CATALYST SEMICONDUCTOR INC
Form 10-K
June 30, 2004

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SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-K

FOR ANNUAL AND TRANSITION REPORTS

PURSUANT TO SECTIONS 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

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

For the fiscal year ended May 2, 2004

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 0-21488

Catalyst Semiconductor, Inc.

(Exact name of Registrant as specified in its charter)

Delaware	**77-0083129**
(State or other jurisdiction of incorporation or organization)	*(I.R.S. Employer Identification No.)*

1250 Borregas Avenue, Sunnyvale, California 94089

(Address of Principal Executive Offices)

Registrant s telephone number, including area code: (408) 542-1000

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

NONE

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

Common Stock, $.001 par value

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

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

Indicate by checkmark whether registrant is an accelerated filer (as defined in Rule 12b-2 of the Act). Yes þ No o

The aggregate market value of voting stock held by non-affiliates of the registrant as of October 24, 2003, the last day of the registrant s most recently completed second quarter, was $82.3 million based upon the last sales price reported for such date on the Nasdaq National Market. For purposes of disclosure, shares of common stock held by persons who hold more than 5% of the outstanding shares of common stock and shares held by executive officers and directors of the registrant have been excluded in that such persons may be deemed to be affiliates. This determination is not necessarily conclusive.

The number of shares of Registrant s Common Stock outstanding as of June 15, 2004 was 16,431,705.

CATALYST SEMICONDUCTOR, INC.

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CATALYST SEMICONDUCTOR, INC.

EXPLANATORY NOTE

This report contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Words such as projected, expects, believes, intends and assumes and similar expressions are used to identi forward-looking statements. These statements are made based upon current expectations and projections about our business and the semiconductor industry and assumptions made by our management are not guarantees of future performance, nor do we assume any obligation to update such forward-looking statements after the date this report is filed. Our actual results could differ materially from those projected in the forward-looking statements for many reasons, including the risk factors listed in Part II, Item 7 Management s Discussion & Analysis of Financial Conditions and Results of Operations Certain Risks that May Affect Our Future Results and elsewhere in, or incorporated by reference into, this report.

PART I

Item 1. ***Business***

Overview

We design, develop and market a broad line of reprogrammable non-volatile memory products and analog and mixed-signal products. Our products are used by manufacturers of electronic products in a wide range of consumer, computing, communications, industrial and automotive applications. We target high volume markets for our cost effective, high quality semiconductor products. We have been a committed long term supplier of memory products even through periods of tight manufacturing capacity and cyclical market downturns. We are leveraging our extensive experience in high volume, reprogrammable memory products to develop complementary analog and mixed-signal products that offer our customers a more complete system solution. We supply semiconductor products in high volumes to our diverse customer base of more than 3,000 customers and shipped more than 100 million units in each of the last three fiscal quarters.

We outsource the fabrication of our products to third party foundries for a high quality, low cost and long term supply of our products. We focus our internal efforts on product design, testing and sales. In fiscal 2003, we strengthened and expanded the expertise of our research and development team by establishing our own development center in Bucharest, Romania and by hiring additional engineers in Romania and in our Sunnyvale, California headquarters. We continue to make substantial investments in research and development to advance our non-volatile memory products, as well as to broaden our product line of analog and mixed-signal products.

We incorporated in California in October 1985. In May 1993, we reincorporated in Delaware. Our principal executive offices are located at 1250 Borregas Avenue, Sunnyvale, California 94089, our telephone number is (408) 542-1000 and our website is www.catalyst-semiconductor.com. Information contained on or accessible through our website does not constitute a part of this report.

Our fiscal year ends on the Sunday closest to April 30 of each year. We refer to the fiscal year ended April 30, 2000 as fiscal 2000, the fiscal year ended April 29, 2001 as fiscal 2001, the fiscal year ended April 28, 2002 as fiscal 2002, the fiscal year ended April 27, 2003 as fiscal 2003 and the fiscal year ended May 2, 2004 as fiscal 2004. Fiscal 2005 will end on May 1, 2005. For presentation purposes only, we refer in this report to April 30 as the end of each fiscal year.

Industry Background

Semiconductor devices may be divided into three broad categories: analog, digital and mixed-signal. Analog products monitor and manipulate real world signals such as sound, light, pressure, motion, temperature and electrical current. Digital circuits, such as microprocessors, use threshold voltages which function as on and off switches, which are expressed in binary code as ones and zeros. The digital components process and

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manipulate the data while the analog components condition the inputs or signals. Mixed-signal devices incorporate both analog and digital functions into a single semiconductor device. In most cases, these mixed-signal devices convert analog signals to digital signals or vice versa, or these devices may be used to improve the performance of the specific analog application. Non-volatile memory devices require certain building blocks that have analog characteristics included within them in order to perform their memory functions.

Non-Volatile Memory Products

The principal distinguishing characteristic of non-volatile memory is that it does not require a continuous application of power to retain data while volatile memory, such as dynamic random access memory, or DRAM, requires continuous power. While non-volatile memory products are often considered digital semiconductor devices, these non-volatile memory devices incorporate certain high performance analog blocks. Electronic systems primarily use non-volatile memory to store critical data when the power to the system is turned off. Virtually all electronic systems that use a digital processor or controller, including personal computers, printers, cellular handsets, digital cameras, optical networks, wireless local area networks, digital set-top boxes and automotive systems, incorporate non-volatile memory products such as electrically erasable programmable read only memory, or EEPROM, and/or flash memory. Many electronic systems utilize a combination of volatile and non-volatile memory.

System manufacturers generally prefer non-volatile memory devices that can be reprogrammed efficiently in the system in order to achieve several important advantages over non-volatile memory devices that are not reprogrammable or which require physical removal for reprogramming. With reprogrammable memory, manufacturers can cost effectively change program codes in response to accelerated product cycles and changing market specifications. Reprogrammable memory greatly simplifies inventory management and manufacturing processes and allows the manufacturer to reconfigure or update a system either locally or remotely through a network connection. In addition, consumers use non-volatile memory devices that can be programmed and reprogrammed to store user selected system configurations in consumer electronics devices, such as phone numbers in mobile telephones. Major non-volatile memory classifications include EEPROM and flash.

EEPROM provides significant programming flexibility to system designers. This non-volatile memory can be erased and reprogrammed electrically within the system hundreds of thousands to millions of times and can be altered one byte or several bytes at a time. In an EEPROM device, each cell, which is the discrete area on the device in which one bit is stored, consists of two transistors, one to store data and one to permit the cell to be selected when erasing data. Serial EEPROM transmits data through a single input, output port and parallel EEPROM transmits data through multiple input output ports concurrently. In March 2004, Gartner Dataquest estimated the total market for EEPROM in 2003 was $686 million.

Flash provides significant programming flexibility to system designers at higher density than EEPROM. Although flash can be reprogrammed electrically within the system, the number of reprogramming cycles is generally less than EEPROM and only a memory block can be rewritten, not an individual byte. In flash, a block consists of an array of memory cells. Flash products can be manufactured with storage densities, transfer rates and data alterability comparable to DRAM and can achieve a relatively low manufacturing cost at higher densities. For low density memory used in high volume applications, flash is not cost effective relative to EEPROM. Because of its limitations and cost at low densities, flash is not used in certain system critical applications.

The EEPROM market is characterized by high unit volumes sold at relatively low per unit prices. The EEPROM market has a limited number of vendors. Each participant in the EEPROM market has relatively weak pricing power because of interchangeability of one vendor s parts for another s. EEPROM prices are largely a function of the demand for electronic devices in which they are incorporated, available memory manufacturing capacity, product availability and memory density. In light of these competitive dynamics, some suppliers have exited the EEPROM market, leaving fewer alternatives for original equipment manufacturer, or OEM, customers. Manufacturers customarily use flash and EEPROM to address different needs but often within the same electronic system. Since most consumer and industrial electronic devices

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continue to use EEPROM either separately or in conjunction with other memory, OEM customers want to develop relationships with memory vendors who are likely to be long term vendors of EEPROM and those vendors which are developing and supplying a broad range of products.

Analog and Mixed-Signal

The analog and mixed-signal market is generally broken into two major product categories depending on how the devices are used by system designers:

general purpose analog and mixed-signal products for standard designs; and

analog and mixed-signal application specific standard products, or ASSPs, for customized designs.

General purpose analog and mixed-signal products that perform a given function usually are interchangeable with standard components from another supplier. Similarly, in the memory market, most non-volatile memory components are general purpose or industry standard parts and are interchangeable with parts from other suppliers.

General purpose analog and mixed-signal products include power management products, which control and regulate the amount of power delivered to an electronic system. Power management products are critical to overall system performance and cost. These products include direct current to direct current, or DC to DC, converters, switching regulators, low drop out voltage regulators and voltage references. Suppliers of power management products are increasingly integrating discrete power management components into multi-function devices to reduce design time and lower system costs by consuming less board space and power.

ASSPs are a superior solution for systems that have special requirements, such as portability, size constraints or functionality. The relationship between customer and supplier tends to be more dynamic and intertwined in this market with greater reliance on each other. On one hand, the customer has to have enough trust in the supplier to take the risk of committing its supply chain to a single vendor. On the other hand, the supplier faces the risk of investing significant research and development resources to design and develop a customized solution with the uncertainty of the market acceptance of the customer s end product. Suppliers servicing the ASSPs market typically have greater pricing power and receive higher margins.

The analog and mixed-signal market is highly fragmented into many segments with numerous vendors serving one or more of the various segments. The general purpose analog and mixed-signal semiconductor market is characterized by long product cycles with a broad, diverse base of customers. As a result, general purpose analog and mixed-signal product prices tend to be more stable than those for non-volatile memory products. In April 2004, Gartner Dataquest estimated that the total general purpose analog and mixed-signal product market was $10.6 billion in 2003.

Our Competitive Strengths

We have nearly two decades of experience in the design, testing and sale of reprogrammable non-volatile memory products, including EEPROM and low density flash. We believe we have established a brand name that our OEM and distribution customers associate with cost effective, high quality and high value products supported by excellent customer service. These strengths have helped us grow in the competitive non-volatile memory market. On April 30, 2004, we completed our sixth consecutive fiscal year of profitability. We intend to leverage our OEM customer base and the design and operational expertise developed in our non-volatile memory products to increase our revenues from our non-volatile memory and analog and mixed-signal product offerings.

We believe the following are our key competitive strengths:

High Quality Design. We have invested and intend to continue to invest substantial resources in research and development to improve our memory, analog and mixed-signal products. To complement our Sunnyvale, California engineering capabilities, in 2003, we established our own design and development center in Bucharest, Romania. We previously used contract personnel in Romania but now have an integrated design organization. In addition, we have subsequently added engineers in both Romania and

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California. Through the development of our EEPROM products, we also routinely design and develop high performance analog and mixed-signal functions for use in our non-volatile memory products. As a result, our design personnel have extensive experience in designing high performance analog blocks, which we believe will enable us to expand our focus to the complementary analog and mixed-signal product market.

Expertise in High Volume, Low Cost Manufacturing. The markets for our non-volatile memory products are characterized by high unit volumes sold at competitive prices. To reduce cost, we are developing successive generations of our memory products scaled to smaller process geometries, such as our current efforts to transition a portion of our products to 0.50 micron and 0.35 micron, which is intended to result in reduced die sizes and lower cost per unit. We conduct a portion of our sort operations in our Sunnyvale, California headquarters and take other steps to maintain and improve the quality of our products. These efforts have improved the yield on our products. We use third party contractors for a majority of our manufacturing, packaging, testing and shipping activities in order to control our costs and to be able to respond quickly to customer requests.

Long Term, Established Foundry Relationships. We have worked with our primary foundry partner, Oki Electronic Industry Co., Ltd., or Oki, for more than 19 years. This long standing foundry relationship has enabled us to optimize our designs for Oki s high volume and high yield processes. To reduce our reliance on a single wafer foundry, we also developed our processes so that different fabrications facilities could easily replicate them. In 2000, we also began volume shipments of our products from X-FAB Texas, Inc., or X-FAB, which currently produces our analog and mixed-signal products and acts as a second fabrication facility for some of our non-volatile memory products.

Comprehensive EEPROM Product Line. We believe that we offer one of the most comprehensive lines of serial and parallel EEPROM products in the industry. Our EEPROM products support industry requirements and are available in a broad selection of densities and voltages. Our EEPROM product line includes a wide array of performance characteristics which electronic system manufacturers need, such as interfaces, memory densities, voltages and bus speeds.

Diverse End Markets and Applications. Through direct and indirect sales channels, we sell our products in a variety of end markets, including consumer, computing, communications, industrial and automotive. Our solutions are used in a broad array of applications within each of these markets, such as automotive systems, cordless telephones, digital cameras, digital video players, digital set-top boxes, mobile phones, optical networks, personal computers and wireless local area networks. Due to the diversity of our markets and applications, we are not dependent on any individual industry or end user product. In addition, we believe we have the opportunity to take advantage of the markets and growth in any of the industries we serve.

Strong Customer Base. We are one of the largest suppliers of EEPROM in the world and we have relationships with many customers including large OEMs, through direct sales and distributors. During fiscal 2004, we served more than 3,000 customers. Through our collaborations with OEM customers in an interactive product design and development process, we have established durable relationships, solidified our customer base and defined the next generation of our products. Consequently, we believe that we are well positioned to continue to sell our existing and future analog and mixed-signal products to these customers, which could use many of these products in conjunction with our memory products.

Our Strategy

We intend to continue to provide our customers with a reliable source of industry standard non-volatile memory products. We also intend to further improve our non-volatile memory products and become a systems knowledgeable partner to our customers by providing a broad range of standard and custom analog and mixed-signal products. Our strategy includes the following:

Strengthen and Expand EEPROM Product Offerings. We intend to continue to develop high performance EEPROM products and reduce our costs by continuing to migrate to smaller process

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geometries. We intend to continue to increase the breadth of our non-volatile memory offerings and continue to provide high quality, competitively priced products with higher data transfer speeds and a broad range of densities and voltages. As a result, we intend to strengthen our position in the EEPROM market.

Broaden Standard Analog and Mixed-signal Product Offerings. We have developed a range of industry standard analog and mixed-signal products that serve high volume markets. Leveraging our large OEM customer base and efficient, low cost manufacturing process, we intend to become a reliable, high volume, cost effective supplier of standard analog and mixed-signal products to existing and new OEM customers. We intend to continue to introduce additional industry standard analog and mixed-signal products to increase net revenues, address new applications and increase our portfolio of analog building blocks for internal reuse in other products, such as application specific analog and mixed-signal products. We reuse proven design blocks, which enables us to reduce the design and manufacturing risks associated with new products and assists us in reducing development times and in achieving higher reliability and manufacturing yields.

Expand Proprietary Analog and Mixed-signal Product Offerings. We have introduced a range of proprietary analog products, which often integrate analog elements with reprogrammable non-volatile memory, such as digital potentiometer products, or DPPs, and processor supervisors. We intend to continue to introduce additional embedded memory products and to leverage our non-volatile memory and analog design expertise. We intend to continue to have these products built for us by our foundry partners using our proprietary process technology, which supports both analog and non-volatile memory elements in a single manufacturing process technology. Some of our non-volatile memory customers, who include industry leading OEMs, are also beginning to purchase our standard analog products. We are now working with selected customers to develop more highly integrated, high value added products customized for specific applications. We are targeting selected applications in large segments, such as solid state illumination, which is lighting for displays, consumer electronic devices, automotive and other purposes.

We intend to implement our strategies by:

leveraging our design portfolio and ongoing research and development activities;

expanding engineering resources in low cost areas, such as our Bucharest, Romania design center;

expanding our design portfolio and making selective acquisitions of complementary companies or technologies;

using third party foundries to provide wafer fabrication for our products;

developing our processes in a manner that permits the manufacture of our products in the fabrication facilities of different semiconductor foundries; and

taking advantage of the flexible capacity and lower fixed costs of the outsourced manufacturing model.

Products

We use our expertise in non-volatile memory to develop a broad range of EEPROM products and selected flash products. In addition, we are expanding our focus to include analog and mixed-signal products.

Parallel and Serial EEPROM

We offer a broad range of serial EEPROM products compatible with the three popular industry standard bus interface protocols: the inter-integrated circuit, or I^2C, bus interface of Philips Electronics, the microwire interface protocol of National Semiconductor and the serial peripheral interface, or SPI, bus protocol of Motorola. Additionally, we offer four wire bus interface protocol type products, primarily for Japanese customers. We offer products in a wide variety of density from 1 kilobit, or Kbit, to 256 Kbit, and voltage ranges from 1.8 volts to 6.0 volts. Serial EEPROM products are used in many applications to store user

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reconfigurable data. Some of the more common applications are digital cameras, disk drives, digital video and compact disc players, cordless phones, laser printers, memory modules for computers, mobile phones, remote controls and various automotive applications.

We offer both standard 5.0 volt and 3.3 volt parallel EEPROM, the latter of which meets battery operated application requirements. We offer products with a broad range of densities, such as 16 Kbit to 512 Kbit densities. Parallel EEPROM provides faster transfer rates than serial EEPROM, which transfers data through a single port. Because of the higher number of drivers and packaging, parallel EEPROM is larger and more costly to manufacture than serial EEPROM and, accordingly, is used primarily in high performance applications. Parallel EEPROM is primarily used in applications such as point of sale terminals, industrial controllers, local area network adapters and telecommunication switches.

Flash Memory

We currently offer flash memory in a small number of densities. We offer Intel licensed flash memory devices in densities ranging from 512 Kbit to 2 megabit, or Mb. This family includes Intel licensed boot block and bulk erase technologies available in 1 Mb and 2 Mb densities.

Analog and Mixed-Signal

Although we have not received a substantial portion of our net revenues to date from analog and mixed-signal products, we have undertaken development programs and we are now beginning to release standard and ASSP products to the market. We believe that there is a substantial market opportunity for analog and mixed-signal products and have begun to leverage our design, development and sales skills to accomplish these objectives. Because applications for non-volatile memory incorporate microcontrollers or microprocessors, we have been developing products which would interface with the controllers in various applications such as power management, systems supervision and interface support.

Supervisory Products with EEPROM. We have introduced a family of microcontroller supervisory products, which combine serial EEPROM with the reset and watchdog functions required by many microcontrollers to ensure safe sustained operation and allow systems to recover more efficiently from power disruptions. These products integrate two functions in the same semiconductor to provide savings in printed circuit board space and component costs. Our initial products are designed for use by the automotive industry and for power metering functions. Currently, we offer 2 Kbit, 16 Kbit and 64 Kbit of EEPROM with embedded supervisory functions. Other memory products of other densities are under development. We believe that we are one of the few analog semiconductor companies with floating gate EEPROM technology, which is the basis of this family of products.

Supervisory Products without Memory. We have also introduced a family of multi-industry supervisory products without EEPROM memory, based on our patent pending floating gate technology, which replaces bandgap technology, allows low standby power and provides electronic system designers with the ability to program the critical threshold voltage after packaging, which reduces our inventory costs while providing higher precision to the OEM customer more cost effectively.

Digitally Programmable Potentiometers (DPP). We have introduced a number of solid state DPP products, which replace mechanical potentiometers used to fine tune and trim electronic circuitry in a variety of applications. DPP products are built using the same processes as our EEPROM products. We have released 35 DPP products to the market thus far. Our DPP products have been included in digital cameras and optical transceivers.

White LED Drivers. We have introduced several products intended to drive the white light emitting diodes, or LED, drivers used as backlights in color liquid crystal display, or LCD, screens in cell phones, digital cameras, MP3 music players, personal digital assistants, industrial instrumentation and home appliances. Color displays require more specialized LED drivers than monochrome displays. Our products tightly regulate the current to the LEDs to ensure the uniform brightness and color purity necessary for the clarity in viewing the color displays.

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DC to DC Converters. Converting one current voltage to another within an electronic system is a common requirement, particularly in battery powered applications where the power available from the batteries will decline over time and use. Our designs allow smooth operation of a system throughout the battery life. Our first generation of DC to DC converters are pin compatible with industry standard circuits.

I^2C Interface Input/ Output Expanders. As consumers demand greater functionality in consumer electronics products, such as cell phones, the input/output demands of those applications exceed those which can be economically incorporated into microcontrollers. Our Input/ Output Expanders support adding eight or 16 input/output ports to those of the microcontroller to use less circuit board space and at low cost. We also make LED dimmers which offload control of LED lighting from the microcontroller. These dimmers control up to 16 LEDs.

All of the products described above are, or are expected to be, available in environmentally friendly packages.

Customers and Markets

The following is a representative list by industry of our end customers:

Industry	Customer	Application
Automotive	Denso	powertrain control systems
Computing	Asustech	desktop computers; motherboards
	Hewlett-Packard	printers
	Infineon Technologies	dual in-line memory modules, or DIMMs
	Samsung	DIMMs
Consumer	LG Electronics	LCD monitors; digital video and compact disc players
	Lite-on	digital video and compact disc players
Telecommunications	CCT	cordless telephones
	VTech	cordless telephones

Sales and Marketing

The majority of our customers order our products through our manufacturers representatives, distributors and resellers. These manufacturers representatives, distributors and resellers also create demand for our products, generally focusing on OEM customers who are not directly served by our internal sales managers. For example, our distributors sell to OEM customers or those OEMs contract manufacturers.

As of April 30, 2004, we employed 24 people in our sales organization. In addition to our Sunnyvale, California headquarters facility, we have sales operations in Southern California, Illinois, California, China, England, Germany, Japan, South Korea and Taiwan. Our sales offices support both OEMs and manufacturers representatives, distributors and resellers. In addition, our Japanese operation works closely with Oki, one of our foundries, OEM customers and their contract manufacturers, as well as our Japanese manufacturers representatives, distributors and resellers.

Currently, we have eight distributors and one reseller in North and South America and a network of more than 28 distributors and seven resellers throughout Asia, Europe and Africa to support our international business. These firms work with our regional sales managers in discovering new opportunities, providing technical support and other value-added services.

We often seek to develop strategic relationships with major OEMs and other customers by providing a high level of customer support and rapid problem solving. Our product knowledge includes a broad range of non-volatile memory and analog and mixed-signal technology compatible with the common industry

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standards. We also seek to work closely with our customers to provide solutions to address an individual customer s needs.

Our marketing activities consist of several key components:

- targeted print advertising in trade, technical and business publications;
- online advertising on our website;
- cooperative marketing programs with manufacturers representatives, distributors and other resellers;
- participation in seminars and tradeshows; and
- direct mailings to both prospective and existing customers.

Research and Development

We have made and expect to continue to make substantial investments in research and development and to participate in the development of new and existing industry standards. As of April 30, 2004, our research and development staff consisted of 70 full time equivalent employees working primarily in Sunnyvale, California and Bucharest, Romania.

Our memory engineering group develops non-volatile memory products. Our analog and mixed-signal development group develops products with logic as well as analog circuitry contents. In connection with the development of our EEPROM products, we also routinely design and develop high performance analog and mixed-signal functions used in our non-volatile memory products. As a result, we have extensive experience in designing high performance analog blocks. Our technology development group develops advanced processes in cooperation with our foundries and also supports the design engineers with device modeling and characterization. Our computer aided design engineering group supports the design tools used by our design and layout engineers and converts the design data into mask shop usable format. Our test engineering group develops test programs for validating the electrical performance of our products in wafer and packaged form.

Intellectual Property

We rely on a combination of patents, copyrights and trade secrets to establish and protect our intellectual property rights. As of April 30, 2004, we owned 18 U.S. patents and have nine pending applications for additional U.S. patents. The expiration dates of our patents range from January 2008 to September 2021. As a result of the rapid changes in technology, the lives of these patents will likely last longer than the economic lives of the technologies they cover. We also have a number of trademarks. There can be no assurance that our pending patent or trademark applications will be allowed or that the issued or pending patents will not be challenged or circumvented by competitors. We also protect our numerous original mask sets under the copyright laws.

We also own a substantial body of proprietary techniques and trade secrets. We seek to protect our trade secrets and proprietary technology, in part, through confidentiality agreements with employees, consultants and other parties. There can be no assurance that these agreements will not be breached, that we will have adequate remedies for any breach or that our trade secrets will not otherwise become known to or independently developed by others. In addition, the laws of some foreign countries do not offer protection of our proprietary rights to the same extent as the laws of the United States, which is an increasing concern as more of our production is located in foreign countries.

We may become involved in patent or other intellectual property disputes or actions. From time to time, we receive letters alleging patent infringement or inviting us to take a license to other parties patents. We evaluate these letters on a case by case basis. Offers such as these may lead to litigation if we reject the opportunity to obtain the license or reject the other party s demands. Adverse determinations in any litigation could subject us to significant liabilities to third parties, require us to seek licenses from third parties and prevent us from manufacturing and selling our products. Any of these situations could have a material adverse effect on our business.

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Manufacturing

We have established close relationships with our foundry partners for our wafer fabrication in an effort to ensure stability in our supply of products and focus our internal efforts on product design and sales. We currently outsource our wafer fabrication to Oki and X-FAB. Our designs are manufactured utilizing processes developed jointly by us and Oki or X-FAB, as the case may be. Oki currently manufactures a majority of our high volume production. X-FAB currently manufactures our analog and mixed-signal products as well as some of our EEPROM products. We endeavor to develop our processes in a manner that permits the portability of our manufacturing processes. We currently purchase wafer supplies on a purchase order basis from Oki and X-FAB. We also have a die bank of wafers in order to be able to respond to customer orders quickly and to attempt to manage our exposure to changes in manufacturing capacity and wafer costs.

We have wafer sorting operations at our headquarters facility in Sunnyvale to control quality and improve yields and we also utilize a subcontractor in Japan for this purpose. We perform circuit assembly and testing primarily through our subcontractors located in Southeast Asia. In the assembly process, the wafers are separated into individual die, which are then assembled into packages. The packaged devices are further tested and inspected pursuant to our quality assurance program prior to shipment to our customers. The majority of our assembly and test services are provided in Bangkok, Thailand by NS Electronic Bangkok, or NSEB, and Millennium Microtech Holding Corporation; in the Philippines by Orient Semiconductor Electronics, Inc., or OSEP, and in China by ChipPAC Limited. We also subcontract certain production planning, product engineering, shipping and tape and reel activities to Trio Tech International, NSEB and OSEP.

Competition

The semiconductor industry is competitive and has been characterized by price competition, manufacturing capacity constraints and product availability constraints. We compete with major domestic and international semiconductor companies, many of which have substantially greater financial, technical, marketing, distribution and other resources.

Our non-volatile memory products, such as EEPROM devices, compete on the basis of product performance, price, product availability and customer service. We believe that we compete successfully with respect to each of these competitive factors. Price competition is significant and is expected to continue. We believe our principal competitors for our EEPROM products currently include Atmel, STMicroelectronics and Microchip Technology.

We manufacture low density flash memory products, which represent a small subsegment of the flash memory market. This subsegment has been characterized by reduced demand for low density memory, which has resulted in lower product availability and higher cost, due to the shift by most customers to the larger flash memory sizes that we do not offer. Our key competitors for low density or similar flash memory products include Silicon Storage Technology and Integrated Silicon Solution.

We currently compete in the analog and mixed-signal products on the basis of price, product performance, product availability and customer support. The analog and mixed-signal industry is highly fragmented with competition varying with the applicable segment and subsegments, including: Maxim Integrated Products, Linear Technology, Intersil, Fairchild Semiconductor, National Semiconductor and Texas Instruments.

Employees

As of April 30, 2004, we had a total of 130 employees worldwide. Our employees are also supported in part by our subcontracting of certain other operations and manufacturing activities to approximately 102 contract employees located in Thailand and the Philippines. Our future success will depend on our ability to attract, train, retain and motivate highly qualified employees. Our employees are not represented by any collective bargaining organization or labor unions. We have never experienced any work stoppage and we believe that our employee relations are favorable.

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Executive Officers

Set forth below is certain information as of April 30, 2004, regarding each of our executive officers:

Name	Age	Principal Occupation
Gelu Voicu	54	President, Chief Executive Officer and Director
Thomas E. Gay III	55	Vice President of Finance and Administration and Chief Financial Officer
Sorin Georgescu	52	Vice President of Technology Development
Irvin W. Kovalik	66	Vice President of Sales
George Smarandoiu	57	Vice President of Product Design
Barry H. Wiley	67	Vice President of Corporate Marketing

Mr. Voicu has served as our president and chief executive officer and as a director since October 2002. From August 2002 to October 2002, he served as our executive vice president and chief operating officer. From April 1998 to August 2002, he served as our vice president of engineering and manufacturing. From July 1995 to April 1998, Mr. Voicu was our director of flash product lines. Mr. Voicu holds an M.S. in Electrical Engineering from the Polytechnical Institute, Bucharest, Romania.

Mr. Gay has served as our vice president of finance and administration and chief financial officer since May 1998. From August 1997 to May 1998, he was the controller of Wireless Access, Inc., a communications device manufacturing company. From April 1993 to May 1994, he was our controller and, from July 1994 to November 1996, he was a contract accountant for us. From July 1988 to July 1992, Mr. Gay was controller of Sanmina Corporation, a contract manufacturing company. Mr. Gay holds a B.S. in Accounting from San Diego State University.

Mr. Georgescu has served as our vice president of technology development since October 2001. From October 1998 to October 2001, he was director of process development at Tripath Technology, Inc., a semiconductor manufacturer. From April 1998 to October 1998, he was our vice president of technology. From October 1997 to April 1998, Mr. Georgescu was an engineering manager at Sandisk Corporation, a semiconductor manufacturer. From August 1994 to October 1997, he was our director of process development. Mr. Georgescu holds an M.S. in Electrical Engineering from the Polytechnical Institute, Bucharest, Romania.

Mr. Kovalik has served as our vice president of sales since October 1998. From January 1998 to October 1998, he was director of strategic sales for Alliance Semiconductor, Inc., a semiconductor company. From January 1997 to January 1998, he was vice president of sales for NovaWeb Technologies, Inc., a modem manufacturer. From September 1995 to January 1997, Mr. Kovalik was director of strategic sales for Sequel, Inc., a semiconductor company. From June 1992 to June 1995, he was our vice president of sales. Mr. Kovalik holds a B.S. in Electrical Engineering for the University of Illinois.

Dr. Smarandoiu has served as our vice president of design since December 2002. From 1992 to 2002, he served in a variety of roles at Atmel Corporation, a semiconductor company, most recently as director of mixed-mode product development. Dr. Smarandoiu holds a Master of Engineering and Doctor of Engineering from the University of California, Berkeley.

Mr. Wiley has served as our vice president of corporate marketing since November 2000. From September 1999 to November 2000, he was our vice president, programmable analog business unit. From July 1997 to September 1999, he was vice president marketing and sales for IMP, Inc., a semiconductor manufacturer. Mr. Wiley holds a B.A. in Physics from the University of California, Berkeley, an M.B.A. from the Harvard School of Business Administration and an M.A. in Physics from the University of Southern California.

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Website Postings

We make our annual report on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K, and amendments to such reports, available free of charge through our website as soon as reasonably practicable after we electronically file such material with, or furnish it to, the United States Securities and Exchange Commission, at the following address: *www.catalyst-semiconductor.com*. The information in or that can be accessed through our website is not part of this report.

Item 2. ***Properties***

Our principal administrative, sales, marketing, research & development and sort facility is located in a building of approximately 42,500 square feet in Sunnyvale, California. The facility is leased through July 2006 with an option to renew. Our research and development facility in Romania, consisting of 8,300 square feet, is leased though December 2005. We also have office space in Illinois, China, Japan, Korea and Taiwan. We believe that our existing facilities are adequate to meet our current needs and that additional or alternative space will be available in the future on commercially reasonable terms.

Item 3. ***Legal Proceedings***

We are not party to any legal proceedings.

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

No matters were submitted to a vote of security holders during the fourth quarter of the fiscal year ended April 30, 2004.

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PART II

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

Common Stock Market Prices and Dividends

Our common stock is quoted on the Nasdaq National Market under the symbol CATS. The following table sets forth, for the periods indicated, the high and low sale prices per share of our common stock as reported on the Nasdaq National Market for the period from September 3, 2003 to the present and on the Nasdaq SmallCap Market for the period prior to September 3, 2003.

	Price Range	
	High	**Low**
Fiscal year ended April 30, 2003		
First Quarter	$3.48	$2.32
Second Quarter	2.77	1.95
Third Quarter	2.81	2.14
Fourth Quarter	2.68	2.05
Fiscal year ended April 30, 2004		
First Quarter	$6.50	$2.51
Second Quarter	7.99	4.60
Third Quarter	8.98	6.30
Fourth Quarter	9.75	7.08

On June 28, 2004, the reported last sale price of our common stock on the Nasdaq National Market was $6.75 per share. As of April 30, 2004, there were approximately 147 holders of record of our common stock, excluding those persons holding shares in street or nominee name. The actual number of our stockholders is greater than this number of holders of record.

Dividend Policy

We have never declared or paid any cash dividends on our common stock or other securities. We currently expect to retain future earnings for use in the operation and expansion of our business and do not anticipate paying cash dividends in the foreseeable future.

Purchases of Our Stock

The following table sets forth certain information regarding purchases by us of shares of our common stock during the fourth quarter of fiscal 2004.

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs(1)	Maximum Number of Shares that may yet be Purchased Under the Plans or Programs
February 2, 2004 - February 29, 2004				
March 1, 2004 - March 28, 2004				
March 29, 2004 - April 30, 2004	600,000(2)	$6.77		
Total	600,000	$6.77		

(1) In September 2001, our board of directors authorized a program for the open market purchase of up to an aggregate 1.5 million shares of our common stock, and in March 2003 increased the authorized limit to an aggregate of 2 million shares. Our most recent purchases under this program were 74,000 shares in the first quarter of fiscal 2004 and, to date, we have purchased an aggregate 1,544,100 shares under the

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program. A maximum of 455,900 shares may yet be repurchased under the program. See the section entitled Common Stock Repurchase Plan in Item 7 of this annual report for further information on this program.

(2) Represents shares purchased from Elex N.V. on April 22, 2004.

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

The selected consolidated financial data set forth below should be read together with Management s Discussion and Analysis of Financial Condition and Results of Operations and the consolidated financial statements and notes thereto in this report. Historical results are not necessarily indicative of results to be expected in the future.

	Years Ended April 30,				
	2004	2003	2002	2001	2000
	(In thousands, except per share data)				
Consolidated Statements of Operations Data:					
Net revenues	$63,538	$48,221	$42,791	$98,015	$49,527
Cost of revenues	37,375	28,396	27,158	50,863	26,837
Gross profit	26,163	19,825	15,633	47,152	22,690
Research and development	7,130	5,223	4,380	4,543	2,846
Selling, general and administrative	11,453	10,020	10,652	13,490	9,042
Income from operations	7,580	4,582	601	29,119	10,802
Interest income (expense), net	379	382	663	793	(492)
Income before income taxes	7,959	4,964	1,264	29,912	10,310
Income tax provision (benefit)	(1,408)	(1,354)	494	2,560	300
Net income(1)	$ 9,367	$ 6,318	$ 770	$27,352	$10,010
Net income per share:					
Basic	$ 0.57	$ 0.38	$ 0.04	$ 1.63	$ 0.69
Diluted	$ 0.48	$ 0.34	$ 0.04	$ 1.36	$ 0.50
Weighted average common shares:					
Basic	16,567	16,721	17,829	16,744	14,552
Diluted	19,411	18,339	20,439	20,169	19,974

(1) In fiscal 2004 and fiscal 2003, our net income was favorably impacted by $4.7 million and $1.9 million, respectively, due to the reversal of our tax valuation allowance.

	April 30,				
	2004	2003	2002	2001	2000
	(In thousands, except per share data)				
Consolidated Balance Sheet Data:					
Cash, cash equivalents and short-term investments	$33,809	$27,906	$26,295	$30,534	$ 6,205
Total working capital	46,338	39,017	36,180	38,516	8,709
Total assets	66,865	50,588	47,924	53,178	22,943

Total current liabilities	12,877	8,235	9,296	12,073	12,378
Total long-term liabilities and capital lease obligations			3,262	1,992	64
Stockholders equity	53,988	42,353	35,366	39,113	10,501

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

EXPLANATORY NOTE

The following discussion should be read together with the consolidated financial statements and notes thereto included in this annual report on Form 10-K. Certain statements in this Management s Discussion and Analysis of Financial Condition and Results of Operations are forward-looking statements. These forward-looking statements contained herein are based on current expectations and involve various risks and uncertainties that could cause actual results to differ materially from those expressed in the forward-looking statements. See the risks and uncertainties identified in Certain Risks that May Affect Our Future Results below and in the documents filed by us from time to time with the Securities and Exchange Commission. We undertake no obligation to revise or update publicly any forward-looking statements for any reason.

Overview

We design, develop and market a broad line of reprogrammable non-volatile memory products and analog and mixed-signal products. Our products are used by manufacturers of electronic products in a wide range of consumer, computing, communications, industrial and automotive applications. We generally target high volume markets for our cost effective, high quality products. We have been a committed long term supplier of memory products even through periods of tight manufacturing capacity and cyclical market downturns.

The market for our non-volatile memory is competitive and market participants have relatively weak pricing power. Although average selling prices of our non-volatile memory products have declined over time, prices are sensitive to conditions in our OEM customers target markets. For example, the average selling prices for most of our EEPROM products weakened initially but ultimately increased in fiscal 2004, whereas the market conditions improved and average selling prices for our low density flash increased consistently during the same period. In general, we expect the average selling prices for a given memory product to decline in the future, primarily due to market competition, product availability and manufacturing capacity.

We are leveraging our extensive experience in high-volume, reprogrammable memory products to develop complementary analog and mixed-signal products that offer our customers a more complete system solution. In fiscal 2003, we strengthened and expanded the expertise of our research and development team by establishing our own development center in Bucharest, Romania and by hiring additional engineers in Romania and in our Sunnyvale, California headquarters. We continue to make substantial investments in research and development to advance our non-volatile memory products, as well as develop a broader solution with our line of analog and mixed-signal products. Although analog and mixed-signal products comprised 2.9% of net revenues in the fourth quarter of fiscal 2004, we expect net revenues from analog and mixed-signal products to comprise a larger portion of our net revenues in the future.

Our business is less capital intensive than traditional semiconductor companies since we outsource to third parties the manufacturing, assembling and testing of our products. We use Oki and X-FAB for foundry services and primarily use NSEB for assembly and test services. We strive to maintain long term relationships with our suppliers to ensure stability in our supply of products at a low cost. In addition, in an effort to alleviate any potential wafer capacity constraints, we maintain a supply of wafers in a die bank for selected high volume products.

We market and sell our products directly through our sales force and indirectly through manufacturers representatives, distributors and resellers. Indirect sales were a majority of our total sales in fiscal 2004 and in fiscal 2003. Our OEM customer base, including end customers of our manufacturers representatives, distributors and resellers, is relatively diverse and during fiscal 2004 consisted of more than 3,000 customers. We have approximately 40 manufacturers representatives, distributors and resellers but the only party that accounted for more than 10% of our net revenues in fiscal 2004 was ALR Company Limited, a Chinese reseller, which comprised of approximately 11% of our net revenues.

Our sales are generated by purchase orders and are typically shipped within a few weeks of receiving the order. Since industry practice allows customers to reschedule or cancel orders on relatively short notice, we do

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not use backlog to forecast our future net revenues. Cancellations of customer orders or distributor price protection and stock rotation rights, both industry standards, could result in the loss of future net revenues without allowing us sufficient time to reduce our inventory and operating expenses.

Sales to customers outside the United States comprised the vast majority of our net revenues in recent periods. This increasing non-United States growth in net revenues was consistent with the current trend towards outsourcing of the manufacturing process, particularly to companies located in Asia. Substantially all sales of our products are denominated in U.S. dollars, minimizing the effects of currency fluctuations.

Description of Operating Accounts

Net Revenues. Net revenues consist of product sales, net of returns and allowances.

Gross Profit. Gross profit is net revenues less cost of revenues and is affected by a number of factors, including competitive pricing, product mix, foundry pricing and yields. Cost of revenues consists primarily of costs of manufacturing, assembly and testing of our products as well as compensation and associated costs related to manufacturing support, logistics and quality assurance personnel. It also can include, on occasion, adjustments to inventory valuations based on demand and average selling prices expected in future periods.

Research and Development. Research and development expense consists primarily of compensation and associated costs for engineering, technical and support personnel, contract engineering services, depreciation of equipment and cost of wafers and mask sets used to evaluate new products and new versions of current products.

Selling, General and Administrative. Selling, general and administrative expense consists primarily of compensation and associated costs for sales, marketing and administrative personnel, commissions, promotional activities, professional fees and director and officer insurance.

Proposed Changes in Accounting for Stock-Based Compensation

We may be required to expense stock options and other share-based payments to employees and directors, which would mean that we would record a significant charge to earnings. On March 31, 2004, the FASB issued an exposure draft No. 1102-100, *Proposed Statement of Financial Accounting Standards Share-Based Payment,* effective for fiscal periods beginning after December 15, 2004. This exposure draft outlines a methodology for the accounting treatment of stock options and certain other share-based payments. It requires these payments to be recorded as an operating expense. It will supersede SFAS 123, which allows for disclosure of this expense on a pro forma basis in notes to consolidated financial statements. This pro forma compensation expense was $2.8 million for fiscal 2004. Adoption of this accounting standard will have a material adverse impact on our consolidated financial statements. We are currently evaluating our stock-based compensation programs to determine what actions we may elect to take to reduce this potential charge if this exposure draft is enacted. If we elect not to issue stock options at the levels we have in the past, we believe we will face a more difficult time in attracting and retaining the talented employees. We believe it is likely that any expenses resulting from the implementation of the exposure draft would be included in the income statement line item where the related salary cost for the applicable employee or consultant is recorded, and that as a result, it may be difficult for investors to conduct period to period comparisons of our expenses if this exposure draft is adopted.

Critical Accounting Estimates

The preparation of our consolidated financial statements and related disclosures in conformity with generally accepted accounting principles in the United States requires us to make estimates and judgments that affect the amounts reported in our financial statements and accompanying notes. We evaluate our estimates and judgments based on historical experience and apply them on a consistent basis. We believe that such consistent application results in financial statements and accompanying notes that fairly represent our financial condition, operating results and cash flows for all periods presented. However, any factual errors or

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errors in these estimates and judgments may have a material impact on our financial conditions, operating results and cash flows.

Recognition of Revenues

We generally recognize revenues as products are shipped if all of the following criteria are met:

- we have evidence that an arrangement exists;
- we have delivered the products;
- we have performed the services, if any;
- the sales price is fixed or determinable;
- we believe that collection of the resulting receivable is reasonably assured; and
- we can reasonably estimate product returns.

We sell products directly to OEM customers and indirectly through manufacturers representatives, distributors and resellers. We recognize revenues upon delivery to OEM customers and manufacturers representatives, distributors and resellers who have no, or limited, product return rights and no price protection rights. We deem that delivery occurs when legal title and the risk of loss transfers to the customer. Delivery is generally defined by the customers shipping terms, as stated in the related purchase order. If the customers purchase orders do not define the shipping terms, the shipping terms will be Ex-Works as defined in our invoice. We record an estimated allowance for returns from OEM customers and manufacturers representatives, based on a percentage of our revenues. This estimate is based on historical averages.

We sell to some of our distributors under agreements which provide for product return and price protection rights. These agreements generally permit the distributor to return up to 10% by value of the total products that the distributor has purchased from us in a specified six month period. We defer recognition of revenues until the time the distributor sells the product to the end customer, at which time the sales price becomes fixed. On a monthly basis, we receive point of sales information from each distributor. Using this information, we determine the amount of revenues to recognize. For distributors who have product return rights, we also record an inventory reserve to address the cost of products we anticipate that we will not be able to resell after their return by the distributors. For distributors who have price protection rights, distributors may take credits immediately and in general, we process the credits one or two months after the credit is taken by the distributor. We record a reserve to cover the estimated liability of those unprocessed credits. We re-evaluate our policies periodically and no less often than annually.

Inventory Valuation

We value our inventory at the lower of standard cost or net realizable value. Standard cost approximates actual cost on a first-in, first-out basis. We routinely evaluate the value and quantities of our inventory in light of the current market conditions and market trends and we record reserves for quantities in excess of demand, cost in excess of market value and product age. Our analysis may take into consideration historical usage, expected demand, anticipated sales price, new product development schedules, the effect new products might have on the sales of existing products, product age, customer design activity, customer concentration and other factors. Our forecasts for our inventory may differ from actual inventory use and the time we have held finished goods in inventory. The lives of our products are usually long and obsolescence has not been a significant factor historically in the valuation of our inventories.

We maintain inventory reserves for quantities in excess of demand equal to the cost of inventory that exceeds expected demand for approximately the next 12 months. If market conditions are less favorable than those we estimate, we may be required to write down inventory. If we overestimate the future selling prices, we will incur additional losses when the inventory is sold for a lower price or when we establish additional reserves to cover the even lower estimated sales price. Once established, we do not reverse inventory reserves until the associated inventory has been sold or physically scrapped.

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Allowance for Doubtful Accounts

We estimate the collectibility of our accounts receivable at the end of each reporting period. We analyze the aging of accounts receivable and the bad debt history, payment history, customer concentration, customer credit worthiness and current economic trends when evaluating the adequacy of the allowance for doubtful accounts. We maintain an allowance for doubtful accounts, which is created by charges to selling, general and administrative expenses. Our accounts receivable balance was $12.5 million, net of allowance for doubtful accounts of $138,000, as of April 30, 2004.

Income Taxes

As part of the process of preparing our consolidated financial statements we are required to estimate our income taxes in each of the jurisdictions in which we operate. This process involves estimating our current tax exposure and assessing temporary differences resulting from differing treatment of items, such as deferred revenues, for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which are included on our balance sheet on a net basis. We then assess the likelihood that our deferred tax assets will be recovered from future taxable income and to the extent we establish a valuation allowance or increase this allowance in a period, we include an expense in the tax provision in the statement of operations.

We make significant judgments in determining our provision for income taxes, our deferred tax assets and any valuation allowance recorded against our net deferred tax asset. As of April 30, 2004, our gross deferred tax assets, consisting primarily of net operating loss carryforwards, tax credit carryforwards and nondeductible reserves and accruals, were valued at $9.1 million and our valuation allowance was zero.

In fiscal 2004, we concluded that all of our deferred tax assets will be realizable, based on available objective evidence and our recent history of net income before taxes. Accordingly, we reversed the $8.6 million valuation allowance that we had previously established. When the valuation allowance was reversed, $4.7 million benefited net income, while $3.9 million was credited to additional paid in capital. The amount credited to additional paid in capital was attributable to deferred tax assets associated with employee stock options.

Results of Operations

The following table sets forth the percentage of net revenues for certain items in our consolidated statements of operations for the periods indicated::

	Years Ended April 30,		
	2004	**2003**	**2002**
Net revenues	100.0%	100.0%	100.0%
Gross profit	41.2	41.1	36.5
Operating expenses:			
Research and development	11.2	10.8	10.2
Selling, general and administrative	18.0	20.8	24.9
Income from operations	12.0	9.5	1.4
Interest income, net	0.5	0.8	1.5
Income before income taxes	12.5	10.3	2.9
Income tax provision (benefit)	(2.2)	(2.8)	1.1
Net income	14.7%	13.1%	1.8%

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The following table sets forth net revenues (in thousands) and percentage of net revenues by product group:

	Years Ended April 30,					
	2004		2003		2002	
EEPROM	$56,239	88.5%	$41,690	86.5%	$35,456	82.9%
Flash	5,988	9.4	5,786	12.0	6,907	16.1
Analog and mixed-signal	1,311	2.1	745	1.5	428	1.0
Net revenues	$63,538	100.0%	$48,221	100.0%	$42,791	100.0%

Comparison of the Fiscal Year Ended April 30, 2004 and 2003

Net Revenues. Our net revenues increased $15.3 million, or 31.8%, to $63.5 million for fiscal 2004 from $48.2 million for fiscal 2003. The increase in net revenues was primarily due to the increased sales volume and shift in product mix of our EEPROM product line, for which net revenues increased $14.5 million, primarily from the growth in our inter-integrated circuit, or I^2C, product line. Our flash product revenues continued to decline as a percentage of net revenues but increased slightly in absolute dollars in fiscal 2004 as a result of increased average selling prices and increased sales volume, especially in the last quarter of fiscal 2004 as we began selling to new OEM customers in Europe. Our analog and mixed-signal product revenues increased as we introduced more products to market and established product traction with our existing OEM customer base.

Sales to customers outside the United States represented approximately 88% of net revenues in fiscal 2004 as compared to 80% of net revenues in fiscal 2003.

Gross Profit. Gross profit increased $6.3 million, or 32.0%, to $26.2 for fiscal 2004 from $19.8 million for fiscal 2003. Gross margin, the result of gross profit divided by net revenues, was 41.2% for fiscal 2004 and 41.1% for fiscal 2003. The $6.3 million improvement in gross profit in fiscal 2004 was primarily due to higher sales volume, lower average costs and greater benefit from net movements in inventory reserves. This improvement was offset by lower average selling prices and a $1.4 million charge relating to a one-time payment we made to the Philips Corporation in settlement of disputed royalty obligations under a license agreement. In fiscal 2004 and fiscal 2003, charges to inventory reserves were $853,000 and $2.7 million, respectively. The sales of previously reserved inventory reduced cost of revenues by $2.0 million for fiscal 2004 and $3.1 million for fiscal 2003. The net impact of movements in inventory reserves was an improvement in gross profit of $1.1 million in fiscal 2004 and of $495,000 in fiscal 2003.

Research and Development. Research and development expense increased $1.9 million, or 36.5%, to $7.1 million for fiscal 2004 from $5.2 million for fiscal 2003. As a percentage of net revenues, research and development expense was 11.2% in fiscal 2004 and 10.8% in fiscal 2003. The increase in research and development expense in fiscal 2004 was primarily attributable to an increase in personnel related expenses, including an increase in headcount. Additionally, there was a $312,000 increase in the depreciation and amortization of software, equipment and mask sets, which were purchased for development purposes. As of April 30, 2004, we employed 70 people in research and development activities, compared to 55 employees as of April 30, 2003.

Selling, General and Administrative. Selling, general and administrative expense increased $1.4 million, or 14.3%, to $11.5 million for fiscal 2004 from $10.0 million for fiscal 2003. As a percentage of net revenues, selling, general and administrative expense was 18.0% in fiscal 2004 and 20.8% in fiscal 2003. The increase in absolute dollars was primarily attributable to a $886,000 increase in sales and marketing personnel related expenses, an increase in commissions paid to outside representatives of $191,000 and an increase of $213,000 for freight expense on higher shipping volume.

Net Interest Income and Expense. We earned net interest income of $379,000 in fiscal 2004 compared to net interest income of $382,000 in fiscal 2003. Our rate of return on our average balance of cash, cash

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equivalents and short-term investments was approximately 1.2% in fiscal 2004 and approximately 1.4% in fiscal 2003.

Income Tax Provision (Benefit). The effective income tax rate was a benefit of 17.7% in fiscal 2004, as compared to a benefit of 27.3% in fiscal 2003. The difference between our fiscal 2004 and fiscal 2003 effective tax rates was primarily attributable to the reversal of our valuation allowance recorded against our net deferred tax asset.

Comparison of the Fiscal Year Ended April 30, 2003 and 2002

Net Revenues. Our net revenues increased $5.4 million, or 12.7%, to $48.2 million for fiscal 2003 from $42.8 million for fiscal 2002. The increase in net revenues was primarily due to a $6.2 million increase in net revenues for our EEPROM products. This increase was offset by a decline in net revenues for our flash products due to deteriorating market conditions for the lower density flash products that we produce. Net revenues from our analog and mixed-signal products increased as we began to offer a greater number of products for sale.

Sales outside the United States represented approximately 80% of net revenues in fiscal 2003 as compared to 71% of net revenues in fiscal 2002. The increase in sales outside the United States was primarily attributable to increased sales in Japan and Europe.

Gross Profit. Gross profit increased $4.2 million, or 26.8%, to $19.8 million for fiscal 2003 from $15.6 million for fiscal 2002. Gross margin was 41.1% for fiscal 2003 and 36.5% for fiscal 2002. The $4.2 million improvement in gross profit in fiscal 2003 was primarily due to higher sales volume and lower costs, and a greater benefit from net movements in inventory reserves. Charges to inventory reserves were $2.7 million for fiscal 2003 and $2.1 million for fiscal 2002. The sales of previously reserved inventory reduced cost of revenues by $3.1 million for fiscal 2003 from $2.0 million for fiscal 2002. The net impact on inventory reserves was an improvement in gross profit of $495,000 for fiscal 2003 and a decrease in gross profit of $72,000 for fiscal 2002.

Research and Development. Research and development expense increased $843,000, or 19.2%, to $5.2 million for fiscal 2003 from $4.4 million for fiscal 2002. As a percentage of net revenues, research and development expense was 10.8% for fiscal 2003 and 10.2% for fiscal 2002. The increase was primarily attributable to a $690,000 increase in personnel related expenses and a $97,000 increase in the depreciation of software and equipment purchased for development purposes.

Selling, General and Administrative. Selling, general and administrative expense declined by $632,000, or 5.9%, to $10.0 million for fiscal 2003 from $10.7 million for fiscal 2002. As a percentage of net revenues, selling, general and administrative expense was 20.8% for fiscal 2003 and 24.9% for fiscal 2002. The decrease was primarily attributable to a $416,000 decrease in commissions paid to outside representatives and a $200,000 decrease in bad debt expense.

Net Interest Income and Expense. We earned net interest income of $382,000 in fiscal 2003 compared to net interest income of $663,000 in fiscal 2002. Our rate of return on our average balance of cash, cash equivalents and short-term investments was approximately 1.4% in fiscal 2003 and approximately 2.3% in fiscal 2002.

Income Tax Provision (Benefit). The effective income tax rate was a benefit of 27.3% in fiscal 2003, as compared to a provision of 39.1% in fiscal 2002. The difference between our fiscal 2003 and fiscal 2002 effective tax rates was primarily attributable to the reversal in fiscal 2003 of a portion of our valuation allowance recorded against our net deferred tax asset.

Liquidity and Capital Resources

At April 30, 2004, we had cash, cash equivalents and short-term investments of $33.8 million. Our historical sources of cash and capital expenditures have come from our operating activities. In fiscal 2003, we began to invest our excess cash in short-term financial instruments to generate interest income. These

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instruments are U.S. government debt securities, the majority of which have maturities that are less than one year. They are highly liquid and can be converted to cash at any time. They are classified as current assets in the balance sheet but are not considered cash and cash equivalents and are therefore excluded from our analysis of changes to cash and cash equivalents in our consolidated statement of cash flows included in this Form 10-K.

Net Cash from Operating Activities

In fiscal 2004, we had operating cash flows of $10.7 million, which resulted from net income of $9.4 million, adjusted for non-cash charges including depreciation and amortization of $1.4 million, additions to inventory reserves of $853,000, a reduction of gross inventories of $2.6 million, an increase in accounts payable of $1.3 million primarily due to the timing and amount of inventory purchases, an increase in accrued expenses and other liabilities of $891,000 related primarily to the tax provision and an increase of $2.7 million for deferred gross profit on distributor sales due to increased distributor inventories. These increases were partially offset by releases of inventory reserves of $2.0 million resulting from shipments of previously reserved inventory and an increase in gross accounts receivable of $4.7 million due to increased shipments.

In fiscal 2003, we had operating cash flows of $6.3 million, which resulted from net income of $6.3 million, adjusted for non-cash charges including depreciation and amortization of $1.1 million, additions to inventory reserves of $2.7 million, a reduction of gross accounts receivable of $1.1 million, a reduction of gross inventories of $821,000 and an increase in accrued expenses and other liabilities of $1.1 million primarily from tax related adjustments. These increases were partially offset by releases of inventory reserves of $3.1 million resulting from shipments of previously reserved inventory, a reduction in accounts payable of $1.4 million primarily due to the timing and amount of inventory purchases, an increase in deferred tax assets of $1.9 million and a decrease in the deferred gross profit on distributor sales due to decreased inventories and margins at distributors of $399,000.

In fiscal 2002, we had operating cash flows of $3.3 million, which resulted from net income of $770,000, adjusted for non-cash charges including depreciation and amortization of approximately $1.0 million, an addition to the provision for doubtful accounts of $200,000, additions to inventory reserves of $2.1 million, a decrease in gross accounts receivable of $1.7 million related to decreased sales, an increase in accounts payable of $852,000, related to timing of our inventory purchases and an increase in other credits of $1.3 million. These increases were partially offset by releases of inventory reserves of $2.0 million resulting from shipments of previously reserved inventory, an increase in gross inventories of $472,000, an increase in other current assets of $642,000 related to an expected refund of income taxes paid in a previous year and a decrease in accrued expenses of $1.1 million.

Net Cash from Investing Activities

In fiscal 2004, investing activities provided $1.7 million. During fiscal 2004, our short-term investments declined by $3.5 million as we transferred those funds to cash and cash equivalents. We also used $1.7 million primarily for the acquisition of test equipment.

In fiscal 2003, investing activities used $21.8 million. During fiscal 2003, we invested $20.1 million in short-term investments and we used $1.8 million primarily for the acquisition of design software and equipment for research and development activities and our manufacturing operations.

In fiscal 2002, investing activities used $833,000 primarily for the purchase of equipment for our manufacturing operations.

Net Cash from Financing Activities

In fiscal 2004, cash used by financing activities was $3.0 million. In a private transaction we purchased 600,000 shares from Elex N.V., our largest stockholder, for $6.77 per share and an aggregate of $4.1 million, which represented a 13% discount from the closing market price on the Nasdaq National Market on the last trading date prior to the approval of the transaction by our Board of Directors. Separately, we purchased

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74,000 shares of our common stock from the open market as part of our open market repurchase program. We also received $1.3 million of proceeds upon the exercise of stock options by employees.

In fiscal 2003, cash used by financing activities was $2.9 million. We used $3.2 million to purchase an aggregate of 1,276,400 shares of our common stock in the open market as part of our open market repurchase program. We also received $296,000 of proceeds upon the exercise of stock options by employees.

In fiscal 2002, cash used by financing activities was $6.7 million. In a private transaction we purchased 1.5 million shares from Elex N.V. for $3.13 per share and an aggregate of $4.7 million, which represented a 5% discount from the closing market price on the Nasdaq National Market on the date of the purchase. Separately, we purchased 193,700 shares of our common stock for an aggregate of $417,000 from the open market as part of our open market repurchase program. We used $2.0 million to pay off our bank credit line and remaining capital lease obligations. We also received $451,000 of proceeds upon the exercise of stock options by employees.

Common Stock Repurchase Plan

In September 2001, our board of directors authorized a program for the open market repurchase of up to 1.5 million shares of our common stock. In March 2003, the board of directors increased the authorized limit to an aggregate of 2 million shares. The purpose of this share repurchase program is to reduce the long-term potential dilution in earnings per share that might result from issuances under our stock option plans and to take advantage of the relatively low price of our common stock. The following table summarizes the activity of the open market repurchase program through April 30, 2004 and does not include our repurchases of shares from Elex N.V.:

	Years Ended April 30,			
	Total	**2004**	**2003**	**2002**
Shares repurchased in open market	1,544,100	74,000	1,276,400	193,700
Total cost of shares	$3,868,000	$216,000	$3,235,000	$417,000
Average cost per share	$ 2.51	$ 2.92	$ 2.53	$ 2.15

Contractual Obligations and Commercial Commitments

The following table summarizes our contractual obligations as of April 30, 2004 and the effects these obligations and commitments are expected to have on our liquidity and cash flows in future periods (in thousands):

	Years Ended April 30,				
	Total	**2005**	**2006**	**2007**	**2008**
Contractual cash obligations					
Operating leases(1)	$1,277	$ 621	$543	$113	$
Sales-purchase promissory agreement(2)	2,200	2,200			
Wafer purchases	5,691	5,691			
Other purchase commitments	258	258			
Total contractual cash obligations	$9,426	$8,770	$543	$113	$

(1) Our primary facility lease is our business office in Sunnyvale, California. This lease expires in 2006 and allows us to exercise an option to extend the term by an additional five years.

(2) On November 6, 2003, we entered into a Sale-Purchase Promissory Agreement with S.C. Hathor Impex SRL to purchase a building for Catalyst Semiconductor Romania SRL. We expect to take possession of the building and complete the financial transaction by August 1, 2004.

As part of our ongoing business, we do not participate in transactions that generate relationships with unconsolidated entities of financial partnerships, such as entities often referred to as structured finance or

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special purpose entities, or SPEs, which would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purpose. As of April 30, 2004, we are not involved in any SPE transactions.

Need for Additional Resources

On June 14, 2004, we filed with the Securities and Exchange Commission a registration statement on Form S-3 in connection with a proposed underwritten public offering of up to 1,450,000 newly-issued shares of common stock and up to 3,150,000 shares of our common stock held by certain selling stockholders. The registration statement is not yet effective. Although we currently intend to issue the shares to the public, we cannot be certain that the offering will be completed and that the shares will be issued.

We believe that the net proceeds from the above offering, if completed, together with our current cash, cash equivalents and available-for-sale securities will be sufficient to meet our anticipated operating and capital requirements for at least the next 12 months. We have no current plans, nor are we currently negotiating, to obtain additional financing following the closing of the above offering. Our long term plan is to finance our core business operations with cash we generate from operations. However, from time to time we may raise additional capital through a variety of sources, including the public equity market, private financings, collaborative arrangements and debt. The additional capital we raise could be used for working capital purposes, to fund our research and development activities or our capital expenditures or to acquire complementary businesses or technologies. If we raise additional capital through the issuance of equity or securities convertible into equity, our stockholders may experience dilution. Those securities may have rights, preferences or privileges senior to those of the holders of the common stock. Additional financing may not be available to us on favorable terms, if at all. If we are unable to obtain financing, or to obtain it on acceptable terms, we may be unable to successfully support our business requirements.

Effects of Transactions with Related Parties

Elex N.V.

During the fourth quarter of fiscal 2000, we began taking delivery of wafers fabricated by X-FAB, a wholly owned subsidiary of Elex N.V., a Belgian holding company, that owned 3,578,700 shares, or 21.8% of our outstanding shares, as of April 30, 2004. Mr. Roland Duchâtelet, the chairman and chief executive officer of Elex N.V., serves as a member of our board of directors. The wafers provided by X-FAB include wafers for our analog and mixed-signal products and EEPROM products. We believe that the cost of the wafers we purchase from X-FAB is no greater than comparable materials available from alternative foundries. We periodically negotiate the prices of wafers purchased from X-FAB with X-FAB management and compare those prices to quotes we obtain from other prospective foundries and pricing surveys published by various industry trade organizations. We purchased $3.7 million of wafers from X-FAB in fiscal 2004. As of April 30, 2004, 2003 and 2002, the total amount owed to X-FAB was $137,000, $18,000 and $184,000, respectively. Other than purchase orders currently open with X-FAB, there is no purchasing agreement in place with X-FAB.

On April 22, 2004, we purchased 600,000 shares of our common stock from Elex N.V. for $6.77 per share and an aggregate of $4.1 million.

LXI Corporation

We had an informal arrangement from 1995 through January 2003 to obtain engineering services from LXI Corporation, a California corporation, or Lxi, a provider of engineering services through Essex com SRL, or Essex, Lxi s wholly owned subsidiary in Romania. The number of full time engineers we used was dependent upon the scope and number of research and development projects in process at a given time. These services related to our key development projects including development, design, layout and test program development services. We believe that we received these engineering services from Lxi on terms and at rates that were at least as favorable, if not more favorable, than we could obtain from unaffiliated third parties. Two of our officers, Gelu Voicu and Thomas E. Gay III, owned approximately 3% and 1%, respectively, of Lxi until

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February 2003. Mr. Gay, who had served as a director of Lxi, resigned from that position in January 2003. Mr. Voicu and Mr. Gay received no payments from Lxi during fiscal 2004, fiscal 2003 and fiscal 2002 other than $40,000 and $12,000, respectively, from the repurchase of their shares at net book value by Lxi in February 2003. Additionally, we believe that our former chief executive officer, Radu Vanco, continues to own a majority of the outstanding shares of Lxi. In January 2003, we formed a wholly owned subsidiary in Romania to perform these engineering design services on our behalf and discontinued our use of the engineering services of Lxi.

Allan Advisors, Inc.

One of our directors, Lionel Allan, has also served as a consultant to us through his consulting company, Allan Advisors, Inc. Under the terms of his consulting agreement, we paid Mr. Allan consulting fees of $8,333 per month throughout fiscal 2003. In April 2003, we terminated the agreement and paid the $29,000 balance due as required by the agreement. Mr. Allan no longer provides consulting services to us and we have no continuing obligations to Mr. Allan under the terminated agreement.

Recent Accounting Pronouncements

In May 2003, the FASB issued Statement of Financial Accounting Standards No. 150, Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity, or SFAS No. 150. SFAS No. 150 establishes standards for how an issuer classifies and measures certain financial instruments with characteristics of both liabilities and equity and further requires that an issuer classify as a liability, or an asset in some circumstances, financial instruments that fall within its scope because that financial instrument embodies an obligation of the issuer. Many of such instruments were previously classified as equity. The statement is effective for financial instruments entered into or modified after May 31, 2003, and otherwise was effective at the beginning of the first interim period beginning after June 15, 2003. The adoption of this standard did not have a material impact on our financial position, results of operations or cash flows.

On December 17, 2003, the Securities and Exchange Commission, or SEC, issued Staff Accounting Bulletin No. 104, Revenue Recognition, or SAB No. 104, which supersedes Staff Accounting Bulletin No. 101, Revenue Recognition in Financial Statements, or SAB No. 101. SAB No. 104 s primary purpose is to rescind accounting guidance contained in SAB No. 101 related to multiple element revenue managements, superseded as a result of the issuance of Emerging Issues Task Force 00-21, Accounting for Revenue Arrangements with Multiple Deliverables. SAB No. 104 also rescinds the SEC s Revenue Recognition in Financial Statements Frequently Asked Questions and Answers, or the FAQ, issued with SAB No. 101 that had been codified in SEC Topic 13, Revenue Recognition. Selected portions of the FAQ have been incorporated into SAB No. 104. While the wording of SAB No. 104 reflects the issuance of EITF 00-21, the revenue recognition principles of SAB No. 101 remain largely unchanged by the issuance of SAB No. 104. EITF 00-21 was effective for revenue arrangements entered into in fiscal periods beginning after June 15, 2003. The adoption of SAB No. 104 did not have a material impact upon our financial position, results of operations or cash flows for the fiscal 2004.

In March 2004, the FASB approved EITF Issue 03-6, Participating Securities and the Two-Class Method under FAS 128. EITF Issue 03-6 supersedes the guidance in Topic No. D-95, Effect of Participating Convertible Securities on the Computation of Basic Earnings per Share, and requires the use of the two-class method of participating securities. The two-class method is an earnings allocation formula that determines earnings per share for each class of common stock and participating security according to dividends declared (or accumulated) and participation rights in undistributed earnings. In addition, EITF Issue 03-6 addresses other forms of participating securities, including options, warrants, forwards and other contracts to issue an entity s common stock, with the exception of stock-based compensation (unvested options and restricted stock) subject to the provisions of Opinion 25 and SFAS 123. EITF Issue 03-6 is effective for reporting periods beginning after March 31, 2004 and should be applied by restating previously reported earnings per share. We are currently in the process of evaluating the impact that adoption of EITF Issue 03-6 will have on our financial position and results of operations.

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Certain Risks that May Affect Our Future Results

The following lists some, but not all, of the risks and uncertainties which may have a material and adverse effect on our business, financial condition or results of operations. The risks and uncertainties set out below are not the only risks and uncertainties we face.

Our quarterly operating results may fluctuate due to many factors and are difficult to forecast, which may cause the trading price of our common stock to decline substantially.

Our operating results have historically been and in the future may be adversely affected or otherwise fluctuate due to factors such as:

fluctuations in customer demand for the electronic devices into which our products are incorporated;

volatility in supply and demand affecting semiconductor prices generally, such as the increases in supply of competitive products and significant declines in average selling prices we experienced most recently in fiscal 2002;

establishment of additional inventory reserves if sales of our inventory fall below our expected sales, or the anticipated selling prices of our products fall below the amounts paid to produce and sell certain parts;

changes in our product mix including product category, density, package type or voltage;

inadequate visibility of future demand for our products;

timing of new product introductions and orders of our products;

increases in expenses associated with new product introductions and promotions, process changes and/or expansion of our sales channels;

increases in wafer prices due to increased market demand and other factors;

increases in prices charged by our suppliers due to increased costs, decreased competition and other factors;

gains or losses of significant OEM customers or indirect channel sellers, such as manufacturers representatives, distributors or resellers;

fluctuations in manufacturing yields;

charges to bad debt expense caused by accounts receivable we deem unlikely to be collected in a reasonable amount of time, if ever; and

general economic conditions.

Our net revenues and operating results are difficult to forecast. We base our expense levels, in significant part, on our expectations of future net revenues and our expenses are therefore relatively fixed in the short term. If our net revenues fall below our forecasts, our operating results are likely to be disproportionately adversely affected because our costs are relatively fixed in the short term.

We may never realize a material portion of our net revenues from our analog and mixed-signal products, despite our expenditure of a disproportionate amount of our research and development resources on these products.

Analog and mixed-signal products accounted for 2.1% of net revenues for fiscal 2004, 1.5% of net revenues for fiscal 2003 and 1.0% of net revenues for fiscal 2002. We believe that the growth in our analog and mixed-signal product revenues has been limited due to the small number of products we offer, extended product design cycles and a sales force that has limited experience selling these products. Despite limited product acceptance to date, we continue to invest in and devote research and development and marketing resources to analog and mixed-signal products with the expectation that our standard analog and mixed-signal

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products will be accepted by many of our current customers and that we will eventually qualify and sell custom analog and mixed-signal products. Competition is intense as we have initially offered a limited range of products while our more established competitors are offering a much broader array of analog and mixed-signal products. If we are unable to realize more revenues from these products, our total revenues may not grow. In addition, if we devote a disproportionate amount of our research and development resources to analog and mixed-signal products, our development of new non-volatile memory products may suffer and operating results may be harmed.

We may be unable to fulfill all our customers orders according to the schedule originally requested due to the constraints in our wafer supply and processing time from die bank to finished goods, which could result in reduced revenues or higher expenses.

Due to the lead time constraints in our wafer supply, foundry activities and other manufacturing processes, from time to time we have been unable to fulfill all our customers orders on the schedule originally requested. Although we attempt to anticipate pending orders and maintain an adequate supply of wafers and communicate to our customers delivery dates that we believe we can reasonably expect to meet, our customers may not accept the alternative delivery date or may cancel their outstanding orders. Reductions in orders received or cancellation of outstanding orders would result in lower net revenues and reduced operating results, excess inventories and increased inventory reserves. We may also be required to pay substantially higher per wafer prices to replenish our die bank, which could harm our gross margins. If we were requested to pay rush charges to our manufacturing or foundry partners to meet a customer s requested delivery date, our expenses may increase and harm our operating results.

Due to the lack of adequate product sales history and limited visibility in forecasting future demand, we do not have the same inventory levels of wafers and die bank for our newer products compared to our established products. As a result, we may be unable to meet demand for those newer products if demand exceeds our expectations and we do not have adequate time or capacity to make the additional products.

We may forecast incorrectly and produce excess or insufficient inventories of particular products, which may adversely affect our results of operations.

Since we must order products and build inventory substantially in advance of product shipments, we may forecast incorrectly and produce excess or insufficient inventories of particular products. The ability of our customers to reschedule or cancel orders without significant penalty could adversely affect our liquidity, as we may be unable to adjust our purchases from our wafer suppliers to match any customer changes and cancellations. As part of our business strategy, we maintain a substantial inventory of sorted wafers in a die bank but limit our investment in finished goods. We may have adequate wafer inventory to meet customer needs but may be unable to finish the manufacturing process prior to the delivery date specified by the customer. Demand for our products is volatile and customers often place orders with short lead times. Our inventory may not be reduced by the fulfillment of customer orders and in the future we may produce excess quantities of our products.

It is our policy to fully write down all inventories that we do not expect to be sold in a reasonable period of time. During recent fiscal years, as a result of reductions in estimated demand for our various products, we have taken charges for write down of inventories for certain products, primarily our flash and EEPROM products. For example, we took inventory write down charges of $5.0 million in fiscal 2001, which were partially offset by a benefit of $2.3 million relating to products that were written off in prior years and sold during fiscal 2001. We may suffer reductions in values of our inventories in the future and we may be unable to liquidate our inventory at acceptable prices. To the extent we have excess inventories of particular products, our operating results could be adversely affected by charges to cost of revenues that we would be required to recognize due to significant reductions in demand for our products or rapid declines in the market value of inventory, resulting in inventory write downs or other related factors.

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We depend on a small number of suppliers for the supply of wafers and we may be unable to meet customer demand due to our inability to obtain wafers.

We do not manufacture or process the semiconductor wafers used for our products. In 1985, we began a relationship with Oki Electric Industry Co., Ltd., or Oki, in Japan. Since 1987, Oki has supplied wafers to us and has been our principal foundry source. At the end of fiscal 2000, an additional foundry, X-FAB Texas, Inc., or X-FAB, began to provide products to us. We primarily use Oki for fabricating our memory products and X-FAB for fabricating our analog and mixed-signal products. We do not presently have a wafer supply agreement with Oki or X-FAB and instead purchase wafers on a purchase order and acceptance basis. Our reliance on these independent foundries involves a number of risks, including:

inadequate wafer supplies to meet our production needs;

increased prices charged by these independent foundries;

unavailability of or interruption in access to required or more cost-effective process technologies; and

reduced control over delivery schedules, manufacturing yields and costs.

We have been unable and in the future we may be unable to obtain sufficient quantities of wafers from Oki and X-FAB to fulfill customer demand.

To address our wafer supply concerns, we plan to co