 million in fiscal 2011 to $36.6 in fiscal 2012. Gross margin decreased from 45.8% in fiscal 2011 to 44.4% in fiscal 2012. The decrease in gross profit was primarily related to the decreased net revenues. The decrease in gross margin was primarily related to the increases in manufacturing overhead expenses described above.

Research and Development Expenses. Research and development expenses were unchanged at $10.6 million in fiscal 2011 and in fiscal 2012. A decrease of $727,000 in research and development mask expense was primarily offset by increases in payroll related expenses and stock-based compensation. Research and development expenses included stock-based compensation expense of $1,061,000 and $834,000, respectively, in fiscal 2012 and fiscal 2011.

Selling, General and Administrative Expenses. Selling, general and administrative expenses increased 80.5% from $10.7 million in fiscal 2011 to $19.4 million in fiscal 2012. This increase was due to an increase of $9.3 million in legal fees related to the pending patent infringement and antitrust litigation involving Cypress Semiconductor Corporation, partially offset by a decrease in independent sales representative commissions of $475,000 and a lesser decrease in non-legal professional fees. Stock-based compensation expense of $714,000 and $578,000 were included in selling, general and administrative expenses in fiscal 2012 and fiscal 2011, respectively.

Interest and Other Income (Expense), Net. Interest and other income (expense), net increased 13.9% from $461,000 in

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fiscal 2011 to $525,000 in fiscal 2012. Interest income decreased by $131,000 due to lower interest rates received on our cash and short-term and long-term investments. In addition, we recorded a foreign currency exchange loss of $212,000 in fiscal 2011 compared to $17,000 in fiscal 2012. The exchange loss in each period was related to our Taiwan branch operations.

Provision for Income Taxes. The provision for income taxes decreased from $5.0 million in fiscal 2011 to $425,000 in fiscal 2012. This decrease was due to the decreased pre-tax income and changes in the relative mix of income within operating jurisdictions in fiscal 2012.

Net Income. Net income decreased 64.2% from $18.9 million in fiscal 2011 to $6.8 million in fiscal 2012. This decrease was primarily due to the decreased net revenues and changes in operating expenses and gross profit discussed above.

Fiscal Year Ended March 31, 2011 Compared to Fiscal Year Ended March 31, 2010

Net Revenues. Net revenues increased by 44.7% from $67.6 million in fiscal 2010 to $97.8 in fiscal 2011. Direct and indirect sales to Cisco Systems, our largest customer, increased by $12.7 million from $23.5 million in fiscal 2010 to $36.2 million in fiscal 2011. Net revenues in fiscal 2011 included $14.6 million from the sale to Cisco of products acquired in our August 28, 2009 acquisition of the Sony SRAM memory device product line, compared to $5.4 million in fiscal 2010. In addition to the increase in sales to Cisco Systems, net revenues benefited from the continued acceptance of our SigmaQuad product line which resulted in a 103.3% increase in SigmaQuad shipments in fiscal 2011 compared to fiscal 2010, accounting for 31.7% of our total shipments in fiscal 2011.

Cost of Revenues. Cost of revenues increased by 38.3% from $38.3 million in fiscal 2010 to $53.0 million in fiscal 2011. This increase was primarily due to the increase in net revenues. Fiscal 2011 and 2010 cost of revenues included approximately $252,000 and $352,000, respectively, related to masks valued at approximately $604,000 that were acquired in the Sony acquisition and are being amortized over four quarters. Cost of revenues included stock-based compensation expense of $300,000 and $291,000, respectively, in fiscal 2011 and fiscal 2010.

Gross Profit. Gross profit increased by 53.2% from $29.2 million in fiscal 2010 to $44.8 in fiscal 2011. Gross margin increased from 43.2% in fiscal 2010 to 45.8% in fiscal 2011. The increase in gross profit was primarily related to the increased net revenues.The increase in gross margin was primarily related to a shift in product mix to a higher percentage of higher density, higher margin products, partially offset by a reduction in the percentage of sales of products for military applications and increased depreciation and amortization expense related to assets acquired from Sony.

Research and Development Expenses. Research and development expenses increased 17.2% from $9.1 million in fiscal 2010 to $10.6 million in fiscal 2011. This increase was primarily due to increases in payroll related expenses of $695,000, facility related expenses of $241,000 and lesser increases in software maintenance expense, stock-based compensation expense and depreciation expense. The increase in payroll expenses was related to increases in headcount to support our low latency DRAM project and various high speed SRAM projects. Research and development expenses included stock-based compensation expense of $834,000 and $686,000, respectively, in fiscal 2011 and fiscal 2010.

Selling, General and Administrative Expenses. Selling, general and administrative expenses increased 12.5% from $9.5 million in fiscal 2010 to $10.7 million in fiscal 2011. This increase was primarily related to increases of $710,000 in independent sales representative commissions, $521,000 in payroll related expenses and a smaller increase in facility related expenses, partially offset by a decrease in outside consulting expenses. Selling, general and administrative expenses in fiscal 2010 included $533,000 in legal and accounting fees and changes to the fair value of the contingent consideration related to the Sony acquisition, compared to $64,000 in such acquisition related expenses in fiscal 2011. Stock-based compensation expense of $578,000 and $502,000 were included in selling, general and administrative expenses in fiscal 2011 and fiscal 2010, respectively.

Interest and Other Income (Expense), Net. Interest and other income (expense), net decreased 76.5% from $2.0 million in fiscal 2010 to $461,000 in fiscal 2011. This decrease was primarily the result of a $1.1 million bargain purchase gain resulting from our acquisition of the Sony SRAM memory device product line in the quarter ended September 30, 2009, and decreases in interest income due to lower interest rates received on our cash, short-term and long-term investments. In addition, we recorded an exchange loss of $212,000 in fiscal 2011 compared to an exchange

loss of $29,000 in fiscal 2010, related to our Taiwan branch operations.

Provision for Income Taxes. The provision for income taxes increased from $2.2 million in fiscal 2010 to $5.0 million in fiscal 2011. This increase was due to the increased pre-tax income and changes in the relative mix of income within operating jurisdictions in fiscal 2011.

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Net Income. Net income increased 81.8% from $10.4 million in fiscal 2010 to $18.9 million in fiscal 2011. This increase was primarily due to the increased net revenues and changes in operating expenses and gross profit discussed above.

Liquidity and Capital Resources

As of March 31, 2012, our principal sources of liquidity were cash, cash equivalents and short-term investments of $58.7 million compared to $52.0 million as of March 31, 2011.

Net cash provided by operating activities was $17.0 million for fiscal 2012 compared to $13.3 million for fiscal 2011 and $13.7 million for fiscal 2010. The primary sources of cash in fiscal 2012 were net income of $6.8 million and decreases in accounts receivable of $4.5 million and inventory of $4.0 million, partially offset by an increase in prepaid expenses and other assets of $2.6 million and a decrease in deferred revenue of $2.6 million. The decrease in accounts receivable was due to the lower level of shipments in the fourth quarter of fiscal 2012 compared to the fourth quarter of fiscal 2011. The primary sources of cash in fiscal 2011 were net income of $18.9 million, depreciation and amortization of $2.8 million and lesser increases in accrued expenses and other liabilities and deferred revenue, partially offset by an increase in inventory of $7.1 million and an increase in accounts receivable of $5.8 million. Deferred revenue increased as a result of our distributors increasing the levels of inventory in their possession to better enable them to respond to their customers' requirements. The increase in accounts receivable was a result of the the timing of shipments in the quarter ended March 31, 2011 compared to the quarter ended March 31, 2010. Inventory levels increased as a result of a planned inventory build-up to enable us to better respond to current and forecasted customer requirements. The primary uses of cash in fiscal 2010 were increases of $3.6 million in accounts receivable, $1.1 million in inventory and $1.0 million in prepaid expenses and other assets. The increase in accounts receivable reflects the higher level of net revenues in the fourth quarter of fiscal 2010 compared to the fourth quarter of fiscal 2009. These uses of cash were primarily offset by increases of $3.4 million in accounts payable and $2.0 million in accrued expenses and other liabilities. The increase in accounts payable reflects higher levels of wafer purchases and manufacturing related expenses as we built inventory levels in response to increased levels of shipments.

Net cash used in investing activities was $6.5 million in fiscal 2012, $17.5 million in fiscal 2011 and $3.8 million in fiscal 2010. Investment activities in fiscal 2012 consisted primarily of the purchase of state and municipal obligations and corporate notes of $38.1 million. This use was substantially offset by sales and maturities of investments of $33.3 million. Investment activities in fiscal 2011 consisted primarily of the purchase of state and municipal obligations and corporate notes of $49.0 million and purchases of property and equipment. These uses were offset by sales and maturities of investments of $35.8 million. Investing activity in fiscal 2010 consisted primarily of the purchase of short-term and long-term investments of $28.7 million, primarily state and municipal obligations and corporate notes, our acquisition of the Sony SRAM memory device product line and purchases of property and equipment, including our new headquarters facility in Sunnyvale, California. These uses were partially offset by the sale and current maturities of short-term investments of $37.2 million.

Net cash provided by financing activities in fiscal 2012, fiscal 2011 and fiscal 2010 primarily consisted of the net proceeds from the sale of common stock pursuant to our employee stock plans. In addition, net cash used in financing activities in fiscal 2012 and in fiscal 2010 included the repurchase of our common stock for a total purchase price of $6.3 million and $58,000, respectively. We repurchased $6.3 million of our common stock at an average price of $4.74 per share in fiscal 2012.

At March 31, 2012, we had total minimum lease obligations of approximately $179,000 from April 1, 2012 through May 31, 2013, under non-cancelable operating leases.

We believe that our existing balances of cash, cash equivalents and short-term investments, and cash flow expected to be generated from our future operations, will be sufficient to meet our cash needs for working capital and capital expenditures for at least the next 12 months, although we could be required, or could elect, to seek additional funding prior to that time. Our future capital requirements will depend on many factors, including the rate of revenue growth that we experience, the extent to which we utilize subcontractors, the levels of inventory and accounts receivable that we maintain, the timing and extent of spending to support our product development efforts and the expansion of our

sales and marketing efforts. Additional capital may also be required for the consummation of any acquisition of businesses, products or technologies that we may undertake. We cannot assure you that additional equity or debt financing, if required, will be available on terms that are acceptable or at all.

Contractual Obligations

The following table describes our contractual obligations as of March 31, 2012:

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	Payments due by period				
	Up to 1 year	1 - 3 years	3 - 5 years	More than 5 years	Total
Facilities and equipment leases	$167,000	$12,000	$—	$—	$179,000
Wafer, test and mask purchase obligations	6,078,000	2,001,000	481,000	—	8,560,000
	$6,245,000	$2,013,000	$481,000	$—	$8,739,000

As of March 31, 2012, the current portion of our unrecognized tax benefits was $599,000, and the long-term portion was $1,835,000. The unrecognized tax benefits balance as of March 31, 2012 of $3,109,000 would affect our effective tax rate if recognized. As of March 31, 2012, $901,000 of unrecognized tax benefits have been recorded as a reduction to net deferred tax assets.

Critical Accounting Policies and Estimates

The preparation of our financial statements and related disclosures in conformity with accounting principles generally accepted in the United States ("GAAP") 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 financial statements and the reported amounts of revenue and expenses during the reporting period. Significant estimates are inherent in the preparation of the consolidated financial statements and include estimates affecting revenue recognition, obsolete and excess inventory, the realization of intangible assets, the valuation allowance on deferred tax assets, the valuation of equity instruments and stock-based compensation. We believe that we consistently apply these judgments and estimates and that our financial statements and accompanying notes fairly represent our financial results for all periods presented. However, any errors in these judgments and estimates may have a material impact on our balance sheet and statement of operations. Critical accounting estimates, as defined by the Securities and Exchange Commission, are those that are most important to the portrayal of our financial condition and results of operations and require our most difficult and subjective judgments and estimates of matters that are inherently uncertain. Our critical accounting estimates include those regarding revenue recognition, the valuation of inventories, taxes and stock-based compensation.

Revenue Recognition. We recognize revenue when persuasive evidence of an arrangement exists, delivery has occurred, the price is fixed or determinable and collectibility of the resulting receivable is reasonably assured. Under these criteria, revenue from the sale of our products is generally recognized upon shipment according to our shipping terms, net of accruals for estimated sales returns and allowances based on historical experience. Sales to distributors are made under agreements allowing for returns or credits. We defer recognition of revenue on sales to distributors until products are resold by the distributor to the end-user. Distributors have stock rotation, price protection and ship from stock pricing adjustment rights, and we therefore defer recognition of revenue on sales to distributors until products are resold by the distributor. We are unable to reasonably estimate the inventory that could be returned pursuant to the stock rotation rights. In light of possible changes to sales prices resulting from price protection and price adjustment rights granted, we are unable to reasonably estimate possible changes and the resulting sales price to the distributor is not fixed or determinable until the final sale to the end user. Sales to consignment warehouses, who purchase products from us for use by contract manufacturers, are recorded upon delivery to the contract manufacturers.

The timing of recognizing revenues on product sales to distributors is dependent on receiving pertinent and accurate data from our distributors in a timely fashion. Distributors provide us monthly data regarding the product, price, quantity, and end customer for their shipments as well as the quantities of our products they have in stock at month end. In determining the appropriate amount of revenue to recognize, we use this data in reconciling differences between our estimate of their inventory levels and their reported inventories and shipment activities. If distributors incorrectly report their inventories or shipment activities, it could lead to inaccurate reporting of our revenues and income. As of March 31, 2012 and 2011, reconciling differences were not significant after appropriately accounting for goods-in-transit.

Valuation of Inventories. Inventories are stated at the lower of cost or market value, cost being determined on a weighted average basis. Our inventory write-down allowance is established when conditions indicate that the selling

price of our products could be less than cost due to physical deterioration, obsolescence, changes in price levels, or other causes. We consider the need to establish the allowance for excess inventory generally based on inventory levels in excess of 12 months of forecasted demand for each specific product. Inventory consists of finished goods at our premises or consignment warehouses, work in progress at our premises or our contract manufacturers and finished goods at distributors. Historically, it has been difficult to forecast customer demand especially at the part-number level. Many of the orders we receive from our customers and distributors request delivery of product on relatively short notice and with lead times less than our manufacturing cycle

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time. In order to provide competitive delivery times to our customers, we build and stock a certain amount of inventory in anticipation of customer demand that may not materialize. Moreover, as is common in the semiconductor industry, we may allow customers to cancel orders with minimal advance notice. Thus, even product built to satisfy specific customer orders may not ultimately be required to fulfill customer demand. Nevertheless, at any point in time, some portion of our inventory is subject to the risk of being materially in excess of our projected demand. Additionally, our average selling prices could decline due to market or other conditions, which creates a risk that costs of manufacturing our inventory may not be recovered. These factors contribute to the risk that we may be required to record additional inventory write-downs in the future, which could be material. In addition, if actual market conditions are more favorable than expected, inventory previously written down may be sold to customers resulting in lower cost of sales and higher income from operations than expected in that period.

Intangible Assets. Intangible assets are amortized over their estimated useful lives, generally on a straight-line basis over five to nine years. The Company reviews identifiable amortizable intangible assets for impairment whenever events or changes in circumstances indicate that the carrying value of the assets may not be recoverable. Determination of recoverability is based on the lowest level of identifiable estimated undiscounted cash flows resulting from use of the asset and its eventual disposition. Measurement of any impairment loss is based on the excess of the carrying value of the asset over its fair value.

Taxes. We account for income taxes under the liability method, whereby deferred tax assets and liabilities are determined based on the difference between the financial statement and tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to affect taxable income. We make certain estimates and judgments in the calculation of tax liabilities and the determination of deferred tax assets, which arise from temporary differences between tax and financial statement recognition methods. We record a valuation allowance to reduce our deferred tax assets to the amount that management estimates is more likely than not to be realized. If in the future we determine that we are not likely to realize all or part of our net deferred tax assets, an adjustment to deferred tax assets would be charged to earnings in the period such determination is made.

In addition, the calculation of tax liabilities involves inherent uncertainty in the application of complex tax laws. We record tax reserves for additional taxes that we estimate we may be required to pay as a result of future potential examinations by federal and state taxing authorities. If the payment ultimately proves to be unnecessary, the reversal of these tax reserves would result in tax benefits being recognized in the period we determine such reserves are no longer necessary. If an ultimate tax assessment exceeds our estimate of tax liabilities, an additional charge to provision for income taxes will result.

Authoritative guidance prescribes a comprehensive model for how a company should recognize, measure, present, and disclose in its financial statements uncertain tax positions that the company has taken or expects to take on a tax return (including a decision whether to file or not to file a return in a particular jurisdiction). Under this guidance, the financial statements will reflect expected future tax consequences of such positions presuming the taxing authorities' full knowledge of the position and all relevant facts, but without considering time values.

Stock Based Compensation. Under authoritative guidance, stock-based compensation expense recognized in the statement of operations is based on options ultimately expected to vest, reduced by the amount of estimated forfeitures.We chose the straight-line method of allocating compensation cost over the requisite service period of the related award in accordance with the authoritative guidance. We calculated the expected term based on the historical average period of time that options were outstanding as adjusted for expected changes in future exercise patterns, which, for options granted in fiscal 2012, 2011 and 2010 resulted in an expected term of approximately five years. We based our estimate of expected volatility on the estimated volatility of similar entities whose share prices are publicly available. The risk-free interest rate is based on the U.S. Treasury yields in effect at the time of grant for periods corresponding to the expected life of the options. The dividend yield is 0%, based on the fact that we have never paid dividends and have no present intention to pay dividends. Determining some of these assumptions requires significant judgment and changes to these assumptions could result in a significant change to the calculation of stock-based compensation in future periods.

Authoritative guidance requires cash flows, if any, resulting from the tax benefits from tax deductions in excess of the compensation cost recognized for those options (excess tax benefits) to be classified as financing cash flows.

As stock-based compensation expense recognized in the Consolidated Statement of Operations is based on awards ultimately expected to vest, it has been reduced for estimated forfeitures in accordance with authoritative guidance. We estimate forfeitures at the time of grant and revise the original estimates, if necessary, in subsequent periods if actual forfeitures differ from those estimates.

We have no stock-based compensation arrangements with non-employees except for stock options granted to non-employee directors.

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Off-Balance Sheet Arrangements

At March 31, 2012, we did not have any off-balance sheet arrangements or relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. Accordingly, we are not exposed to the type of financing, liquidity, market or credit risk that could arise if we had engaged in such relationships.

Recent Accounting Pronouncements

In June 2011, the Financial Accounting Standards Board (the "FASB") amended its guidance on the presentation of comprehensive income. Under the amended guidance, we have the option to present comprehensive income in either one continuous statement or two consecutive financial statements. A single statement must present the components of net income and total net income, the components of other comprehensive income and total other comprehensive income, and a total for comprehensive income. In a two-statement approach, we must present the components of net income and total net income in the first statement. That statement must be immediately followed by a financial statement that presents the components of other comprehensive income, a total for other comprehensive income, and a total for comprehensive income. We are also required to present on the face of its financial statements reclassification adjustments for items that are reclassified from other comprehensive income to net income in the statement(s) where the components of net income and the components of other comprehensive income are presented. The option under previous guidance that permits the presentation of components of other comprehensive income as part of the statement of changes in stockholders' equity has been eliminated. In December 2011, the FASB further amended its guidance to defer changes related to the presentation of reclassification adjustments indefinitely as a result of concerns raised by stakeholders that the new presentation requirements would be difficult for preparers and add unnecessary complexity to financial statements. The amendment (other than the portion regarding the presentation of reclassification adjustments which, as noted above, has been deferred indefinitely) becomes effective during the first quarter of our fiscal year ending March 31, 2013. Early adoption is permitted. The amendment will impact the presentation of our financial statements but will not impact our consolidated financial position, results of operations or cash flows.

In May 2011, the FASB amended its guidance to converge fair value measurement and disclosure guidance about fair value measurement under GAAP with International Financial Reporting Standards ("IFRS"). IFRS is a comprehensive series of accounting standards published by the International Accounting Standards Board. The amendment changes the wording used to describe many of the requirements in GAAP for measuring fair value and for disclosing information about fair value measurements. For many of the requirements, the FASB does not intend for the amendment to result in a change in the application of the requirements in the current authoritative guidance. The amendment became effective prospectively for our interim reporting period ended March 31, 2012. Implementation of the guidance did not have an impact on our consolidated financial position, results of operations or cash flows.

In January 2010, the FASB issued authoritative guidance for fair value measurements. This guidance now requires a reporting entity to disclose separately the amounts of significant transfers in and out of Level 1 and Level 2 fair value measurements and also to describe the reasons for these transfers. This authoritative guidance also requires enhanced disclosure of activity in Level 3 fair value measurements. The guidance for Level 1 and Level 2 fair value measurements became effective for our fiscal year ended March 31, 2010 and the guidance for Level 3 fair value measurement disclosures became effective for our interim reporting period ended June 30, 2011. Implementation of the guidance did not have an impact on our consolidated financial position, results of operations or cash flows as it is disclosure-only in nature.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Foreign Currency Exchange Risk. Our revenues and expenses, except those expenses related to our operations in Taiwan, including subcontractor manufacturing expenses, are denominated in U.S. dollars. As a result, we have relatively little exposure for currency exchange risks, and foreign exchange losses have been minimal to date. We do

not currently enter into forward exchange contracts to hedge exposure denominated in foreign currencies or any other derivative financial instruments for trading or speculative purposes. In the future, if we feel our foreign currency exposure has increased, we may consider entering into hedging transactions to help mitigate that risk.

Interest Rate Sensitivity. We had cash, cash equivalents, short term investments and long-term investments totaling $92.2 million at March 31, 2012. These amounts were invested primarily in money market funds, state and municipal obligations, corporate notes and certificates of deposit. The cash, cash equivalents and short-term marketable securities are held for working capital purposes. We do not enter into investments for trading or speculative purposes. Due to the short-term nature

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of these investments, we believe that we do not have any material exposure to changes in the fair value of our investment portfolio as a result of changes in interest rates. We believe a hypothetical 100 basis point increase in interest rates would not materially affect the fair value of our interest-sensitive financial instruments. Declines in interest rates, however, will reduce future investment income.

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Item 8. Financial Statements and Supplementary Data

GSI TECHNOLOGY, INC.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

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Report of Independent Registered Public Accounting Firm
To the Board of Directors and Stockholders of GSI Technology, Inc.:
In our opinion, the consolidated financial statements listed in the index appearing under Item 15(a)(1) present fairly, in all material respects, the financial position of GSI Technology, Inc. and its subsidiaries at March 31, 2012 and March 31, 2011, and the results of their operations and their cash flows for each of the three years in the period ended March 31, 2012 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. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of March 31, 2012, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements and financial statement schedule, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting under Item 9A. Our responsibility is to express opinions on these financial statements, on the financial statement schedule, and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included 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. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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

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

/s/ PricewaterhouseCoopers LLP
San Jose, California
June 4, 2012

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GSI TECHNOLOGY, INC.
CONSOLIDATED BALANCE SHEETS

	March 31, 2012	2011
	(In thousands, except share and per share amounts)	
ASSETS		
Cash and cash equivalents	$31,634	$25,952
Short-term investments	27,044	26,033
Accounts receivable, net	10,579	15,042
Inventories	16,725	21,380
Prepaid expenses and other current assets	8,108	5,575
Deferred income taxes	1,097	1,729
Total current assets	95,187	95,711
Property and equipment, net	12,806	13,545
Long-term investments	33,497	30,938
Other assets	1,627	1,723
Total assets	$143,117	$141,917
LIABILITIES AND STOCKHOLDERS' EQUITY		
Accounts payable	$5,490	$5,638
Accrued expenses and other liabilities	4,343	4,790
Deferred revenue	2,670	5,248
Total current liabilities	12,503	15,676
Income taxes payable	1,835	1,561
Total liabilities	14,338	17,237
Commitments and contingencies (Note 6)		
Stockholders' equity:		
Preferred stock: $0.001 par value authorized: 5,000,000 shares; issued and outstanding: none	—	—
Common Stock: $0.001 par value authorized: 150,000,000 shares; issued and outstanding: 27,617,942 and 28,649,033 shares, respectively	28	29
Additional paid-in capital	54,402	57,063
Accumulated other comprehensive income	88	83
Retained earnings	74,261	67,505
Total stockholders' equity	128,779	124,680
Total liabilities and stockholders' equity	$143,117	$141,917

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

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GSI TECHNOLOGY, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS

	Year Ended March 31,		
	2012	2011	2010
	(In thousands, except per share amounts)		
Net revenues	$82,540	$97,763	$67,558
Cost of revenues	45,891	53,009	38,342
Gross profit			