ALTERA CORP Form 10-K March 15, 2004 Index to Financial Statements

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

x ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES

EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2003

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES

EXCHANGE ACT OF 1934

For the transition period from _____ to ____

Commission File Number: 0-16617

ALTERA CORPORATION

(Exact Name of Registrant as Specified in its Charter)

Delaware 77-0016691

(State or Other Jurisdiction of (I.R.S. Employer

Incorporation or Organization)

Identification No.)

101 Innovation Drive, San Jose, California

95134

(Address of Principal Executive Offices)

(Zip Code)

(408) 544-7000

(Registrant s Telephone Number, Including Area Code)

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

None

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

Common Stock, \$0.001 par value per share

(Title of Class)

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

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

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

The aggregate market value of the registrant s common stock held by non-affiliates of the registrant was approximately \$4,720,844,661 as of July 3, 2003, based upon the closing sale price on the Nasdaq National Market for that date. For purposes of this disclosure, shares of common stock held by persons who hold more than 5% of the outstanding shares of common stock and shares held by executive officers and directors of the registrant have been excluded because such persons may be deemed affiliates. This determination is not necessarily conclusive.

There were 375,825,187 shares of the registrant s common stock issued and outstanding as of February 9, 2004.

DOCUMENTS INCORPORATED BY REFERENCE

Item 6 of Part II incorporates information by reference from the Annual Report to Stockholders for the fiscal year ended December 31, 2003.

Items 10, 11, 12, 13, and 14 of Part III incorporate information by reference from the Proxy Statement for the Annual Meeting of Stockholders to be held on May 11, 2004.

FORWARD-LOOKING STATEMENTS

This report contains forward-looking statements, which are provided under the safe harbor protection of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are generally written in the future tense and/or are preceded by words such as will, may, should, could, expect, suggest, believe, anticipate, intend, plan, or other similar words. Forward statements include statements regarding (1) our gross margins and factors that affect gross margins, such as the costs of raw materials, our ability to absorb manufacturing costs, trends in selling prices, and the sale of previously reserved inventory; (2) the commercial success of our new products; (3) the future availability of our announced products; (4) trends in future sales; (5) and future economic conditions.

Forward-looking statements are not guarantees of future performance and involve risks and uncertainties. The forward-looking statements contained in this report are based on information that is currently available to us and expectations and assumptions that we deem reasonable at the time the statements were made. We do not undertake any obligation to update any forward-looking statements in this report or in any of our other communications, except as required by law. All such forward-looking statements should be read as of the time the statements were made and with the recognition that these forward-looking statements may not be complete or accurate at a later date.

Many factors may cause actual results to differ materially from those expressed or implied by the forward-looking statements contained in this report. These factors include, but are not limited to, those risks set forth under Management s Discussion and Analysis of Financial Condition and Results of Operations Risk Factors.

PARTI

ITEM 1. Business.

Founded in 1983, Altera Corporation designs, manufactures, and markets: (1) programmable logic devices, or PLDs; (2) HardCopy devices; (3) pre-defined design building blocks known as intellectual property, or IP, cores; and (4) associated development tools. Our headquarters facility is located at 101 Innovation Drive, San Jose, California 95134, and our Web site is www.altera.com. Our common stock trades on the Nasdag National Market under the symbol ALTR.

Our PLDs, which consist of field-programmable gate arrays, or FPGAs, and complex programmable logic devices, or CPLDs, are semiconductor integrated circuits that are manufactured as standard chips that our customers program to perform desired logic functions within their electronic systems. Our HardCopy devices enable our customers to move from a PLD to a low-cost, high-volume, non-programmable implementation of their designs. Our customers can license IP cores from us for implementation of standard functions in their PLD designs. Customers develop, compile, and verify their PLD designs, and then program their designs into our PLDs using our proprietary development software, which operates on personal computers and engineering workstations.

We were one of the first suppliers of complementary metal oxide semiconductor, or CMOS, PLDs and are currently a global leader in this market. Today, we offer a broad range of PLDs that offer unique features as well as differing densities and performance specifications. Our products serve a wide range of customers within the communications, computer and storage, consumer, and

industrial market segments. An overview of typical PLD applications within these markets is shown in the table on the next page.

2

Market Segment	Market Sub-Segment	Application/Product		
Communications	Networking	Routers		
		Switches		
	Wireline	Access Systems		
		Metro Area Networks		
		Optical Networks		
	Wireless	Cellular Base Stations		
		Wireless Local Area Networks		
Computer and Storage	Computer	Mainframes		
		Servers		
	Office Automation	Copiers		
		Multi-Function Peripherals		
		Printers		
	Storage	Redundant Array of Inexpensive Disks (RAID) Systems		
		Storage Area Networks		
Consumer	Broadcast	Studio Editing		
		Satellite Equipment		
		Broadcasting Equipment		
	Entertainment	Audio/Video Systems		
		Broadband Equipment		
		Video Display Systems		
Industrial ⁽¹⁾	Automotive	Car Entertainment Systems		
		Navigation Systems		
	Instrumentation	Manufacturing Systems		
		Medical Diagnostic Systems		
		Test Equipment		
	Military	Guidance and Control		
		Radar Systems		
		Secure Communications		
	Security/Energy Management	Automatic Teller Machines (ATMs)		

Card Readers

Energy Management Systems

(1) The Industrial market segment was formerly referred to as the Industrial and Automotive market segment.

Digital Logic Overview

Three principal types of digital integrated circuits are used in most electronic systems: (1) processors, (2) memory, and (3) logic.

Processors, which include microprocessors, microcontrollers, and digital signal processors, are typically used for control and central computing tasks;

Memory is used to store programming instructions and data; and

Logic is typically used to manage the interchange and manipulation of digital signals within a system.

While system designers employ a relatively small number of standard architectures to meet their processor and memory needs, they require a wide variety of logic circuits to differentiate their end products.

3

The majority of the digital logic market is made up of three product sub-segments: (1) application-specific integrated circuits, or ASICs; (2) application-specific standard products, or ASSPs; and (3) PLDs. In a broad sense, all of these products are competitive with each other as they generally may be used in the same types of applications in electronic systems. However, differences in cost, performance, density, flexibility, ease-of-use, and time-to-market dictate the extent to which they may be directly competitive for particular applications. The table below summarizes key characteristics of ASIC, ASSP, and PLD products from the perspective of the end customer.

	ASIC	ASSP	PLD
Customizable	Yes, by chip fabrication facility	No	Yes, by end user
Erasability/Re-programmability	No	No	Yes
Relative Time-to-Market	Slow	Fast	Fast
Relative Unit Cost	Low	Moderate	Moderate to High
Customer s Development Cost	High	Low	Moderate

ASICs, also referred to as standard cells, are defined by the end customer and customized during manufacturing at the chip fabrication facility. As a result, a given ASIC has a fixed function for use by a single customer in a single application. ASSPs are defined by the ASSP supplier and sold as standard devices that cannot be customized by the end user. Rather than being built for a single customer as in the case of an ASIC, an ASSP is built for a specific type of application and is typically targeted and sold to a limited number of customers. For simplicity, an ASSP may be viewed as an ASIC developed for more than one customer. In contrast to the fixed nature of both ASICs and ASSPs, PLDs are customized by the end customer and hence can be used in a wide range of applications. As a result, a given PLD is typically sold to hundreds or thousands of customers.

The inherent flexibility of PLDs provides significant advantages over ASICs, including design change simplicity, shorter design cycles, and lower development cost. In contrast to ASIC users, PLD users program their design directly into the PLD and can have custom chips that are fully functioning and verified at the time the design is completed, bypassing the lengthy and complex cycles involved in the verification and fabrication of ASICs. As a result of user programmability, PLD customers may experiment with and revise their designs in a relatively short amount of time and with minimum development cost. The ease-of-use and time-to-market advantages of PLDs are complemented by the added benefit of field upgradeability, which generally enables PLD users to modify the PLD design after the electronic system has been shipped.

Due to their programmability, however, PLDs generally have a larger die size and associated higher per-unit cost when compared to ASICs. While the customized manufacturing of ASICs can result in more optimized chip performance and lower per-unit cost than PLDs, ASICs require higher up-front costs and longer manufacturing lead times.

Historically, due to their lower per-unit costs, ASICs have been viewed as more cost effective than PLDs for large-volume, low-cost applications such as consumer electronics. Consequently, the unit volume of a PLD implementation is typically lower than that for an ASIC implementation. Additionally, some customers may choose to prototype with PLDs for initial engineering development and then re-design to an ASIC in volume production for lower per-unit cost. While such re-designs have always been an aspect of the PLD business, we believe that the following factors are driving electronic systems manufacturers to use PLDs for their systems entire life cycle: (1) the continual reduction in the price premium of programmable logic; (2) the ever-shortening product life cycle of many electronic systems; and (3) the use of more advanced chip manufacturing technology, which elevates the risk of ASICs and the up-front costs of design, verification and mask development, known as non-recurring engineering costs, or NREs.

ASSPs have been used in applications where specific fixed functions are needed, such as in implementing certain electronic industry standards where little differentiation is required. However, the fixed functionality of ASSPs limits the range of applications they can address. In contrast to ASSPs, the flexibility found in PLDs allows users to define circuitry

4

to suit their value-added and differentiated system architecture, rather than restrict their system architecture based upon the ASSP manufacturer s device specification. Furthermore, the emergence of IP design blocks in PLDs has allowed the implementation of standardized functions otherwise performed by ASSPs.

We believe that the adoption of more advanced chip manufacturing technology, which is increasing the total cost of chip development, is reducing the cost advantage of ASICs and ASSPs. The cost and time for us to develop a PLD is comparable to the cost and time for others to develop an ASIC or ASSP. Since each of our PLDs is sold to hundreds or thousands of customers, we spread development costs and generate revenue across a wide customer base. In contrast, ASIC and ASSP suppliers build fixed, custom chips for a single customer or for a single application. Because it is increasingly difficult for ASIC and ASSP suppliers to identify opportunities that generate enough revenue relative to the high development costs, ASIC suppliers are imposing ever-higher up-front costs and minimum order quantities on the customer, and ASSP manufacturers are developing fewer products.

Strategy and Competition

We believe that the increasing cost associated with the use of advanced chip manufacturing technology is driving the development and use of standard, programmable digital integrated circuits. As in microprocessors and memories, PLDs provide the flexibility for the end user to change and define circuits without incurring the cost, risk and delays of custom chip fabrication. Consequently, we believe that customers will increasingly use PLDs rather than ASICs or ASSPs, despite the higher per-unit cost of PLDs.

We believe that competitive pressures to improve chip functionality, performance, reliability, and cost are driving customers increasingly towards high-density PLDs. With high-density PLD solutions, system designers require fewer, if any, separate microprocessor, memory, or logic chips, thereby allowing them to reduce the size and cost of their systems. Programmability allows the user to quickly develop and modify custom circuitry, thereby enhancing time-to-market and reducing risk.

In order to capture a larger percentage share of the semiconductors purchased by our customers, we are focused on providing the most advanced programmable solutions. To accomplish this goal, we strive to offer our customers:

PLDs with the speed, density, functionality, and package types to meet their specific needs;

HardCopy devices that enable our customers to move from a PLD to a low-cost, high-volume structured ASIC implementation of their designs;

Optimized, pre-verified system-level IP cores to speed their design process;

State-of-the-art development tools that offer low cost and ease of use and compatibility with other industry-standard electronic design automation, or EDA, tools; and

A complete customer support system.

We believe that the greatest opportunity for our growth is displacing ASICs and ASSPs. We compete with other PLD vendors to realize this opportunity and for market share within the PLD market. The programmable logic market is highly concentrated with three vendors accounting for an overwhelming majority of the total market: ourselves, Xilinx, Inc., and Lattice Semiconductor Corporation. Within the PLD market, sales of CPLDs and FPGAs constitute the majority of revenues and are often viewed as two distinct sub-segments of the PLD market. Generally, CPLDs and FPGAs do not compete directly for the same customer designs as they are distinct in their applications. Altera was an early entrant in the CPLD sub-segment and, by our estimates, has held market share in the mid-40% range for more than five years. The FPGA sub-segment has outgrown the CPLD sub-segment, and it is generally accepted by participants and observers of the industry that this trend will continue. We believe that in 2003 we had a 29% share in the FPGA sub-segment, up from 27% in 2002, and that maintaining or increasing market share in this sub-segment is critical to our long term growth.

Competition between vendors is most intense in the design-win phase of the customer s design. The design win phase refers to the customer s selection of a particular vendor s product for use in the customer s electronic system.

Because each vendor s product offering is proprietary, the cost to switch PLD devices after a system has been designed and prototyped is very high almost prohibitive. Therefore, customers rarely switch PLD vendors after this initial selection. From the time a design-win is secured it is often as long as two years, and sometimes longer, before the customer starts volume purchases of our devices. Typically the customer selects the PLD vendor device relatively early in the customer s design program. It takes several years from that point before the customer has completed its entire system design, built prototypes, sampled the marketplace for customer acceptance, made any modifications, and established volume manufacturing capacity. Thus, movements in PLD market share often occur some time after the change in relative competitiveness that gave rise to the market share shift. Because of this time lag, market share is a lagging indicator of relative competitive strength. Because it is extremely difficult to forecast the degree of success or timing of a customer s program, and because the end markets are so fragmented (there are over 10,000 PLD customers) it is difficult even for PLD vendors to gauge their competitive strength in securing design wins as of a particular point in time.

Principal competitive factors in the programmable logic sub-segment include:		
Technical	innovation;	
Device pe	erformance and features;	
The capal	bility of software development tools and IP cores;	
Pricing an	nd availability;	
Quality ar	nd reliability;	
Technical	service and customer support;	
Manufacto	uring and operational competence; and	
Customer	familiarity with existing vendors and entrenched products.	

We believe that we compete favorably with respect to these factors and that our proprietary device architecture and our installed base of software development systems may provide some competitive advantage. We have been able to introduce new product families that, as compared to their predecessors, provide greater functionality at a lower price for any given density because of unique architectural innovation and advanced technologies.

We also believe that in certain circumstances these new product families compete favorably against ASICs and ASSPs, as well as against other types of chips such as microcontrollers, microprocessors, and digital signal processors. The functionality offered by these other types of chips can be implemented in PLDs using pre-built and pre-verified IP cores. An IP core is typically offered in either a hard or soft form. A hard IP core is embedded into the actual circuitry of our chips. A soft IP core is a licensed design file that our customers incorporate into their design and program onto the PLD. By incorporating more functionality and logic capacity on a programmable fabric while providing the necessary design tools and IP cores to design a reliable system, we believe we can

build upon the advantages of PLDs over competing solutions.

As is true of the semiconductor industry as a whole, the digital logic segment and the PLD sub-segment are intensely competitive and are characterized by rapid technological change, rapid rates of product obsolescence, and price erosion. All of these factors may influence our future operating results. For a discussion of risk factors associated with our strategy and competition, see Item 7: Risk Factors Our financial results depend on our ability to compete successfully in the highly competitive semiconductor industry and Our future success depends on our ability to define, develop, and sell new products that achieve market acceptance.

6

Products

Our products consist primarily of devices, IP cores, and proprietary development tools. A brief overview of these products follows.

Devices

Our devices fall into the following four categories: (1) FPGAs, (2) CPLDs, (3) low-cost, high-volume structured ASIC devices, and (4) configuration devices that store the programming code for our FPGAs. These devices span multiple architectures and device families, with a total of more than 1,000 product options. Each device family offers unique functional benefits and differing density and performance specifications. Our latest device families, which are typically designed into new end equipment, are summarized and described on the next page. Certain of our more mature device families, which are not now typically designed into new end equipment but may still comprise significant portions of our total revenue, have been omitted from the table below.

Family	Device Category	Focus	Process Geometry	Logic Capacity
Stratix II	FPGA	High Density, Feature-Rich, Highest Performance	90 nm	15,600 to 179,000 Equivalent Logic Elements
Stratix	FPGA	High Density, Feature-Rich, High Performance	130 nm	10,570 to 79,040 Logic Elements
Cyclone	FPGA	Low Cost, High Volume	130 nm	2,910 to 20,060 Logic Elements
Stratix GX	IP-Based FPGA	High Performance Transceivers	130 nm	10,570 to 41,250 Logic Elements
MAX II	CPLD	Low Cost High Performance	180 nm	128 to Over 1,000 Equivalent Macrocells
MAX 3000A	CPLD	Low Cost High Performance	300 nm	32 to 512 Macrocells
HardCopy Stratix	Structured ASIC Devices	Low Cost High Volume	130 nm	16,640 Logic Elements and Above

General-Purpose FPGAs

Our general-purpose FPGA products, consisting of our Stratix , Cyclone , APEX II, APEX, FPEXMd ACEX® product families, are built using the most advanced CMOS static random access memory, or SRAM, process technology and address a broad range of applications in communications, computing and storage, consumer, and industrial markets. The basic logic building block in a general-purpose FPGA is the logic element. With more logic elements, an FPGA can support more logic circuitry. In addition to the number of logic elements, the amount of embedded RAM within general-purpose FPGAs is also important in user device selection. Our general-purpose FPGAs will provide up to 179,000 equivalent logic elements and up to 9 megabits of RAM in a single device, while offering competitive logic core and I/O performance levels.

Some of our major and more recently introduced general-purpose FPGAs are more fully described below:

STRATIX II: The Stratix II architecture was publicly announced in September 2003 with shipments planned in 2004. Based on a newly developed architecture optimized for a 90-nanometer, or nm, process, the Stratix II device family: (1) provides all the features and capability of the original Stratix architecture, (2) boosts device density up to 179,000 equivalent logic elements, and (3) includes a new logic fabric for improved logic efficiency and over 50% increase in performance over Stratix devices.

STRATIX: Based on a 130-nanometer process, the Stratix device family: (1) is presently available in densities ranging from 10,570 to 79,040 logic elements, (2) includes up to 7 megabits of embedded RAM, and (3) contains embedded digital signal processing, or DSP, blocks that are useful in applications such as wireless communications, digital entertainment, military, and medical equipment.

CYCLONE: Cyclone devices are built on a 130-nanometer process, and offer powerful functionality at a low cost. With up to 20,060 logic elements and 288 kilobits of RAM, Cyclone devices can integrate many complex functions. The combination of a low-cost structure with abundant device resources makes Cyclone devices ideal for high-volume applications across all our served markets in areas such as digital set-top boxes, DVD player/recorder systems, automotive telematics, and plasma displays.

Embedded IP-Based FPGAs

As a complement to our general-purpose FPGAs, our embedded IP-based FPGAs combine a general-purpose FPGA architecture with embedded IP cores. Together, these two elements comprise a fully integrated and flexible, customizable solution for use in targeted applications. Our embedded IP-based FPGAs consist of our Excalibur devices, which are well-suited for applications requiring high-performance embedded microprocessors, and our Stratix GX and Mercury devices, which are best employed in applications that need embedded transceiver capability for ultra high-speed data transfer.

Our embedded IP-based FPGAs are more fully described below:

STRATIX GX: The Stratix GX device family combines 3.125 Gbps per channel transceiver technology with our Stratix FPGA architecture. Stratix GX devices are built on a 130-nanometer, all-layer-copper SRAM process and contain up to 20 transceiver channels, offering system architects a low-risk path to 3.125 Gbps transceiver capability. Stratix GX devices are ideal for implementing common interface protocols, including proprietary systems that require data rates up to 3.125 Gbps, while providing lower power per channel than competing solutions. Devices in this family range in density from 10,570 to 41,250 logic elements and contain up to 3 megabits of RAM.

EXCALIBUR: Our Excalibur solution combines logic, memory, and an embedded processor core for implementation in a wide range of applications from 3G base stations, embedded routers, microcontrollers, and network processors to industrial control and factory automation. The Excalibur PLD family integrates of the ARM®-based hard core embedded processor licensed from ARM Limited and provides our customers with enhanced integration and royalty-free access to leading technology for applications requiring the complexity of an ARM processor and the flexibility of a general-purpose FPGA.

CPLDs

Our CPLD products, consisting of our MAX® and Classic product families, are built using CMOS floating-gate process technology and address a wide range of high-speed glue logic functions found in a broad range of electronics equipment in the communications, computing and storage, consumer, and industrial markets. Glue logic enables the interaction of multiple subsystem components. The basic logic building block in a general-purpose CPLD is the macrocell. Therefore, the total number of macrocells within CPLDs is often used to gauge relative logic density. Another critical metric used in gauging CPLD performance is

the total propagation delay, or t_{PD} , from an input pin to an output pin. Our MAX CPLDs provide over 1000 macrocells in a single device with t_{PD} specifications as fast as 3.5 nanoseconds.

Some of our major CPLDs are more fully described below:

MAX II: The MAX II architecture was publicly announced in September 2003 with shipments planned in 2004. Based on a newly developed architecture, the MAX II device family will reduce costs by up to 50 percent or more, consume 90 percent less power, and increase performance by as much as 50 percent over existing CPLD families. Density will range from 128 to over 1,000 equivalent macrocells.

MAX 3000A: The MAX 3000A device family is among the most widely used CPLD families in the industry. This device family provides low-cost, high-density, high-speed, I/O-intensive programmable logic solutions for a broad range of glue logic applications, including state machines, control functions, and address decoding. Devices in this family range in density from 32 to 512 macrocells and provide t_{PD} values as fast as 3.5 nanoseconds.

HardCopy Structured ASIC Devices

Our HardCopy products, described below, offer customers a migration path from a high-density FPGA to a low-cost, high-volume structured ASIC device for high-volume production applications. In contrast to traditional ASICs, in which every mask layer is custom and unique to the customer s design, structured ASICs share a common set of base layers and the customer s design is instantiated on the device by customizing only the last few mask layers. Structured ASIC devices deliver most of the performance attributes of leading process ASICs but with reduced development costs and shorter production lead-times.

HARDCOPY: For designs implemented in the largest members of our Stratix II, Stratix, and APEX families, our HardCopy structured ASIC devices offer our customers an automated process to a masked implementation of their designs using common base arrays. HardCopy device base arrays are developed from equivalent FPGAs by removing the configuration circuitry, programmable routing, and programmability for logic and memory. This process reduces the die size while maintaining the FPGA architecture, easing the migration of the customer design to a HardCopy device. As a result, HardCopy devices extend the flexibility and time-to-market advantages of high-density FPGAs to high-volume, more cost-sensitive applications traditionally served by fixed ASICs. HardCopy devices offer up to a 70% die size reduction from the original FGPA, resulting in a lower cost for customers seeking a high-volume production solution in our highest density FPGAs. HardCopy designs may also be employed to gain significant increases in performance and reductions in power consumption relative to the high-density FPGA design. Additionally, to further facilitate the replacement of ASIC designs, the HardCopy design flow allows designers the option to go directly to a HardCopy device, bypassing the FPGA design phase.

Intellectual Property Cores

IP cores are pre-verified building blocks that implement standard system-level functions that customers incorporate in their PLD design by using our proprietary development software. Soft IP cores available for use in our devices consist of our Nios® soft core embedded processor and our portfolio of MegaCore® functions, which we license to our customers, and our Altera Megafunction Partners Program, or AMPPSM, cores, which are licensed to our customers by third parties.

The Nios embedded processor utilizes a reduced instruction set computing, or RISC, architecture and is a cost-competitive and flexible alternative to discrete microcontroller solutions. The Nios embedded processor can be efficiently implemented in all of our newer FPGA devices. The Nios II soft core embedded processor, publicly announced in September 2003 for shipments planned in 2004, provides up to a 300% improvement in price/performance when compared to the original Nios embedded processor.

With IP cores, system designers can focus more time and energy on improving and differentiating the unique aspects of their system design, rather than spending time designing common off-the-shelf functions. IP cores are essential to providing our customers solutions that enable higher levels of integration and faster time to market. Today, we offer a broad range of soft IP cores for various system blocks for DSP algorithms, bus interfaces, memory controllers, telecommunications, data communications, microprocessors, and peripherals. Prior to licensing a soft IP core, customers may download an encrypted soft IP

core from our web site and verify that it works in their own system design. While licensing soft IP cores represents a small portion of our total revenues, we believe a broad product offering in this area is necessary to compete with ASIC and ASSP suppliers as well as PLD suppliers.

Development Tools

Our proprietary development tools, consisting primarily of the Quartus® II and MAX+PLUS® II software, enable our customers to successfully complete all necessary PLD design steps. Our tools enhance engineering productivity by

facilitating design entry, design compilation, design verification, and device programming during the initial design and subsequent design revisions.

Our development tools can be used on a variety of computer platforms and have built-in interfaces with other engineering design software, thus making it possible for customers to utilize their existing design environment. Our Quartus II and MAX+PLUS II software development tools run under the Microsoft Windows, UNIX (including Solaris and HP-UX), and Linux operating environments. Our development tools also provide interfaces to many industry-standard EDA tools, including those offered by Mentor Graphics Corporation, Synplicity, Inc., Synopsys, Inc., and Cadence Design Systems, Inc.

Like soft IP cores, our development tools generate a small portion of our total revenues but are a critical and necessary element of our product portfolio because they are used to program our devices and can drive our success in competing for design wins against ASIC and ASSP suppliers as well as PLD suppliers.

Research and Development

Our research and development activities have focused primarily on PLDs and on the associated IP cores and development software and hardware. We have developed these related products in parallel to provide comprehensive design support to customers upon device introduction. As a result of our research and development efforts, we have introduced during the past three years a number of new families, including the Stratix, Stratix GX, Cyclone, and HardCopy device families, as well as major enhancements to our IP core offering and the Quartus II development platform. We have also redesigned a number of our products to accommodate new wafer fabrication processes.

Our research and development expenditures were \$178.5 million in 2003, \$182.8 million in 2002, and \$170.9 million in 2001. We expense all research and development costs that have no alternative future use as incurred. We intend to continue to spend substantial amounts on research and development in order to continue to develop new products and achieve market acceptance for such products, particularly in light of the industry pattern of short product life cycles and intense competition within the digital logic market.

Patents, Trademarks, and Licenses

We generally rely on intellectual property law, including patent, copyright, trademark, and trade secret laws, to establish and maintain our proprietary rights in products and technology. As of December 31, 2003, more than 632 patents relating to various aspects of our products and technology had been issued to us in the United States. We also have a number of other patents issued in other countries as well as a number of patent applications currently pending. Also, we have used, registered, and applied to register certain trademarks and service marks to distinguish our products, technologies, and services from those of our competitors in the United States and foreign countries. In addition, we file registrations in the United States under the Semiconductor Chip Protection Act to protect our chip designs.

We have also entered into technology licensing agreements that give us rights to design, manufacture, and package products using certain intellectual property owned by others. In July 2001, we entered into a settlement agreement with Xilinx under which we

settled all pending litigation with Xilinx. As part of the settlement agreement, we entered into a royalty-free patent cross license agreement with Xilinx, including a prohibition of further patent litigation between the two companies through July 2006. In connection with the settlement agreement, we paid Xilinx a one-time payment of \$20.0 million. Similarly, in July 2001, we entered into a settlement agreement with Lattice under which we settled all pending patent litigation. As part of the settlement agreement, we entered into a royalty-free patent cross license agreement with Lattice, including a multi-year prohibition of further patent litigation between the two companies. No payments were made by Altera or Lattice as part of the settlement.

When necessary, we seek to enforce our intellectual property rights. Although we believe that protection afforded by our intellectual property rights has value, the rapidly changing technology in the semiconductor industry makes our future success dependent primarily on the innovative skills, technological expertise, and management abilities of our employees

rather than on our patent, trademark, or other proprietary rights. For a discussion of risk factors associated with our patents, trademarks, and licenses, see Item 3, Item 7: Risk Factors Our intellectual property rights may not provide meaningful protection from our competitors and We may face significant costs arising from intellectual property litigation, and Note 11: Litigation to our Consolidated Financial Statements.

Marketing and Sales

We market our products worldwide through a network of third-party distributors, independent sales representatives, and direct sales personnel. From time to time, we may add or remove independent sales representatives or third party distributors from our selling organization as we deem appropriate.

Altera Distributors

We engage distributors in all major geographic markets that we serve. These distributors are franchised by several component manufacturers to sell a wide variety of products to many customers, and they may sell competing products or solutions. We have contracts with our distributors, which can be terminated by either party in a relatively short period of time. The main roles of the independent distributors are to provide demand creation for the broad base of customers and order fulfillment services.

All of our distributors stock inventory of our products. The distributors purchase products from us at a set distributor cost which is denominated in US dollars. Title and risk of loss generally transfer upon delivery to the distributor or upon shipment from our stocking locations, which are primarily located at the independent subcontractors we employ for test and assembly services in the Asia Pacific region or our warehouse in San Jose. Upon shipment to the distributor, we defer the net margin on the sale in accordance with our revenue recognition policy. The deferral of the net margin on the sale to the distributor is recorded in current liabilities under deferred income and allowances on sales to distributors. All payments to us are denominated in US dollars. For a detailed discussion of our revenue recognition policy, see Item 7: Critical Accounting Estimates Revenue Recognition.

Once customer demand has been created and a design is ready to move into production, the order fulfillment process begins. Regardless of whether Altera, the independent sales representative, or the distributor created the demand, a local distributor will process and fulfill over 95% of all orders from customers. The distributor is the legal seller of the products and as such they bear all risks generally related to the sale of commercial goods, such as credit loss, inventory shrinkage and theft, as well as foreign currency fluctuations.

In accordance with our distribution agreements and industry practice, we have granted the distributors the contractual right to return certain amounts of unsold product on a periodic basis and also to receive price concessions for unsold product in the case of a subsequent decrease in list prices. In addition, we also provide a mechanism for the distributor to seek a price discount in order to meet a high volume and/or competitive situation. This process is standard business practice in the industry and we engage in some level of discounting with every distributor. All discounts are managed on a case-by-case basis and require Altera approval in advance. These discounts are contingent on an actual sale being made by the distributor to the end customer on the terms and conditions agreed upon by Altera. Discounts are material and are paid on a periodic basis by means of a credit memo to the distributors account.

For the year ended December 31, 2003, worldwide sales through distributors for subsequent resale to original equipment manufacturers, or OEMs, or their subcontract manufacturers accounted for over 95% of total sales. In 2003, 2002, and 2001, two distributors each accounted for more than 10% of sales. Arrow Electronics, Inc., is our largest distributor and on a worldwide basis accounted for 51% of sales in 2003, 53% of sales in 2002, and 54% of sales in 2001. Altima Corporation, which services the Japanese market, accounted for 16% of sales in 2003, 14% of sales in 2002, and 13% of sales in 2001.

For a discussion of the risk factors associated with our distribution model, see Item 7: Risk Factors We depend on distributors to generate sales and fulfill our customer orders. See also Note 2: Concentrations of Credit Risk to our Consolidated Financial Statements.

Altera Sales, Marketing, and Customer Support

Altera also maintains a dedicated global sales and marketing organization to create customer demand and manage the network of distributors and independent sales representatives. In general, Altera focuses its direct demand creation efforts on a limited number of key accounts, as well as providing technical, business, and marketing support to the distributors and independent sales representatives. The independent sales representatives are mostly located in North America and in select European countries. The independent sales representatives create demand and provide customer support in a defined territory and, in many cases, with a defined set of customers. They stock no inventory and provide no order fulfillment services. All of our contracts with independent sales representatives may be terminated by either party in a relatively short period of time.

Customer support and service are important aspects of selling and marketing our products. We provide several levels of technical user support, including applications assistance, design services, and customer training. Also, our applications engineering staff publishes data sheets and application notes, conducts technical seminars, and provides design assistance via the Internet and electronic links to the customer.

Throughout the United States, we have domestic sales offices in numerous major metropolitan areas. In addition, we maintain international sales support offices in the metropolitan areas of Bangalore, Beijing, Helsinki, Hong Kong, London, Munich, Ottawa, Paris, Seoul, Shanghai, Shenzhen, Stockholm, Stuttgart, Taipei, Tokyo, and Turin.

No single end customer accounted for more than 10% of our sales in 2003, 2002, or 2001. International sales constituted 67% of sales in 2003, 60% of sales in 2002, and 55% of sales in 2001. We expect international sales to continue to grow in the future.

For a detailed description of our sales by geographic region, see Item 7 and Note 12: Segment and Geographic Information to our Consolidated Financial Statements. For a discussion of the risk factors associated with our foreign operations, see Item 7: Risk Factors We depend on international sales for a majority of our total sales and Our business is subject to tax risks associated with being a multinational corporation.

Backlog

Our backlog consists mostly of distributor orders, as well as limited OEM orders, that are for delivery within the next three months. Our backlog of orders on December 31, 2003, was approximately \$292.4 million, compared to \$183.3 million on December 31, 2002. The increase in backlog is attributable to an increase in sales, together with an increase in advance orders made by our distributors and OEMs.

Historically, backlog has been a poor predictor of future customer demand. While our backlog can increase during periods of high demand and supply constraints, our orders are generally cancelable without significant penalty at the option of the purchaser within a short period of time. Further, we defer recognition of revenue on shipments to distributors until the product is resold. For all of these reasons, backlog as of any particular date should not be used as a reliable predictor of sales for any future period.

Manufacturing

Wafer Supply

We do not directly manufacture our silicon wafers. Instead, our silicon wafers are produced by independent semiconductor foundries. This enables us to take advantage of these suppliers high-volume economies of scale and also gives us direct and timely access to advancing process technology. We purchase nearly all of our silicon wafers from Taiwan Semiconductor Manufacturing Company, or TSMC, and the remaining portion from Sharp Corporation. In the past, we have used other foundry vendors, and we may establish additional foundry relationships as such arrangements become economically useful or technically necessary. For a discussion of risk factors associated with our wafer supply arrangements, see Item 7: Risk Factors We dependently on independent subcontractors to supply us with

finished silicon wafers and Conditions outside the control of our independent subcontractors may impact their business operations.

Testing and Assembly

After wafer manufacturing is completed, each wafer is tested using a variety of test and handling equipment. Such wafer testing is accomplished at TSMC, Sharp, and our San Jose pilot line facility, which is used primarily for new product development. This testing is performed on equipment owned by us and consigned to our vendors.

Resulting wafers are then shipped to various assembly suppliers in Asia, where good die are separated into individual chips that are then encapsulated in packages. We employ a number of independent suppliers for assembly purposes. This enables us to take advantage of these subcontractors high-volume economies of scale and supply flexibility, and gives us direct and timely access to advancing packaging technology. We purchase almost all of our assembly services from Amkor Electronics, Inc., in Korea and the Philippines, ASAT Limited in Hong Kong, and Advanced Semiconductor Engineering, Inc., or ASE, in Malaysia and Taiwan.

Following assembly, each of the packaged units receives final testing, marking, and inspection prior to shipment to customers. We obtain almost all of our final test and back-end operation services from Amkor, ASAT, and ASE. Final testing by these assembly suppliers is accomplished through the use of our proprietary test software, as well as hardware that is consigned to or owned by such suppliers. On our behalf, these suppliers also warehouse and ship our products to our OEMs and distributors.

For a discussion of risk factors associated with our testing and assembly arrangements, see Item 7: Risk Factors We depend on independent subcontractors, located in Asia, to assemble and test our semiconductor products and Conditions outside the control of our independent subcontractors may impact their business operations.

Executive Officers of the Registrant

Our executive officers and their ages are as follows:

Name	Age	Position
John P. Daane	40	President and Chief Executive Officer
Denis M. Berlan	54	Executive Vice President and Chief Operating Officer
Erik R. Cleage	43	Senior Vice President, Marketing
John R. Fitzhenry	54	Vice President, Human Resources
Lance M. Lissner	54	Senior Vice President, Business Development
George A. Papa	55	Senior Vice President, Worldwide Sales
Jordan S. Plofsky	43	Senior Vice President, Applications Business Groups
Nathan M. Sarkisian	45	Senior Vice President and Chief Financial Officer
Katherine E. Schuelke	41	Vice President, General Counsel and Secretary

There are no family relationships among our executive officers or between any executive officer and any of our directors.

John P. Daane joined us as our President and Chief Executive Officer in November 2000, and was elected as one of our directors in December 2000 and our Chairman of the Board in May 2003. Prior to joining us, Mr. Daane spent 15 years at LSI Logic Corporation, a semiconductor manufacturer, most recently as Executive Vice President, Communications Products Group, with responsibility for ASIC technology development and the Computer, Consumer, and Communications divisions. Mr. Daane earned his bachelors degree from the University of California, Berkeley in 1986.

Denis M. Berlan joined us in December 1989 as Vice President, Product Engineering and was named Vice President, Operations and Product Engineering in October 1994. In January 1996, he was named Vice President, Operations. In January 1997, he was named Executive Vice President and Chief Operating Officer. He was previously employed by

Advanced Micro Devices, Inc., or AMD, a semiconductor manufacturer, and by Lattice Semiconductor Corporation, a semiconductor manufacturer, in engineering management capacities. Mr. Berlan received his M.S.E.E. in 1972 and Ph.D. in 1977 from the University of Grenoble in France and an M.B.A. in 1987 from the University of Santa Clara.

Erik R. Cleage joined us as International Marketing Manager in February 1986. He became Director, Japan and Asia Pacific Sales in April 1989, was appointed Vice President, Marketing in August 1990 and Senior Vice President, Marketing in January 1999. Previously, he was employed by AMD and Fairchild Semiconductor Corporation, a semiconductor manufacturer, in various positions. Mr. Cleage earned his bachelor of science degree in electrical engineering from Stanford University in 1981.

John R. Fitzhenry joined us in May 1995 as Vice President, Human Resources. From February 1983 to May 1995, he was employed by Apple Computer, Inc., a manufacturer of personal computers, in various human resource management positions. Mr. Fitzhenry earned his bachelors degree from the University of California, Santa Barbara in 1971 and his J.D. from the University of the Pacific, McGeorge School of Law in 1976.

Lance M. Lissner joined us in May 1998 as Vice President of Business Development and Investor Relations and was appointed Senior Vice President, Business Development in November 2000. Prior to that time, Mr. Lissner was a corporate officer of Measurex Corporation, a developer of computer-integrated measurement, control, and information systems, where he was employed since 1973 and held various positions in sales, marketing, engineering, and business development. Mr. Lissner earned his bachelors degree from Harvey Mudd College in 1972 and his masters degree from Stanford University in 1973.

George A. Papa joined us in February 2002 as Senior Vice President, Worldwide Sales. From February 2000 to February 2002, Mr. Papa served as Vice President of Worldwide Sales of the Communications Business Group of Marvell Semiconductor, Inc., a semiconductor company. From March 1997 to February 2000, he served as Vice President of Worldwide Sales for Level One Communications, Inc., a subsidiary of Intel Corporation, a semiconductor company. From February 1991 to March 1997, Mr. Papa served as Vice President of North American Sales for Siemens Corporation, a diversified global technology company. Mr. Papa earned his bachelors degree from Northeastern University in 1971.

Jordan S. Plofsky joined us in February 2001 as Senior Vice President, Vertical Markets and Embedded Processor Products and became Senior Vice President, Applications Business Groups in March 2002. Prior to joining us, Mr. Plofsky was employed by LSI Logic from October 1996 to February 2001, most recently as Executive Vice President, Enterprise Infrastructure Group from November 2000 to February 2001 and Vice President and General Manager, Networking Products Division from June 1998 to November 2000. Mr. Plofsky earned a bachelors degree from the University of Illinois, Urbana-Champaign in 1982.

Nathan M. Sarkisian joined us in June 1992 as Corporate Controller. He was appointed Vice President, Finance and Chief Financial Officer in August 1995 and Senior Vice President and Chief Financial Officer in March 1998. Prior to joining us, Mr. Sarkisian held various accounting and financial positions at Fairchild Semiconductor and at Schlumberger Limited, an oil field services company. Mr. Sarkisian earned a bachelors degree from Stanford University in 1981 and an M.B.A. from Harvard University in 1992.

Katherine E. Schuelke joined us in March 1996 as Corporate Attorney. She became Senior Corporate Attorney in July 1997 and Assistant General Counsel and Assistant Secretary in July 1999. In October 2001, she was appointed Vice President, General Counsel and Secretary. Prior to March 1996, Ms. Schuelke was an attorney at the law firm of Morrison & Foerster LLP for seven

years. Ms. Schuelke earned a bachelors degree from the State University of New York at Buffalo in 1986 and a J.D. from New York University in 1989.

Employees

As of December 31, 2003, we had 1,995 regular employees. Of these employees, 1,263 were located in the United States, and 732 were employed in 17 other countries. None of our employees is represented by a labor union. We have not experienced any work stoppages, and we believe that our employee relations are good.

Additional Information

Our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to reports filed pursuant to Sections 13(a) and 15(d) of the Securities Exchange Act of 1934, as amended, are available free of charge on our Web site at www.altera.com, when such reports are available on the Securities and Exchange Commission Web site.

ITEM 2. Properties.

Our headquarters facility is located in San Jose, California, on approximately 25 acres of land that we purchased in June 1995. The campus for the headquarters facility currently consists of four interconnected buildings totaling approximately 500,000 square feet. Design, research, marketing, administrative, and limited manufacturing activities are performed in this facility. We also have a 240,000 square foot design and test engineering facility in Penang, Malaysia. This facility is situated on land leased on a long-term basis from the Penang Development Corporation. Finally, we lease on a short-term basis office facilities for our domestic and international sales management offices, our European Technology Center in the United Kingdom, our Toronto Technology Center, and our Ottawa Technology Center. Rental expense under all operating leases amounted to \$6.8 million in 2003. We believe that our existing facilities and any planned future expansions are adequate for our current and foreseeable future needs.

ITEM 3. Legal Proceedings.

In November 1999, we sued Clear Logic Inc., in the United States District Court for the Northern District of California, San Jose Division, alleging that Clear Logic is unlawfully appropriating our registered mask work technology in violation of the federal mask work statute and that Clear Logic has unlawfully interfered with our relationships and contracts with our customers. The lawsuit seeks compensatory and punitive damages and an injunction to stop Clear Logic from unlawfully using our mask work technology and from interfering with our customers. Clear Logic answered the complaint by denying that it is infringing our mask work technology and denying that it has unlawfully interfered with our relationships and contracts with our customers. Clear Logic also filed a counterclaim against us for unfair competition under California law alleging that we have made false statements to our customers regarding Clear Logic.

In October 2001, the District Court ruled on summary judgment motions filed by both parties. The Court denied Clear Logic s motion for summary judgment of our claim of tortious interference with our software license, ruling that using the bitstream [from our MAX+PLUS II software] to program a Clear Logic device violates Altera s software license. Further, the Court granted our motion for summary judgment disposing of Clear Logic s counterclaim of unfair competition. On January 4, 2002, Clear Logic filed a petition for Chapter 11 bankruptcy, which resulted in all proceedings in the lawsuit being automatically stayed. We moved to have this stay lifted, and the bankruptcy court granted our motion effective May 31, 2002. On July 9, 2002, the Court issued a preliminary injunction enjoining Clear Logic and its distributors from selling any semiconductor device that was made, designed, configured, programmed or otherwise manufactured through or with the aid of any bitstream file or other output generated by our MAX+PLUS II software. On November 25, 2002, a jury rendered a verdict in our favor on all issues in the lawsuit.

During the quarter ended September 30, 2003, the Court granted our motion for summary judgment on damages and awarded \$30.6 million. In the first quarter of 2004, Clear Logic filed a notice of appeal in the Ninth Circuit Court of Appeals. Because Clear Logic is in bankruptcy and because they are appealing the jury verdict and the rulings of the District Court, management cannot predict the likelihood of recovery nor the amount that might be recovered, if any; our consolidated financial statements do not reflect any anticipated recovery.

Due to the nature of the litigation with Clear Logic, our management cannot estimate the total expenses that we will incur prosecuting the lawsuit. Although we cannot make any assurances as to the results of this case, we intend to pursue our claims vigorously.

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

None.

15

PART II

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

Our common stock trades on the Nasdaq National Market under the symbol ALTR. As of February 9, 2004, there were approximately 697 stockholders of record. The majority of our shares are held by brokers and other institutions on behalf of approximately 117,999 stockholders as of February 9, 2004.

The closing price of our common stock on February 9, 2004 was \$22.70 per share as reported by the Nasdaq National Market. The following table sets forth, for the periods indicated, the high and low closing sale prices for our common stock as reported by the Nasdaq National Market:

	20	2003		2002	
	High	Low	High	Low	
First Quarter	\$ 15.20	\$ 10.84	\$ 25.48	\$ 19.07	
Second Quarter	19.32	13.90	24.46	13.60	
Third Quarter	23.11	17.44	14.80	8.93	
Fourth Quarter	25.36	17.70	14.98	8.67	

Our policy has been to reinvest our earnings to fund future growth and to repurchase shares of our common stock. Accordingly, we have not paid any cash dividends on our common stock and do not anticipate paying cash dividends in the foreseeable future.

ITEM 6. Selected Financial Data.

The section entitled Selected Consolidated Financial Data in our 2003 Annual Report is incorporated herein by reference.

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

The following Management's Discussion and Analysis of Financial Condition and Results of Operations, as well as information contained in Risk Factors below and elsewhere in this report, contains forward-looking statements, which are provided under the safe harbor protection of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are generally written in the future tense and/or are preceded by words such as will, may, should, could, expect, suggest, believe, anticipate, other similar words. Forward-looking statements include statements regarding (1) our gross margins and factors that affect gross margins, such as the costs of raw materials, our ability to absorb manufacturing costs, trends in selling prices, and the sale of previously reserved inventory; (2) the commercial success of our new products; (3) the future availability of our announced products; (4) trends in future sales; and (5) future economic conditions.

Forward-looking statements are not guarantees of future performance and involve risks and uncertainties. The forward-looking statements contained in this report are based on information that is currently available to us and expectations and assumptions that we deem reasonable at the time the statements were made. We do not undertake any obligation to update any forward-looking statements in this report or in any of our other communications, except as required by law. All such forward-looking statements should be read as of the time the statements were made and with the recognition that these forward-looking statements may not be complete or accurate at a later date.

Many factors may cause actual results to differ materially from those expressed or implied by the forward-looking statements contained in this report. These factors include, but are not limited to, those risks set forth under Risk Factors.

Critical Accounting Estimates

The preparation of our financial statements and related disclosures in conformity with accounting principles generally accepted in the United States requires our management to make judgments and estimates that affect the amounts reported in our financial statements and accompanying notes. Our management believes that we consistently apply these judgments and estimates and the financial statements and accompanying notes fairly represent all periods presented. However, any errors in these judgments and estimates may have a material impact on our statement of operations and financial conditions. Critical accounting estimates, as defined by the Securities and Exchange Commission, are those that are most important to the portrayal of our financial condition and results of operations and require our management s most difficult and subjective judgments and estimates of matters that are inherently uncertain. Our critical accounting estimates include those regarding (1) revenue recognition; (2) the valuation of inventories; and (3) taxes.

Revenue Recognition: We sell our products to original equipment manufacturers, or OEMs, and to electronic components distributors who resell these products to OEMs, or their subcontract manufacturers. We recognize revenue on products sold to OEMs upon shipment. More than ninety-five percent of our products are sold to distributors for subsequent resale to OEMs or their subcontract manufacturers. Because our sales to distributors are made under agreements allowing for product returns, price adjustments or, under certain circumstances, other credits, we defer recognition of revenue on products sold to distributors until the products are resold. Deferred revenue and the corresponding deferred cost of sales are recorded in the caption deferred income and allowances on sales to distributors in the liability section of our consolidated balance sheets.

Our revenue reporting is highly dependent on receiving pertinent and accurate data from our distributors in a timely fashion. Distributors provide us periodic data regarding the product, price, quantity, and end customer on their shipments as well as the quantities of our products they still have in stock. In determining the appropriate amount of revenue to recognize, we use this data and apply judgment in reconciling differences between their reported inventories and activities. If distributors incorrectly report their inventories or activities, or if our judgment is in error, it could lead to inaccurate reporting of our revenues and income.

Valuation of Inventories: Inventories are recorded at the lower of cost on a first-in-first-out basis (approximated by standard cost) or market. We establish provisions for inventory if it is excess to projected customer demand, and the creation of such provisions results in a write-down of inventory to net realizable value and a charge to cost of goods sold. Historically, it has been difficult to forecast customer demand especially at the part-number level. Many of the orders we receive from our customers and distributors request delivery of product on relatively short notice and with lead times less than our manufacturing cycle time. In order to provide competitive delivery times to our customers, we build and stock a certain amount of inventory in anticipation of customer demand that may not materialize. Moreover, as is common in the semiconductor industry, we may allow customers to cancel orders with minimal advance notice. Thus, even product built to satisfy specific customer orders may not ultimately be required to fulfill customer demand. We routinely compare our inventory against projected demand and as a result frequently record immaterial inventory charges to provision for excess and obsolete inventories. Nevertheless, at any point in time, some portion of our inventory is subject to the risk of being materially in excess to projected demand. In 2001, as a result of a large and unforecasted decline in sales, we determined that a significant portion of our inventory was excess to projected demand and recorded an inventory provision of \$154.5 million. While we endeavor to accurately predict demand and stock commensurate inventory levels, we may record unanticipated material inventory write-downs in the future.

Taxes: We make certain estimates and judgments in the calculation of tax liabilities and the determination of deferred tax assets, which arise from temporary differences between tax and financial statement recognition methods. We record a valuation allowance to reduce our deferred tax assets to the amount that management estimates is more likely than not to be realized. If in the future we determine that we are not likely to realize all or part of our net deferred tax assets, an adjustment to the deferred tax assets would be charged to earnings in the period such determination is made.

In addition, the calculation of our tax liabilities involves the inherent uncertainty in the application of complex tax laws. We are currently under examination by various taxing authorities. We record tax reserves for additional taxes that we estimate we may be required to pay as a result of such examinations. If the payment ultimately proves to be unnecessary,

the reversal of these tax reserves would result in tax benefits being recognized in the period we determine such reserves are no longer necessary. If an ultimate tax assessment exceeds our estimate of tax liabilities, an additional charge to expense will result.

Results of Operations

Our fiscal year ends on the Friday nearest December 31st. Our most recent fiscal year ended on January 2, 2004. For presentation purposes, all financial data refers to our fiscal year end as December 31st.

The following table sets forth certain items in the consolidated statements of operations, expressed as a percentage of net sales for 2003, 2002, and 2001:

	Yea	Years Ended December 31,		
	2003	2002	2001	
Net sales	100%	100%	100%	
Cost of sales	32%	37%	55%	
Gross margin	68%	63%	45%	
Research and development expenses	22%	26%	20%	
Selling, general, and administrative expenses	22%	23%	26%	
Restructuring and other special charges			5%	
Income (loss) from operations	24%	14%	(6%)	
Interest and other income, net	2%	3%	4%	
Provision for income taxes	7%	4%	3%	
Net income (loss)	19%	13%	(5%)	

We classify our products into three categories: New, Mainstream, and Mature and Other Products. During 2003, we updated our product categories, and all prior year data have been adjusted to reflect the following compositions:

New Products include Stratix, Stratix GX, Cyclone, MAX 3000A and HardCopy devices;

Mainstream Products include APEX 20K, APEX 20KC, APEX 20KE, APEX II, FLEX 10KE, ACEX 1K, Excalibur, Mercury, MAX 7000A, and MAX 7000B devices; and

Mature and Other Products include FLEX 6000, FLEX 8000, FLEX 10K, FLEX 10KA, MAX 7000, MAX 7000S, MAX 9000, Classic, configuration and other devices, software and other tools, and IP cores.

Sales

Sales were \$827.2 million in 2003, \$711.7 million in 2002, and \$839.4 million in 2001. Sales increased 16% in 2003 from 2002 and declined 15% in 2002 from 2001.

During 2003 our sales grew 16% primarily due to higher unit sales of all product categories, with the largest unit increases in New and Mainstream Products, offset by routine declines in average selling prices primarily in our Mainstream and Mature and Other Products. FPGA sales accounted for 65% of total sales and grew 26% in 2003 driven predominantly by increased sales of our Stratix, APEX 20KE, ACEX 1K, and Cyclone families. CPLD sales accounted for 27% of total sales and decreased 2% in 2003, driven primarily by decreases in sales of older families, partially offset by increases in the MAX 3000A and MAX 7000B families.

The decline in sales in 2002 compared to 2001 was the result of a general economic downturn and softening demand for products manufactured by our customers. Although our quarterly sequential sales growth resumed in 2002, it was not sufficient to offset the rapid 2001 sales decline. As a result, 2002 sales in total decreased 15% compared to 2001. The decrease was also due to lower unit sales of our Mature and Mainstream products as well as lower average unit selling prices in all product categories.

Sales by Product Category

Sales by product category, as a percentage of total sales, as well as yearly growth or decline, were as follows. All prior year data has been adjusted to conform to the new classification in 2003.

	Year	s Ended Decemb	per 31,	2003 vs.		
	2003	2002	2001	2002 Change	2002 vs. 2001 Change	
New	12%	4%	2%	288%	71%	
Mainstream	50%	49%	39%	18%	6%	
Mature and Other	38%	47%	59%	(5%)	(32%)	
Total Sales	100%	100%	100%	16%	(15%)	

Our New Products have been developed and introduced to the marketplace over the last several years and have additional features and higher densities than their predecessors. New Products increased 288% predominantly due to customer prototyping and development activities using our Stratix, Cyclone, and MAX 3000A families. The year 2003 was the first full year of sales for Stratix, and Cyclone first began generating sales in the first quarter of 2003. The New Product growth of 71% in 2002 was due to our MAX 3000A and Stratix families, with Stratix first generating sales in the second quarter of 2002. We expect that sales of our New Products will continue to increase as customer adoption of our New Products continues to be strong, and customers ramp their programs into volume production.

Sales by Market Segment

The following market segment data is derived from data that is provided to us by our distributors and end customers. With a broad base of customers, who in some cases manufacture end products spanning multiple market segments, the assignment of revenue to a market segment requires the use of estimates, judgment, and extrapolation. As such, actual results may differ from those reported.

Effective January 1, 2002, we adopted a new methodology for revenue classification by market segment. Comparable data for 2001 is not available. Sales by market segment, as a percentage of total sales, as well as yearly growth or decline, were as follows:

		ears Ended ecember 31,	2003 vs.
	2003	2002	2002 Change
Communications	44%	46%	12%

Industrial	30%	27%	26%
Consumer	15%	14%	30%
Computer and Storage	11%	13%	(4%)
Total Sales	100%	100%	16%

During 2003, our Consumer and Industrial market segments provided strong growth over the prior year as a result of increased usage of PLDs by customers in these market segments. Communications grew 12% due to improving market conditions in the telecom subsegment and increased market share in the wireless subsegment across multiple customers. Computer and Storage declined 4% in 2003 due to weakness in the storage subsegment partially offset by an increase in the servers subsegment.

While we expect that Communications will remain our largest market segment, we anticipate that the Industrial and Consumer market segments will continue to significantly contribute to our future growth. No single end customer provided more than 10% of our sales for the years ended December 31, 2003, 2002, and 2001.

Sales by Geography

The following table is based on the geographic location of the distributor or OEM who purchased our products which may be different from the geographic locations of our end customers.

	Ye	Years Ended December 31, 2003 vs.		2002 vs.	
	2003	2002	2001	2002 Change	2001 Change
North America	33%	40%	45%	(4%)	(25%)
Europe	22%	24%	26%	9%	(22%)
Japan Asia Pacific	24% 21%	21% 15%	20% 9%	30% 62%	(8%) 37%
Total International	67%	60%	 55%	30%	(7%)
Total Sales	100%	100%	100%	16%	(15%)

Sales in Asia Pacific and Japan increased significantly in 2003 compared to the prior year due primarily to strong demand from a broad base of customers for our New Products. The percentage of total sales represented by Asia Pacific increased as a result of the transfer of business from North America and from Europe, as well as an increase in sales to local customers. We expect that sales will continue to transfer to Asia Pacific from other geographies.

North America sales declined 25% in 2002 from 2001, while sales in Europe declined 22%, and Japan declined 8%. The declines in sales were primarily due to a general economic downturn and softening end-market demand especially in the Communications and Computer and Storage sectors.

Gross Margin

	Yea	Years Ended December 31,		
	2003	2002	2001	
(Dollars in millions)				
Gross Margin Percentage	67.9%	63.0%	45.4%	
Included in Reported Gross Margin Percentage Above:				
2001 Inventory Write-down			\$ (154.5)	
Percentage of Sales			(18.4%)	
Gross Margin Benefit from Sale of Inventory Written down in 2001	\$ 29.0	\$ 18.0		
Percentage of Sales	3.5%	2.5%		

Gross margin increased 4.9 percentage points in 2003 from 2002. The increase was primarily due to yield enhancements and overall declines in unit costs and partially due to higher gross margin benefit resulting from the sale of inventory previously written down in 2001. Gross margin increased 17.6 percentage points in 2002 from 2001 primarily as a result of the inventory write-down in 2001.

As of December 31, 2003, the book value of the inventory written down in 2001 was essentially zero while the cost basis was \$28.4 million. This cost basis was comprised of \$22.0 million of raw materials and work in process inventory and \$6.4 million of finished goods inventory.

Research and Development Expenses

	Yea	ars Ended Decem	ber 31,	2003 vs.	2002 vs.
	2003	2002	2001	2002 Change	2001 Change
(Dollars in millions)					
Research and Development	\$ 178.5	\$ 182.8	\$ 170.9	(2%)	7%
Percentage of Sales	22%	26%	20%		

Research and development expenses include expenditures for labor, masks, prototype wafers, and the amortization of deferred stock-based compensation for employees engaged in research and development activities. These expenditures were for the design of new PLD families, and the development of process technologies, new packages, and software to support new products and design environments.

Research and development expenses decreased slightly in 2003 compared to 2002, primarily due to lower spending on prototype wafers, which was partially offset by increased spending on labor and benefit costs. Research and development expenses increased in 2002 primarily due to higher spending on prototype wafers. Historically, the level of research and development expenses has fluctuated in part due to the timing of the purchase of masks and prototype wafers used in the development of new products.

We will continue to make significant investments in the development of new products and focus our efforts on the development of new programmable products that utilize advanced semiconductor wafer fabrication processes, as well as related development software. We are currently investing in the development of our Stratix II, MAX II, Cyclone II, and HardCopy families, our Quartus II software, our library of IP cores, and other future products.

Selling, General, and Administrative Expenses

	Years	s Ended Decembe	cember 31, 2003 vs.		per 31, 2003 vs.		2002 vs.
	2003	2002	2001	2002 Change	2001 Change		
(Dollars in millions)							
Selling, General, and Administrative	\$ 184.6	\$ 168.5	\$ 215.3	10%	(22%)		
Percentage of Sales	22%	23%	26%				

Selling, general, and administrative expenses primarily include salary expenses related to sales, marketing, and administrative personnel, commissions and incentives, depreciation, legal, advertising, facilities, and travel expenses.

Selling, general, and administrative expenses increased by \$16.1 million in 2003 compared to 2002. The increase was primarily due to higher spending for labor and benefits costs, as well as higher spending for commissions and incentives and consulting and professional services. Selling, general, and administrative expenses decreased \$46.8 million, or 22%, in 2002 compared to 2001. The decrease was primarily due to spending control measures including the restructuring program implemented in 2001, lower expenses for labor, advertising, recruiting, and travel, as well as reduced litigation expenses stemming from the settlement of our litigation with Xilinx, Inc., and Lattice Semiconductor Corporation.

Restructuring and Other Special Charges: During 2001, we recorded restructuring and other special charges of \$47.7 million. For additional information, see Note 3 to the Consolidated Financial Statements. These charges, along with the inventory write-down of \$154.5 million in 2001, led to the loss from operations for that year.

Interest and Other Income, Net

	Year	s Ended Decemb	ber 31,	2003 vs.	2002 vs.
	2003	2002	2001	2002 Change	2001 Change
(Dollars in millions)					
Interest and Other Income, Net	\$ 14.3	\$ 26.0	\$ 40.2	(45%)	(35%)
Percentage of Sales	2%	3%	4%		

Interest and other income consists mainly of interest income generated from investments in high-quality fixed income securities. The year-over-year declines in both 2003 and 2002 were primarily due to declines in market interest rates as well as a recognized loss of \$3.1 million on the sale of certain securities in the second quarter of 2003.

Provision for Income Taxes

Our effective tax rates were 27% for 2003, 26% for 2002, and (206%) for 2001. The increase in the effective tax rate in 2003 over 2002 primarily resulted from the decreased benefit of tax-exempt income and research and development tax credits, which was partially offset by a favorable change in the geographic mix of income. Our effective tax rate was (206%) for 2001 primarily due to inventory and restructuring and other special charges taken in 2001.

Financial Condition, Liquidity, and Capital Resources

We ended 2003 with over \$1.0 billion of cash, cash equivalents, and short-term investments available to finance our operating activities and future growth. We currently use cash generated from operations to support our operating activities, capital expenditures, and acquisitions and investments. We also use our available cash for repurchases of our common stock under our stock repurchase program. As of December 31, 2003, there were no outstanding loans due from us.

In 2003, we spent \$239.0 million to repurchase our common stock, compared to \$139.5 million in 2002, and \$183.2 million in 2001. We also spent \$13.9 million to purchase property and equipment in 2003, compared to \$9.9 million in 2002, and \$65.8 million in 2001. We expect that capital expenditures will increase in 2004 and we will continue to use a portion of our available capital to repurchase shares.

Year 2003: Cash and cash equivalents increased \$3.4 million, or 1%, to \$258.8 million at December 31, 2003, from \$255.4 million at December 31, 2002. Our positive cash flow from operating activities was primarily attributable to net income, depreciation and amortization, amortization of deferred stock-based compensation, increases in deferred income and allowances on sales to distributors of \$101.1 million, \$46.2 million of income taxes payable, and \$8.4 million of tax benefit from stock plans. These items were partially offset by increases in accounts receivable of \$30.1 million and inventories of \$5.5 million.

Cash used for investing activities of \$121.8 million primarily consisted of purchases of available-for-sale investments of \$685.6 million and capital equipment of \$13.9 million. These items were partially offset by proceeds from the maturity and sale of available-for-sale investments of \$568.0 million and held-to-maturity investments of \$13.0 million. Cash used for financing activities of \$202.3 million resulted from the \$239.0 million repurchase of our common stock, which was partially offset by net proceeds of \$36.7 million from the issuance of our common stock to employees through various option plans and our employee stock purchase plan.

Year 2002: We ended 2002 with \$942.7 million of cash, cash equivalents, and short-term investments. Cash and cash equivalents increased \$110.4 million, or 76%, to \$255.4 million at December 31, 2002, from \$145.0 million at December 31, 2001. Our positive cash flow from operations was primarily due to net income, depreciation and amortization, amortization of deferred stock-based compensation, decreases in other current assets of \$54.4 million resulting primarily from the receipt of a tax refund, \$38.5 million of inventories, and \$21.7 million of deferred income taxes. These items were partially offset by a \$23.2 million increase in accounts receivable.

During 2002, cash used for investing activities of \$42.2 million primarily consisted of purchases of available-for-sale investments of \$740.0 million and capital equipment of \$9.9 million. These items were partially offset by proceeds from the maturity and sale of available-for-sale investments of \$709.7 million. Cash used for financing activities of \$95.1 million resulted from the \$139.5 million repurchase of our common stock, which was partially offset by net proceeds of \$44.4 million from the issuance of our common stock to employees through various option plans and our employee stock purchase plan.

Based on past performance and current expectations, we believe that our available sources of funds including cash, cash equivalents, short-term investments, and cash we expect to generate from operations will be adequate to finance our operations for at least the next year.

Contractual Obligations

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

	Payment Due by Year				
		Less than			After
Contractual Obligations	Total	1 Year	1-3 Years	3-5 Years	5 Years
(Dollars in millions)					
Operating Lease Obligations ⁽¹⁾	\$ 21.7	\$ 5.8	\$ 7.6	\$ 3.1	\$ 5.2
Inventory and Related Purchase Obligations(2)	73.0	73.0		·	
Total Contractual Cash Obligations	\$ 94.7	\$ 78.8	\$ 7.6	\$ 3.1	\$ 5.2

Dayma and Diva by Valar

Impact of Currency Translation and Inflation

We purchase the majority of our materials and services in U.S. dollars and sell our products to OEMs and distributors in U.S. dollars. As of December 31, 2003, we had no open forward contracts; however, we may enter into contracts from time to hedge foreign exchange exposure. We have, in the past, entered into forward contracts to hedge against currency fluctuations associated with contractual commitments denominated in foreign currencies.

Common Stock Repurchases

In January 2004, our Board of Directors approved an increase in the shares authorized for repurchase under a stock repurchase plan from 68.0 million shares to 78.0 million shares. Share repurchase activities for 2003, 2002, and 2001, were as follows:

	2003	2002	2001
(In millions, except per share amounts)			
Shares repurchased	12.5	8.9	7.2
Cost of shares repurchased	\$ 239.0	\$ 139.5	\$ 183.2
Average price per share	\$ 19.17	\$ 15.67	\$ 25.38

⁽¹⁾ We lease facilities under non-cancelable lease agreements expiring at various times through 2013. Rental expense amounted to \$6.8 million in 2003

⁽²⁾ We depend entirely upon subcontractors to manufacture our silicon wafers and provide assembly and test services. Due to lengthy subcontractor lead times, we must order these materials and services from these subcontractors well in advance, and we are obligated to pay for the materials and services once they are completed. We expect to receive and pay for these materials and services within the next four to six months.

Since the inception of our repurchase program in 1996 through December 31, 2003, we have repurchased a total of 58.5 million shares of our common stock for an aggregate cost of \$1.3 billion. All shares were retired upon acquisition.

Off-Balance Sheet Arrangements

We do not have any financial partnerships with unconsolidated entities, such as entities often referred to as structured finance or special purpose entities.

Risk Factors

The following risk factors, among others, could in the future affect our actual results of operations and could cause our actual results to differ materially from those expressed in forward-looking statements made by us. Before you decide to buy, hold, or sell our common stock, you should carefully consider the risks described below, in addition to the other information contained elsewhere in this report. The following risk factors are not the only risk factors facing our company. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our business. If any of these known or unknown risks or uncertainties actually occurs, our business, financial condition, and results of operation could be seriously harmed. In that event, the market price for our common stock could decline, and you may lose all or part of your investment.

Our financial results depend on our ability to compete successfully in the highly competitive semiconductor industry.

The programmable logic industry is intensely competitive. Our ability to compete successfully in the industry will depend on our ability to develop, manufacture, and sell complex semiconductor components and development tools that offer customers greater value than solutions offered by competing vendors such as Xilinx and Lattice.

Because we develop PLDs for applications that are presently served by vendors of ASICs, ASSPs, microcontrollers, and digital signal processors, we also indirectly compete against vendors of these products. Many of these vendors, including International Business Machines Corporation, LSI Logic Corporation, and Texas Instruments Inc., have substantially greater financial, technical, and marketing resources than we do and have well-established market positions and solutions that have been proven technically feasible and economically competitive over several decades. We may not be able to displace these vendors in the targeted applications and densities. Further, other programmable logic vendors are targeting these applications and may be successful in securing market share from us. Moreover, some of our customers have historically used standard cell technologies to achieve greater integration in their systems; this may not only impede our efforts to penetrate the markets for ASICs, ASSPs, microcontrollers, and digital signal processors, but may also displace our products in the applications that we presently serve.

Our future success depends on our ability to define, develop, and sell new and enhanced products that achieve market acceptance.

As a semiconductor company, we operate in a dynamic market characterized by rapid technological change. Our current product development efforts focus on developing new PLDs, related development software and hardware, and advanced semiconductor wafer fabrication processes. Our development efforts may not result in the timely introduction of competitive new products, or enhancements to existing products, and/or market acceptance of new and enhanced products.

We depend entirely on independent subcontractors to supply us with finished silicon wafers.

We depend entirely upon subcontractors to manufacture our silicon wafers. We purchase nearly all of our silicon wafers from Taiwan Semiconductor Manufacturing Company, or TSMC, with most of its manufacturing facilities located in Taiwan, and the remaining portion from Sharp Corporation, located in Japan. Silicon wafer production facilities have at any given time a fixed capacity, the allocation of which is determined solely by our vendors and over which we have no direct control. We have no

formalized long-term supply or allocation commitments from our foundry suppliers. If market demand for silicon wafers suddenly exceeds market supply, our supply of silicon wafers could quickly become limited. A shortage in foundry manufacturing capacity could hinder our ability to meet demand for our products. Moreover, silicon wafers constitute more than half of our product cost. If we are unable to procure wafers at favorable prices, our gross margins will be adversely affected.

To ensure the continued supply of wafers, we may establish other sources of wafer supply for our products as such arrangements become economically advantageous or technically necessary. However, there are only a few foundry vendors that have the capabilities to manufacture our products. If we engage alternative sources of supply with foundry

vendors that have the capabilities to manufacture our products, we may encounter start-up difficulties and incur additional costs. Also, shipments could be delayed significantly while such sources are qualified for volume production.

In addition to sufficient foundry manufacturing capacity and wafer prices, we depend on good production yields (good die per wafer), and timely delivery of silicon wafers to meet our customers—demand for products and to maintain profit margins. Wafer production yields depend on a wide variety of factors, including the level of contaminants in the manufacturing environment, impurities in the materials used, and the performance of personnel and equipment. As is common in the semiconductor industry, we have experienced, and may experience from time to time, problems with achieving acceptable production yields and timely delivery from our foundry vendors.

Difficulties in production yields can often occur when we begin production of new products, when we transition to new processes, or when our principal wafer supplier, TSMC, moves production of a product from one manufacturing plant to another, or manufactures the same product at multiple factories. Further, production throughput times vary considerably among the various factories used by our wafer suppliers, and we may experience delays from time to time in processing some of our products. These difficulties and delays can potentially result in significantly higher costs and lower product availability. We have in the past experienced higher than anticipated costs and supply shortages. For example, from the fourth quarter of 1999 through the first half of 2000, process control issues associated with volume ramp up at a wafer supplier resulted in lower than expected die yields on our FLEX 10KA and FLEX 10KE products, thereby leading to reduced product availability in these families. As a result, we were unable to support distributor stocking at desired levels and in some cases could not meet end customer demand.

We expect that, to maintain or enhance our competitive position, we will continue to introduce new products using, and convert established products to, new and more advanced process technologies. For example, our Stratix, Stratix GX and Cyclone families are manufactured on a 130-nanometer, all-layer-copper interconnect process. The company is next generation product families, the Stratix II and Cyclone II families, will be manufactured on a 90-nanometer all-layer-copper interconnect process for which Altera has no production history. We will also continue to transition our fabrication process arrangements to larger wafer sizes and smaller circuit geometries. The Stratix and Cyclone families are currently migrating from 200 mm to 300 mm wafer sizes, and the next generation product families will be exclusively manufactured on 300 mm wafers. Manufacturing 300 mm wafers is relatively new to the industry and Altera has a limited production history. Such transitions entail inherent technological risks and start-up difficulties that can adversely affect R&D spending, yields, product costs, and timeliness of delivery. To enhance our product designs and cost structure, we depend on all of our subcontractors, and especially our principal foundry partner, TSMC, to improve process technologies in a timely manner.

We depend on independent subcontractors, located in Asia, to assemble and test our semiconductor products.

Independent subcontractors, located in Asia, assemble and test our semiconductor products. Because we rely on independent subcontractors to perform these services, we cannot directly control our product delivery schedules or quality levels. For example, in the second quarter of 1999, difficulties with a subcontractor s manufacturing process limited the availability of packaging materials (piece parts) used in certain of our proprietary FineLine BGA®, or ball-grid array, packages, thereby causing limited production. This in turn limited shipments of our FLEX 10KE product family.

Our future success also depends on the financial viability of our independent subcontractors. For example, in 2001, the reduction in overall demand for semiconductor products financially stressed certain of our subcontractors and weakened their capital structures. If the capital structures of our independent subcontractors weaken, we may experience product shortages, quality assurance problems, increased manufacturing costs, and/or supply chain disruption.

Conditions outside the control of our independent subcontractors may impact their business operations.

The economic, market, social, and political situations in countries where certain independent subcontractors are located are unpredictable, can be volatile, and can have a significant impact on our business because we may not be able to obtain product in a timely manner. Market and political conditions, including currency fluctuation, terrorism, political strife, war, labor disruption, and other factors, including natural or man-made disasters, adverse changes in tax laws,

tariff, import or export quotas, power and water shortages, or interruption in air transportation, in areas where our independent subcontractors are located also could have a severe negative impact on our operating capabilities. For example, in September 1999, a major earthquake struck Taiwan, resulting in widespread physical damage and loss of life. The earthquake halted wafer fabrication production at our primary vendor, TSMC, for several days and then only limited production began. Nearly two weeks passed before full production resumed, and a portion of the inventory in the production process was scrapped as a result of damage incurred during the earthquake. Our independent subcontractors may experience similar or more severe problems in the future as a result of similar events.

Our intellectual property rights may not provide meaningful protection from our competitors.

We rely significantly on patents to protect our intellectual property rights. As of December 31, 2003, more than 632 patents relating to various aspects of our products and technology had been issued to us in the United States. We also have a number of other patents issued in other countries as well as a number of patent applications pending. Our patents and patent applications may not provide meaningful protection from our competitors. Our competitors may be able to circumvent our patents or develop new patentable technologies that displace our existing products. Further, we may not be able to timely develop or patent new technologies, and those patents granted to us may not be valuable in all markets or may not enable us to develop new products that achieve market acceptance. Also, from time to time in the normal course of business, we receive and make inquiries with respect to possible patent infringements. As a result of inquiries received from third parties, it may be necessary or desirable for us to obtain licenses relating to one or more of our current or future products. We may not be able to obtain such licenses on reasonable terms.

In addition to patent protection, we rely on trademark, trade secret, copyright, and mask work laws to protect our unpatented proprietary information or technologies. Despite our efforts to protect our proprietary rights from unauthorized use or disclosure, parties, including our former employees or consultants, may attempt to disclose, obtain, or use our proprietary information or technologies without our authorization. Other companies may also develop substantially equivalent proprietary information or technologies or infringe on our trademarks and service marks, potentially diminishing the value of our brand. The steps we have taken may not prevent misappropriation of our proprietary information and technologies, particularly in foreign countries where laws or law enforcement practices may not protect our proprietary rights as fully as in the United States. If other companies obtain our proprietary information or technologies or develop substantially equivalent information or technologies, they may develop products that compete against our products.

We may face significant costs arising from intellectual property litigation.

Intellectual property claims, regardless of their merit, can result in costly litigation and the diversion of our technical and management personnel. Legal proceedings also tend to be unpredictable and may be affected by events outside of our control. Further, we may not succeed in defending or enforcing our intellectual property rights. If we are not successful in defending or enforcing our intellectual property rights, or in defending against third-party intellectual property infringement claims, third parties may obtain significant monetary damages or an injunction against the manufacture and sale of one or more of our product families. We cannot assure you that intellectual property litigation will not have an adverse effect on our financial position, or results of operations or cash flows.

We have been a party to lawsuits and may in the future become a party to lawsuits involving various types of claims, including, but not limited to, unfair competition and intellectual property matters. In July 2001, we entered into a settlement agreement with Xilinx under which we settled all pending litigation with Xilinx. As part of the settlement agreement, we entered into a royalty-free patent

cross license agreement with Xilinx, including a prohibition against further patent litigation between the two companies through July 2006. In connection with the settlement agreement, we paid Xilinx a one-time payment of \$20.0 million. Prior to the settlement with Xilinx, we devoted substantial financial resources over an eight-year period to the Xilinx litigation. Similarly, in July 2001, we entered into a settlement agreement with Lattice under which we settled all pending patent litigation. As part of the settlement agreement with Lattice, we entered into a royalty-free patent cross license agreement with Lattice, including a multi-year prohibition against further patent litigation between the two companies. No payments were made by Altera or Lattice as part of the settlement. We cannot assure you that these cross license agreements will be renewed after expiration, or the litigation prohibition periods extended, and whether any renewal or extension would be upon reasonable terms.

We may incur warranty related liabilities.

We generally warrant our products against defects in materials and workmanship and non-conformance to our specifications for varying lengths of time. If there is a material increase in customer claims compared with our historical experience, or if costs of servicing warranty claims are greater than expected, we may record a charge against future cost of sales and our gross margin could be adversely affected.

We depend on distributors to generate sales and fulfill our customer orders.

Worldwide sales through distributors accounted for more than 95% percent of our total sales during 2003. We rely on several distributors to assist us in creating customer demand, providing technical support and other value-added services to our customers, filling customer orders, and stocking our products. Our contracts with our distributors may be terminated by either party in a relatively short period of time.

Our distributors are located all over the world and are of various sizes and financial conditions. The economic downturn during 2000-2001 placed financial strain on our distributors. Lower sales, lower earnings, debt downgrades, the inability to access capital markets, and higher interest rates could potentially impact our distributors—operations.

We are highly dependent on Arrow Electronics, Inc., in many locations across the world, particularly in North America. During 2003, Arrow on a worldwide basis accounted for approximately 51% of sales, and the next largest distributor accounted for approximately 16% of sales. As of December 31, 2003, three distributors, each of which accounted for more than 10% of total accounts receivable, accounted for 53%, 11%, and 11% of total accounts receivable.

Our distributors have sole authority to accept returns from end customers in the ordinary course of business. Returns from end customers to our distributors are negative sales transactions and reduce our reported sales. Consequently, large returns could have a material adverse impact on our sales.

The length of our design-in and sales cycle could impact our future sales.

Our sales depend on our products being designed into our end customers products and those products achieving volume production. Our products are very complex in nature, and the time from design-in to volume production ranges from 6 months to 3 years. From initial product design-in to volume production, many factors could impact the timing and/or amount of sales actually realized from the design-in. These factors include, but are not limited to, changes in the competitive position of our technology, the competitiveness of our customers products in the markets they serve, our customers financial stability, and our ability to ship products according to our customers schedule.

We depend on international sales for a majority of our total sales.

During each of the last two years, international sales were a majority of our total sales. During 2003, international sales constituted approximately 67% of our total sales. Risks related to our foreign operations include unfavorable economic, market, political, and social conditions in a specific country or region, fluctuation in foreign currency exchange rates, adverse changes in tax laws, increased freight costs, interruptions in air transportation, reduced protection for intellectual property rights in some countries, generally longer receivable collection periods, and natural or man-made disasters in a specific country or region where we sell our products. Our business is also subject to the risks associated with the imposition of legislation and regulations relating specifically to the importation or exportation of semiconductor products. Quotas, duties, tariffs, taxes, or other charges, restrictions, or trade barriers may be imposed by the United States or other countries upon the importation or exportation of our products in the future.

Our business is subject to tax risks associated with being a multinational corporation.

As a multinational corporation, we conduct our business in many countries and are subject to taxation in many jurisdictions. The taxation of our business is subject to the application of multiple and sometimes conflicting tax laws and regulations as well as multinational tax conventions. The application of tax law is subject to legal and factual

interpretation, judgment, and uncertainty and tax laws themselves are subject to change. Consequently, taxing authorities may impose tax assessments or judgments against us that could result in a significant charge to earnings relating to prior periods and/or an increase in our effective income tax rate.

Our gross margins are subject to fluctuations due to many factors.

Our gross margins may fluctuate depending on many factors, including, but not limited to, our product mix, market acceptance of our new products, competitive pricing dynamics, geographic and/or market segment pricing strategies, and various manufacturing cost variables, including product yields, wafer prices and absorption of manufacturing overhead.

Our financial results are affected by general economic conditions and the cyclical nature of the semiconductor industry.

The semiconductor industry is highly cyclical, which means that semiconductor companies such as Altera experience significant fluctuations in sales and profitability. During 2000-2001, the semiconductor industry was significantly impacted by the economic downturn and contraction in the computing and communication equipment markets and by the ensuing inventory correction in the supply chain for those industries. This down cycle, like many of the preceding down cycles, resulted in significant reductions in unit demand, excess customer inventories, price erosion, and excess production capacity. We experienced five consecutive declines in quarterly sales beginning in the fourth quarter of 2000 and ending in the fourth quarter of 2001. The protracted deceleration resulted in a peak-to-trough decline in quarterly sales of nearly 60%. We anticipate that the cyclical nature of the semiconductor industry will continue and that our sales will fluctuate accordingly.

In addition to reductions in sales, our profitability decreases during downturns as we are unable to reduce our expenses at the same rate as our sales decline. For example, at the height of the previous upcycle, in the third quarter of 2000, our operating expenses were less than 27% of sales compared to almost 49% in the first quarter of 2002. Similarly, our gross margins tend to deteriorate and fluctuate during down cycles. For example, in the third quarter of 2000, our reported gross margin was over 66% of sales compared to 60% of sales in the first quarter of 2002. Furthermore, the industry contraction during 2000-2001 was prolonged and severe and resulted in an inventory provision of \$154.5 million in 2001 relating primarily to the write-off of inventories in excess to projected demand. Additionally, as a result of reduced demand and in an effort to reduce our ongoing expense levels, we incurred restructuring charges and write-downs totaling \$47.7 million in 2001. In the year ended December 31, 2000, our net income was \$496.9 million on sales of \$1.4 billion whereas for the year ended December 31, 2001, we reported a net loss of \$39.8 million on sales of \$839.4 million. We expect that our future sales and profitability will continue to be volatile.

In an effort to reduce the possibility of future provision for excess inventory, we reduced our inventory carrying targets in 2002. Reductions in targeted inventory carrying levels may result in poorer delivery performance relative to our customers—desired lead times, which over time may erode our competitive position and result in a loss of market share. Despite our intent to operate with lower inventory levels, we are likely to experience inventory write-downs in the future, especially if our inventory becomes out-of-mix with, or excess to, customer demand.

Our quarterly operating results may fluctuate.

Our quarterly operating results may fluctuate in the future as a result of a number of factors, including:

the cyclical nature of the semiconductor industry;

the cyclical nature of demand for our customers products;

general economic, market, political, and social conditions in the countries where we sell our products;

demand for our products and the products of our customers;

the pricing of our products and the products of our competitors;

the gain or loss of a key customer;

the timing of our and our competitors new product introductions;

our inventory levels and product obsolescence;

the scheduling, rescheduling, and cancellation of large orders by our customers;

the availability of adequate supply commitments from our wafer foundries and assembly and test subcontractors;

our ability to develop new process technologies and achieve volume production at the foundries of TSMC or Sharp;

changes in manufacturing yields;

changes in distribution partners or their financial stability;

adverse movements in exchange rates, interest rates, or tax rates; or

litigation expenses, including those litigation expenses incurred in connection with the defense or enforcement of our intellectual property rights.

Our future success depends on our ability to successfully compete with other technology firms in attracting and retaining key technical and management personnel.

Our future success depends, in large part, upon the continued service of our key management, technical, sales, and support employees, and on our ability to continue to attract and retain additional qualified employees. The competition for such employees is intense and the loss of key employees could prevent our sales and/or profits from increasing or could cause our sales and/or profits to decline.

Our business is subject to the risks of earthquakes and other catastrophic events.

Our corporate headquarters is located near major earthquake faults. A significant natural disaster, such as an earthquake, may cause significant disruption to our business. In addition, our computer systems are vulnerable to computer viruses, break-ins, and similar disruptions from unauthorized tampering. Further, our business is subject to the effects of war and acts of terrorism. Any catastrophic event, such as an earthquake or other natural disasters, the failure of our computer systems, or war or acts of terrorism, could significantly impair our ability to maintain our records, pay our suppliers, or manufacture or ship our products. The occurrence of any of these events could also affect our distributors and subcontractors and produce similar disruptive effects upon their business.

We carry only limited insurance coverages.

Our insurance policies may not be adequate to fully offset the losses resulting from covered incidents. Additionally, we do not have coverage for certain losses.

Our stock price is subject to significant volatility.

In recent years, the stock market has experienced extreme price volatility and the price of our common stock has been subject to wide fluctuations. The overall stock market, the prices of semiconductor stocks in general, and the price of our stock is likely to continue to fluctuate greatly. We believe that factors such as quarter-to-quarter variances in financial results, announcements of new products, new orders, and order rate variations by us or our competitors could cause the market price of our common stock to fluctuate substantially. In addition, the stock prices for many technology companies experience large fluctuations, which are often unrelated to the operating performance of the specific companies. Broad market fluctuations, as well as general economic conditions such as a recessionary period or high interest rates, may cause the market price of our common stock to decline.

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

Our investment portfolio consisted of fixed income securities of \$1.0 billion as of December 31, 2003 and \$930.6 million as of December 31, 2002. These securities, like all fixed income instruments, are subject to interest rate risk and will vary in value as market interest rates fluctuate. If market interest rates were to increase or decline immediately and uniformly by 10% from levels as of December 31, 2003, the increase or decline in the fair value of the portfolio would not be material.

Although we purchase the majority of our materials and services in U.S. dollars and sell our products to OEMs and distributors in U.S. dollars, we do have international operations and are, therefore, subject to foreign currency rate exposure. To date, our exposure to exchange rate volatility has been insignificant. If foreign currency rates were to fluctuate by 10% from rates at December 31, 2003, our financial position, results of operations and cash flows would not be materially affected. However, we cannot assure you that there will not be a material impact in the future.

ITEM 8. Financial Statements and Supplementary Data.

	Page
Consolidated Balance Sheets at December 31, 2003 and 2002	31
Consolidated Statements of Operations for the years ended December 31, 2003, 2002, and 2001	32
Consolidated Statements of Cash Flows for the years ended December 31, 2003, 2002, and 2001	33
Consolidated Statements of Stockholders	34
Notes to the Consolidated Financial Statements	35
Report of Independent Auditors	50
Financial Statement Schedules	
All schedules have been omitted as they are either not required, not applicable, or the required information is included in the financial statements or notes thereto.	
Supplementary Financial Data by Quarter	51

30

Consolidated Balance Sheets

	December 31,	
	2003	2002
(In thousands, except par value amount)		
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 258,831	\$ 255,397
Short-term investments	773,059	687,262
Total cash, cash equivalents, and short-term investments	1,031,890	942,659
Accounts receivable, less allowances for doubtful accounts of \$5,059 and \$5,066,		
respectively	87,204	57,111
Inventories	44,583	39,089
Deferred income taxes	73,795	79,472
Other current assets	32,560	32,028
	<u> </u>	
Total current assets	1,270,032	1,150,359
Long-term investments	14,451	1,130,333
Property and equipment, net	160,924	183,999
Intangible and other assets, net	42,199	37,379
mangible and other assets, her		
	\$ 1,487,606	\$ 1,371,737
LIABILITIES AND STOCKHOLDERS EQUITY		
Current liabilities:		
Accounts payable	\$ 20,992	\$ 22,759
Accrued liabilities	21,582	23,109
Accrued compensation	35,507	34,833
Deferred income and allowances on sales to distributors	245,421	144,307
Income taxes payable	61,700	15,493
Total current liabilities	385,202	240,501
Commitments and contingencies (See Notes 7 and 11)		
Stockholders equity:		
Common stock; \$.001 par value; 1,000,000 shares authorized; 376,080 and 383,504 shares		
issued and outstanding, respectively	376	384
Capital in excess of par value	365,583	403,318
Retained earnings	738,420	740,824
Deferred stock-based compensation	(2,665)	(14,689)
Accumulated other comprehensive income	690	1,399
Accountance of the comprehensive income		
Total stockholders, equity	1 100 404	1 101 006
Total stockholders equity	1,102,404	1,131,236
	\$1,487,606	\$1,371,737

Consolidated Statements of Operations

	Ye	Years Ended December 31,			
	2003	2002	2001		
(In thousands, except per share amounts)					
Net sales	\$ 827,207	\$ 711,684	\$839,376		
Cost of sales	265,873	263,067	458,699		
Gross margin	561,334	448,617	380,677		
Research and development expenses	178,543	182,766	170,869		
Selling, general, and administrative expenses	184,609	168,484	215,318		
Restructuring and other special charges			47,669		
Income (loss) from operations	198,182	97,367	(53,179)		
Interest and other income, net	14,319	25,961	40,176		
Income (loss) before income taxes	212,501	123,328	(13,003)		
Provision for income taxes	57,376	32,065	26,779		
Net income (loss)	\$ 155,125	\$ 91,263	\$ (39,782)		
Net income (loss) per share:			4 (2.12)		
Basic	\$ 0.41	\$ 0.24	\$ (0.10)		
Diluted	\$ 0.40	\$ 0.23	\$ (0.10)		
Shares used in computing per share amounts:	201 207	000 040	000 007		
Basic	381,387	383,619	386,097		
Diluted	389,753	391,708	386,097		

Consolidated Statements of Cash Flows

	Years Ended December 31,			
	2003	2002	2001	
(In thousands)				
Cash Flows from Operating Activities:				
Net income (loss)	\$ 155,125	\$ 91,263	\$ (39,782)	
Adjustments to reconcile net income (loss) to net cash provided by (used				
for) operating activities:				
Depreciation and amortization	45,285	48,489	54,278	
Amortization of deferred stock-based compensation	10,590	11,377	18,569	
Deferred income tax (benefit) provision	(2,160)	21,710	50,383	
Tax benefit from stock plans	8,423	11,491	27,882	
Loss on securities	3,113			
Non-cash restructuring and other special charges			20,311	
Changes in assets and liabilities:				
Accounts receivable, net	(30,093)	(23,180)	134,969	
Inventories	(5,494)	38,522	195,951	
Other assets	(1,993)	54,415	(71,619)	
Accounts payable and accrued liabilities	(2,620)	14,382	(93,233)	
Deferred income and allowances on sales to distributors	101,114	(3,438)	(312,569)	
Income taxes payable	46,207	(17,370)	(103,482)	
Cash provided by (used for) operating activities	327,497	247,661	(118,342)	
Cash Flows from Investing Activities:				
Purchases of property and equipment	(13,901)	(9,871)	(65,758)	
Purchases of available-for-sale investments	(685,597)	(739,950)	(640,514)	
Proceeds from the maturity and sale of available-for-sale investments	568,024	709,731	624,200	
Proceeds from the maturity of held-to-maturity investments	13,022	. 00,. 0.	02.,200	
Purchases of intangible assets	(3,350)	(2,100)	(2,000)	
Taronasso of mangiors associa	(0,000)	(2,100)	(2,000)	
Cook wood for investing opticities	(404.000)	(40.400)	(04.070)	
Cash used for investing activities	(121,802)	<u>(42,190)</u>	(84,072)	
Cash Flows from Financing Activities:				
Proceeds from issuance of common stock through various stock plans	36,715	44,354	34,311	
Repurchases of common stock	(238,976)	(139,476)	(183,234)	
Cash used for financing activities	(202,261)	(95,122)	(148,923)	
Net increase (decrease) in cash and cash equivalents	3,434	110,349	(351,337)	
Cash and cash equivalents at beginning of year	255,397	145,048	496,385	
Cash and cash equivalents at end of year	\$ 258,831	\$ 255,397	\$ 145,048	
Cash paid (received) during the year for:				
Income taxes paid (received), net	\$ 669	\$ (54,279)	\$ 122,907	

Consolidated Statements of Stockholders Equity

	Number of Common Shares	Common Stock and Capital In Excess of Par Value	Retained Earnings	Deferred Stock-based Compensation	Accumulated Other Comprehensive Income (Loss)	Total Stockholders Equity
(In thousands)						
Balance, December 31, 2000 Components of comprehensive loss:	389,265	\$ 389,573	\$ 908,196	\$ (49,101)	\$ (738)	\$ 1,247,930
Net loss			(39,782)			(39,782)
Change in unrealized gains/(losses) on			(55,: 52)			(55,: 52)
available-for-sale investments, net of						
tax expense of \$2,695					4,410	4,410
Total comprehensive loss						(35,372)
Tax benefit from stock plans		27,882				27,882
Issuance of common stock through						
employee stock plans	4,256	34,311				34,311
Deferred stock-based compensation						
resulting from issuance of restricted stock		202		(000)		
Amortization of deferred stock-based		283		(283)		
compensation				18,569		18,569
Reversal of deferred stock-based				10,000		10,000
compensation from forfeitures		(1,440)		1,440		
Write-off of deferred stock-based		,				
compensation related to restructuring				4,414		4,414
Repurchase of common stock	(7,220)	(55,475)	(127,759)			(183,234)
Balance, December 31, 2001	386,301	395,134	740,655	(24,961)	3,672	1,114,500
Components of comprehensive						
income:			01.000			01.000
Net income Change in unrealized gains/(losses) on			91,263			91,263
available-for-sale investments, net of						
tax benefit of \$1,327					(2,273)	(2,273)
ιακ σοποπι οι φτ,σετ					(=,=;0)	(2,270)
Total comprehensive income						88,990
Tax benefit from stock plans		11,491				11,491
Issuance of common stock through		,				,
employee stock plans	6,103	44,354				44,354
Deferred stock-based compensation						
resulting from issuance of restricted						
stock		1,105		(1,105)		
Amortization of deferred stock-based				44.077		44.077
compensation	(0.000)	(40.000)	(01.004)	11,377		11,377
Repurchase of common stock	(8,900)	(48,382)	(91,094)			(139,476)
Balance, December 31, 2002	383,504	403,702	740,824	(14,689)	1,399	1,131,236
Components of comprehensive	303,304	403,702	740,024	(14,009)	1,399	1,131,236
income:						
Net income			155,125			155,125
Change in unrealized gains/(losses) on			,			,
investments, net of tax benefit of \$481					(709)	(709)

Edgar Filing: ALTERA CORP - Form 10-K

Total comprehensive income							154,416
Tax benefit from stock plans		8,423					8,423
Issuance of common stock through							
employee stock plans	5,041	36,715					36,715
Reversal of deferred stock-based							
compensation from forfeiture		(1,434)		1,434			
Amortization of deferred stock-based							
compensation				10,590			10,590
Repurchase of common stock	(12,465)	(81,447)	(157,529)				(238,976)
					-		
Balance, December 31, 2003	376,080	\$ 365,959	\$ 738,420	\$ (2,665)	\$	690	\$ 1,102,404

Notes to the Consolidated Financial Statements

Note 1: The Company

Altera Corporation was founded in 1983 and reincorporated in the State of Delaware in 1997. We design, manufacture, and market high-performance, high-density programmable logic devices, or PLDs; low-cost, masked programmed HardCopy structured ASIC devices; pre-defined design building blocks known as intellectual property, or IP, cores; and associated development tools. Our PLDs, which consist of field-programmable gate arrays, or FPGAs, and complex programmable logic devices, or CPLDs, are semiconductor integrated circuits that are manufactured as standard chips that our customers program to perform desired logic functions within their electronic systems. Our customers can license IP cores from us for implementation of standard functions in their PLD designs. Customers develop, compile, and verify their PLD designs, and then program their designs into our PLDs using our proprietary development software, which operates on personal computers and engineering workstations. Our products serve a wide range of customers within the communications, computer and storage, consumer, and industrial market segments.

Note 2: Significant Accounting Policies

Basis of Presentation: Our fiscal year ends on the Friday nearest December 31st. Our most recent fiscal year ended on January 2, 2004. For presentation purposes, the consolidated financial statements and accompanying notes refer to our fiscal year end as December 31st. The consolidated financial statements include our accounts as well as those of our wholly-owned subsidiaries after elimination of all significant intercompany balances and transactions.

Use of Estimates: The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates, and material effects on our operating results and financial position may result.

Reclassifications: Certain reclassifications have been made to prior year balances in order to conform to the current year presentation. None of these reclassifications had an impact on our consolidated statements of operations for any year presented.

Cash Equivalents and Investments: Cash equivalents consist of highly liquid investments with original maturities of three months or less.

Management determines the appropriate classification of investments at the time of purchase. During 2003, we designated and reclassified certain investments from available-for-sale to held-to-maturity (see Note 5 Marketable Securities). This reclassification was based on our ability and intent to hold such investments to maturity. These securities were transferred at fair value, which approximated the amortized cost at the time of the reclassification. Available-for-sale investments are carried at their fair value based on quoted market prices as of the balance sheet date. The amortized cost of securities is adjusted for amortization of premiums and accretion of discounts to maturity. Such amortization is included in interest and other income, net. Realized gains or losses are determined on the specific identification method and are reflected in interest and other income, net. Net unrealized gains or losses are recorded directly in stockholders equity. Those unrealized losses that are deemed to be other than temporary are reflected in interest and other income, net.

Inventories: Inventories are recorded at the lower of cost on a first-in-first-out basis (approximated by standard cost) or market. Inventories at December 31, 2003 and 2002 were comprised of the following:

	Dec	December 31,	
	2003	2002	
(In thousands)			
Raw materials and work in process	\$ 32,882	\$ 28,841	
Finished goods	11,701	10,248	
Total inventories	\$ 44,583	\$ 39,089	

As a result of unfavorable economic conditions and diminished demand for semiconductor products beginning in late 2000, we experienced a sharp decline in sales and recorded total inventory provisions of \$154.5 million in 2001. These inventory provisions were recorded in cost of sales in our consolidated statements of operations and related primarily to excess inventory and assembly packaging materials. During the years ended December 31, 2003 and 2002, we had gross margin benefits of \$29.0 million and \$18.0 million, respectively, resulting from the sale of inventory previously written-down in 2001.

As of December 31, 2003, the book value of the inventory written down in 2001 was essentially zero while the cost basis was \$28.4 million. This cost basis was comprised of \$22.0 million of raw materials and work in process inventory and \$6.4 million of finished goods inventory.

Property and Equipment: Property and equipment at December 31, 2003 and 2002 was comprised of the following:

	Decem	December 31,		
	2003	2002		
(In thousands)				
Land	\$ 30,779	\$ 30,779		
Building	119,637	119,453		
Equipment and software	190,680	191,501		
Office furniture and fixtures	19,527	19,880		
Leasehold improvements	5,098	4,907		
Property and equipment, at cost	365,721	366,520		
Accumulated depreciation and amortization	(204,797)	(182,521)		
Property and equipment, net	\$ 160,924	\$ 183,999		

Property and equipment are carried at cost less accumulated depreciation and amortization. Depreciation and amortization are computed using the straight-line method. Estimated useful lives of three to five years are used for equipment and office furniture and forty years for buildings. Amortization of leasehold improvements is computed using the shorter of the remaining facility lease term or the estimated useful life of the improvements. Depreciation expense was \$37.0 million in 2003, \$43.2 million in 2002, and \$47.5 million in 2001.

We evaluate the recoverability of our property, equipment, and intangible assets in accordance with Statement of Financial Accounting Standards No. 144, or SFAS No. 144, Accounting for the Impairment or Disposal of Long-Lived Assets. We regularly compare the carrying value of long-lived assets to our projection of future undiscounted cash flows attributable to such assets and in the event that the carrying value exceeds the future undiscounted cash flows, we record an impairment charge against income equal to the excess of the carrying value over the asset s fair value.

Fair Value of Financial Instruments: For certain of our financial instruments, including cash and cash equivalents, short-term investments, accounts receivable, accounts payable, and accrued liabilities, the carrying amounts approximate fair value due to their short maturities.

Concentrations of Credit Risk: Financial instruments that potentially subject us to concentrations of credit risk consist principally of cash, cash equivalents, short-term investments, and accounts receivable. We place our cash, cash equivalents, and short-term investments in a variety of financial instruments and, by policy, limit the amount of credit exposure through diversification and by restricting our investments to highly rated investment grade securities.

We sell our products to distributors and OEMs throughout the world. We perform on-going credit evaluations of our customers financial condition and require credit guarantees whenever deemed necessary. In addition, we maintain allowances for doubtful accounts receivable to reduce our receivables to their estimated net realizable value. For the years ended December 31, we wrote off \$7,000 in 2003 against our allowance for doubtful accounts receivable, \$901,000 in 2002, and \$33,000 in 2001. Charges to expense were immaterial for all three years.

For the year ended December 31, 2003, worldwide sales through distributors for subsequent resale to OEMs or their subcontract manufacturers accounted for over 95% of total sales. Arrow Electronics, Inc., or Arrow, was and continues to be our largest distributor. Arrow on a worldwide basis accounted for 51% of sales in 2003, 53% in 2002, and 54% in 2001. Our second largest distributor, Altima Corporation, accounted for 16% of sales in 2003, 14% in 2002, and 13% in 2001. For the years ended December 31, 2003, 2002, and 2001, no single end customer accounted for more than 10% of our sales.

At December 31, 2003, three distributors, each of which accounted for more than 10% of total accounts receivable, accounted for 53%, 11%, and 11% of total accounts receivable. At December 31, 2002, three distributors, each of which accounted for more than 10% of total accounts receivable, accounted for 29%, 24%, and 15% of total accounts receivable.

We have entered into business arrangements with certain distributors to provide cash deposits to defray their working capital costs associated with servicing our end customers. These arrangements are set forth in legal agreements and such indebtedness is unsecured, bears no interest and is due upon demand. The deposits that represent prepaid price reductions related to inventory on-hand at distributors are included as a component of deferred income and allowances on sales to distributors. Those deposits that are, in substance, an arrangement to finance distributors accounts receivable and inventory are classified as other current assets.

Revenue Recognition: We recognize revenue on products sold to original equipment manufacturers, or OEMs upon shipment provided that persuasive evidence of an arrangement exists, the price is fixed, title has transferred, collection of resulting receivables is reasonably assured, there are no customer acceptance requirements, and there are no remaining significant obligations. We record reserves for OEM sales returns and allowances, included in deferred income and allowances on sales to distributors in our accompanying consolidated balance sheets, based upon historical experience rates and for any specific known customer returns or allowances. At December 31, 2003, the OEM returns allowance was \$30,000. It was \$61,000 at December 31, 2002 and \$52,000 at December 31, 2001. During 2003, we charged against revenue \$346,000 while processing claims of \$377,000. Charges and claims were \$526,000 and \$517,000, respectively, for 2002; and \$1,506,000 and \$1,617,000, respectively, for 2001.

Because our sales to distributors are made under agreements allowing for product returns, price adjustments or, under certain circumstances, other credits, we defer recognition of revenue on products sold to distributors until the products are resold at which time our final net sales price to the distributor is fixed. At the time of shipment to distributors, we record a trade receivable for the selling price since there is a legally enforceable right to payment, relieve inventory for the carrying value of goods shipped since legal title has passed to the distributor, and record the gross margin in deferred income and allowances on sales to distributors in the liability section of our consolidated balance sheets. Deferred margin represents the gross margin on the sale to the distributor; however, the amount of gross margin we recognize in future periods will be less than the originally recorded deferred margin as a result of price concessions. In general, we do not reduce deferred margin by future price concessions; instead, price concessions are typically recorded against deferred income and allowances on sales to distributors when incurred, which is generally at the time the distributor sells the product.

Revenue from software licenses is deferred and recognized as revenue over the term of the license subscription which is generally one year.

Income Taxes: Our provision for income taxes is based on the asset and liability method prescribed by SFAS No. 109, Accounting for Income Taxes. Accordingly, our provision for income taxes is based on pre-tax financial accounting income. This approach recognizes the amount of taxes payable or refundable for the current year, accruals for tax contingencies, as well as deferred tax

assets and liabilities for the future tax consequences of events recognized in the financial statements and tax returns.

Dependence on Wafer Suppliers and Other Independent Subcontractors: We do not directly manufacture finished silicon wafers. Our strategy has been to purchase silicon wafers from independent wafer foundries. We depend

entirely upon subcontractors to manufacture our silicon wafers. We also depend on these wafer foundries to improve process technologies in a timely manner and to enhance our product designs and cost structure. We have no formalized long-term commitment from our foundry suppliers. If market demand for silicon wafers suddenly exceeds market supply, our supply of silicon wafers can become limited quickly. A shortage in foundry manufacturing capacity could hinder our ability to meet demand for our products. Moreover, silicon wafers constitute more than half of our product cost. If we are unable to procure wafers at favorable prices, our gross margins will be adversely affected.

We also depend on independent subcontractors, located primarily in Asia, for the testing and assembly of our semiconductor products. We cannot directly control our product delivery schedules or quality levels. In addition, the recent reduction in overall demand for semiconductor products has financially stressed certain of our subcontractors and has weakened their capital structures. If the capital structures of our independent subcontractors further weaken, we may experience future product shortages, quality assurance problems, increased manufacturing costs, and/or supply chain disruption.

The economic, market, social, and political situations in countries where certain independent subcontractors are located are unpredictable, can be volatile, and can have a significant impact on our business because we may not be able to obtain product in a timely manner. Market conditions, including currency fluctuation, political strife, labor disruption, power shortages, and other factors, including natural or man-made disasters, adverse changes in tax laws, tariff, or freight rates, or interruption in air transportation, in areas where our independent subcontractors are located also could have a severe negative impact on our financial position or results of operations.

Stock-Based Compensation Plans: As allowed under SFAS No. 123, Accounting for Stock-Based Compensation, we account for stock-based compensation using the intrinsic value method prescribed in Accounting Principles Board Opinion No. 25, or APB No. 25, Accounting for Stock Issued to Employees. Under APB No. 25, compensation cost is measured as the excess, if any, of the quoted market price of our stock at the date of grant over the exercise price of the option granted. Compensation cost for stock options, if any, is recognized ratably over the vesting period. We provide additional pro forma disclosures as required under SFAS No. 123 and SFAS No. 148, Accounting for Stock-Based Compensation, Transition and Disclosure in Note 9: Stock-Based Compensation Plans.

Foreign Currency Translation: The U.S. dollar is the functional currency for all of our foreign subsidiaries. Assets and liabilities that are not denominated in the functional currency are remeasured into U.S. dollars and the resulting gains or losses are included in interest and other income, net. Such gains or losses have not been material for any period presented.

Research and Development Expenses: We expense all research and development costs that have no alternative future use as incurred.

Note 3: Restructuring and Other Special Charges

During 2001, we recorded restructuring and other special charges of \$47.7 million in connection with our plan to reduce future operating expenses and to align our organization s cost structure with a reduction in projected sales resulting from unfavorable economic conditions. The charges consisted of severance and fringe benefits related to our workforce reduction of approximately 152 employees primarily in selling, general, and administrative functions. The charges also included the write-down associated with the spin-off of Northwest Logic, the write-down of certain equipment and intangible assets, the consolidation of excess facilities, and the termination of certain license agreements. In addition, we made a one-time payment of \$20.0 million as part of our patent

litigation settlement with Xilinx, Inc. These charges were classified as operating expenses in 2001 in our consolidated statements of operations.

Cash expenditures relating to workforce reductions have been substantially paid. Amounts related to non-cancelable leases will be paid over their respective terms through the third quarter of 2005. The restructuring liability, totaling \$0.3 million as of December 31, 2003, and \$0.5 million as of December 31, 2002, is included in accrued liabilities in our consolidated balance sheets.

Note 4: Income Per Share

In accordance with SFAS No. 128, Earnings Per Share, we compute basic income (loss) per share by dividing net income (loss) available to common stockholders by the weighted average number of common shares outstanding during the period (excluding the dilutive effect of stock options and restricted stock). Diluted income per share reflects the dilution of potential common shares outstanding during the period. In computing diluted income per share, we adjust share count by assuming that all in-the-money options are exercised and that we repurchase shares with the proceeds of these hypothetical exercises along with the tax benefit resulting from the hypothetical option exercises. We further assume that any unamortized deferred stock-based compensation is also used to repurchase shares. In determining the hypothetical shares repurchased, we use the average stock price for the period.

Diluted income per share excludes out-of-the-money stock options and unvested restricted stock totaling 26.0 million shares for 2003, as their effect is anti-dilutive. Anti-dilutive options and unvested restricted stock totaled 30.7 million and 25.5 million shares for 2002 and 2001, respectively. While these options are currently anti-dilutive, they could be dilutive in the future. A reconciliation of basic and diluted income (loss) per share is presented below:

	Ye	Years Ended December 31,			
	2003	2002	2001		
(In thousands, except per share amounts)					
Basic:					
Net income (loss)	\$ 155,125	\$ 91,263	\$ (39,782)		
Weighted shares outstanding	381,387	383,619	386,097		
Net income (loss) per share	\$ 0.41	\$ 0.24	\$ (0.10)		
Diluted:					
Net income (loss)	\$ 155,125	\$ 91,263	\$ (39,782)		
Weighted shares outstanding	381,387	383,619	386,097		
Effect of dilutive securities:					
Stock options and restricted stock	8,366	8,089			
Diluted weighted shares outstanding	389,753	391,708	386,097		
Net income (loss) per share	\$ 0.40	\$ 0.23	\$ (0.10)		

Note 5: Marketable Securities

Our portfolio of marketable securities at December 31 consisted of the following:

		2003					2002							
		Available-for-Sale Securities					Available-for-Sale Securities				es			
			Unr	Gross	Unr	Gross ealized		_		Unr	Gross ealized		Gross alized	Fair
		Cost		Gains		Losses	ı	Fair Value	Cost		Gains	Lo	osses	Value
(In thousands)	_		_		_		_			_		_		
Money market funds	\$	122,843	\$		\$		\$	122,843	\$ 141,218	\$		\$		\$ 141,218
Municipal bonds		531,180		1,031		(251)		531,960	371,076		1,773		(28)	372,821
U.S. government and agency														
obligations		194,932		363		(148)		195,147	168,648		353		(5)	168,996
Corporate bonds		60,333		146		(14)		60,465	54,730		186		(1)	54,915
Other debt securities									192,651		28		(11)	192,668
			_		_		_			_				
Total available-for-sale securities	\$	909,288	\$	1,540	\$	(413)	\$	910,415	\$ 928,323	\$	2,340	\$	(45)	\$ 930,618
			Held	d-to-Mat	urity	Securities				Helo	d-to-Mat	urity S	ecuritie	S
Other debt securities	\$	116,497	\$	1	\$	(24)	\$	116,474	\$	\$		\$		\$
Other debt securities	Φ	110,497	Φ		Φ	(24)	φ	110,474	<u>———</u>	Φ		Φ		<u> </u>
Total held-to-maturity securities	\$	116,497	\$	1	\$	(24)	\$	116,474	\$	\$		\$		\$
, , , , , , , , , , , , , , , , , , ,	_		_		_	(= -/	_		<u> </u>	_		<u> </u>		
Total marketable securities	\$ 1	,025,785	\$	1.541	\$	(437)	\$	1,026,889	\$ 928,323	\$	2,340	\$	(45)	\$ 930.618
	_		_	,-	_		_	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		_	,	_	(- /	, , , , , ,
Included in:														
Cash and cash equivalents							\$	239,379						\$ 243,356
Short-term investments								773,059						687,262
Long-term investments								14,451						
							_							
Total							\$	1,026,889						\$ 930,618
							_	, ===,===						,,

Our portfolio of marketable securities by contractual maturity at December 31 is as follows (in thousands):

	2003	2002
Available-for-Sale Securities:		
Due in one year or less	\$ 572,194	\$ 514,837
Due after one year through two years	338,221	415,781
Total available-for-sale securities	\$ 910,415	\$ 930,618
Held-to-Maturity Securities:		
Due in one year or less	\$ 102,023	

Due after one year through two years	14,451	
Total held-to-maturity securities	\$ 116,474	
Total marketable securities	\$ 1,026,889	\$ 930,618

We record net unrealized gains or losses in stockholders equity. Realized gains or losses are reflected in income. We recognized a loss of \$3.1 million on the sale of certain securities during 2003. Losses were immaterial for 2002.

At September 30, 2003, we designated and reclassified certain investments from available-for-sale to held-to-maturity. This reclassification was based on our ability and intent to hold such investments to maturity. The amortized cost of these securities approximated fair value at the time of reclassification.

Note 6: Intangible and Other Assets

At December 31, 2003 and 2002, our intangible assets included market ready technology acquired in connection with the acquisition of Right Track CAD Inc. (Right Track) in 2000, as well as other acquired intangible assets. Intangible assets are amortized on a straight-line basis over their estimated useful lives. Other assets consisted primarily of the non-current portion of deferred tax assets of \$34.1 million at December 31, 2003 and \$25.8 million at December 31, 2002 (see Note 10 Income Taxes).

During the second quarter of 2003, we performed an analysis of the remaining economic useful life of our Right Track intangible assets in accordance with SFAS No. 144. We noted that while there was no impairment, the purchased technologies were being rapidly superceded by next generation technologies. Therefore, we shortened the amortization period so that these intangible assets will be fully amortized by March 2004. This change in estimate resulted in additional amortization expense of \$4.1 million for 2003. Amortization of acquired intangible assets was \$8.3 million in 2003, \$3.2 million in 2002, and \$6.0 million in 2001.

Our acquired intangible assets at December 31 comprised of the following:

		2003			2002	
		Accumulated			Accumulated	
	Gross	Amortization	Net	Gross	Amortization	Net
(In thousands)						
Market ready technology	\$ 21,168	\$ (18,937)	\$ 2,231	\$ 21,168	\$ (11,706)	\$ 9,462
Other intangible assets	8,978	(4,606)	4,372	5,628	(3,528)	2,100
Total acquired intangible assets	\$ 30,146	\$ (23,543)	\$ 6,603	\$ 26,796	\$ (15,234)	\$ 11,562

At December 31, 2003, the estimated future amortization expense of acquired intangible assets was as follows:

Years ending December 31,

	(I.	n thousands)
2004	\$	4,022
2004 2005		1,843
2006		738
2007 and beyond		
	-	
Total	\$	

Note 7: Commitments

Leases: We lease facilities under non-cancelable lease agreements expiring at various times through 2013. The leases generally require us to pay property taxes, insurance, maintenance, and repair costs. Future minimum lease payments under all

non-cancelable operating leases are as follows:

Years ending December 31,

	(In t	thousands)
2004	\$	5,816
2005		5,072
2006		2,508
2007		1,592
2008 and beyond		6,733
Total	\$	21,721

We have the option to extend or renew most of our leases. Rental expense under all operating leases amounted to \$6.8 million in 2003, \$6.3 million in 2002, and \$5.9 million in 2001.

Indemnification and Product Warranty: We indemnify certain customers, distributors, suppliers, and subcontractors for attorney fees and damages and costs awarded against these parties in certain circumstances in which our products are alleged to infringe third party intellectual property rights, including patents, trade secret, trademarks, or copyrights. In all cases, there are limits on and exceptions to our potential liability for indemnification relating to intellectual property infringement claims. We cannot estimate the amount of potential future payments, if any, that we might be required to make as a result of these agreements. To date, we have not paid any claim or been required to defend any action related to our indemnification obligations, and accordingly, we have not accrued any amounts for such indemnification obligations. However, we may record charges in the future as a result of these indemnification obligations.

We generally warrant our products against defects in materials and workmanship and non-conformance to our specifications for varying lengths of time. If there is a material increase in customer claims compared with our historical experience, or if costs of servicing warranty claims are greater than expected, we may record a charge against cost of sales.

The following table summarizes the activity related to the product warranty liability, which was included in accrued liabilities in our consolidated balance sheets, during fiscal 2003:

	2003
(In thousands)	
Balance at beginning of fiscal year	\$
Provision	2,350
Payments	(255)
Balance at end of fiscal year	\$ 2,095

Note 8: Stockholders Equity

Common Stock Repurchases: In January 2004, our Board of Directors approved an increase in the shares authorized for repurchase from 68.0 million shares to 78.0 million shares. Share repurchase activities for 2003, 2002, and 2001 were as follows:

	2003	2002	2001
(In millions, except per share amounts)			
Shares repurchased	12.5	8.9	7.2
Cost of shares repurchased	\$ 239.0	\$ 139.5	\$ 183.2
Average price per share	\$ 19.17	\$ 15.67	\$ 25.38

Since the inception of our repurchase program in 1996, through December 31, 2003, we have repurchased a total of 58.5 million shares of our common stock for an aggregate cost of \$1.3 billion. All shares were retired upon acquisition.

Deferred Stock-Based Compensation: We did not award any new deferred stock-based compensation during 2003, compared to \$1.1 million awarded during 2002 and \$283,000 awarded during 2001 representing the value of restricted stock issued to certain new employees. We amortize deferred stock-based compensation over the vesting period of three to four years. Amortization of

deferred stock-based compensation was \$10.6 million during 2003, \$11.4 million during 2002, and \$18.6 million during 2001.

Restricted stock may be subject to our repurchase rights under certain circumstances. These rights lapse over a three- to four-year period. At December 31, 2003, 112,579 shares were subject to our repurchase rights at the original sale prices.

Note 9: Stock-Based Compensation Plans

At December 31, 2003, we had three stock-based compensation plans, which are described below. We account for stock-based compensation using the intrinsic value method prescribed in APB No. 25, Accounting for Stock Issued to Employees as allowed under SFAS No. 123.

Stock Option Plans: Our stock option program is a broad-based, long-term retention program intended to attract, motivate, and retain talented employees as well as align stockholder and employee interests. We currently grant stock options under two plans: the 1996 Stock Option Plan, which provides for the periodic issuance of stock options to our employees, and the 1998 Director Stock Option Plan, which provides for the periodic issuance of stock options to members of our Board of Directors who are not employees. The majority of the options granted under these plans generally vest over four years. All options have a maximum term of ten years. As of December 31, 2003, the 1996 Stock Option Plan had 74.0 million shares reserved for issuance and 18.7 million shares were available for future grants. The 1998 Director Stock Option Plan had 680,000 shares reserved for issuance and 247,000 shares were available for future grants.

Any shares reserved for issuance under the 1987 Stock Option Plan and the 1988 Director Stock Option Plan relating to ungranted stock options were cancelled upon the adoption of the option plans described above. As of December 31, 2003, under the 1987 Stock Option Plan, 3.6 million previously granted shares remained unexercised, while under the 1988 Director Stock Option Plan, 846,000 previously granted shares remained unexercised.

On June 5, 2003, we filed with the Securities and Exchange Commission, or SEC, an offer to our employees to exchange certain outstanding options issued under the 1996 Stock Option Plan for a lesser number of new options to be granted at least six months and one day from the cancellation of the surrendered options. We filed an amended offer to exchange on June 24, 2003. Our directors and six most highly compensated officers were not eligible to participate in the stock option exchange program.

The exchange offer expired on July 3, 2003. Our employees tendered for exchange options to purchase 6,634,116 shares of our common stock, which were cancelled on July 4, 2003. On January 5, 2004, under the terms and conditions set forth in the offer to exchange, we granted new options to purchase an aggregate of 4,275,208 shares of our common stock in exchange for the surrendered options. The exercise price per share of the new options is \$23.47, which was the fair market value of our common stock on January 5, 2004. Under current accounting standards, this option exchange did not result in any compensation charges.

A summary of activity under all of our stock option plans and related weighted average exercise prices from 2001 through 2003 is as follows:

		Options Outstanding			
	Shares Available	Number of	Weighte	ed Average	
	for Options	Shares	Exe	ercise Price	
(In thousands, except price per share amounts)					
December 31, 2000	2,223	50,681	\$	16.52	
Additional shares reserved	15,000	,			
Grants	(12,119)	12,119		25.71	
Exercises	,	(3,669)		5.98	
Forfeitures	3,072	(3,089)		29.55	
December 31, 2001	8,176	56,042	\$	18.48	
Additional shares reserved	9,000				
Grants	(12,518)	12,518		14.48	
Exercises	·	(5,166)		6.40	
Forfeitures	3,264	(3,264)		26.98	
December 31, 2002	7,922	60,130	\$	18.22	
Additional shares reserved	6,000				
Grants ⁽¹⁾	(3,043)	3,043		18.10	
Exercises		(3,908)		6.23	
Forfeitures ⁽¹⁾	8,054	(8,056)		36.85	
December 31, 2003	18,933	51,209	\$	16.21	

⁽¹⁾ Forfeitures in 2003 included 6.6 million shares of options cancelled on July 4, 2003 associated with the Stock Option Exchange Program.

These options were cancelled for a lesser number of new options to be granted at least six months and one day from the cancellation date. On January 5, 2004, we granted new options to purchase an aggregate of 4.3 million shares of our common stock in exchange for the surrendered options.

	Options Exercisable					
Range of Exercise	Number Outstanding at 12/31/03	Weighted Average W Remaining Contractual	Number Exercisable Weighted Averate 12/31/03 Exercisable			
Prices	(In thousands)	Life (Years)	Price	(In thousands)	Price	
\$ 0.01 \$ 7.66	9,678	2.56	\$ 5.40	9,660	\$ 5.41	
\$ 7.70 \$12.72	9,231	5.84	10.48	6,262	9.61	
\$12.93 \$17.19	9,340	7.76	13.84	4,261	13.63	
\$17.20 \$22.49	11,000	7.52	21.21	4,263	20.84	
\$22.61 \$27.20	8,632	6.81	23.95	5,391	23.60	
\$27.25 \$61.56	3,328	7.06	33.54	1,313	35.39	
	51,209	6.17	\$ 16.21	31,150	\$ 13.90	

Options exercisable as of December 31, 2002 were 27.7 million at an average price of \$12.63. Options exercisable as of December 31, 2001 were 22.8 million at an average price of \$9.90.

Employee Stock Purchase Plan: Since its inception, 17.7 million shares of common stock had been reserved for issuance under the 1987 Employee Stock Purchase Plan. Under the terms of the Employee Stock Purchase Plan, our employees, nearly all of whom are eligible to participate, can choose each year to have up to 10% of their eligible annual base earnings withheld, up to a maximum of \$21,250, to purchase our common stock. Effective October 2001, the offering period was increased from six to twelve months. The purchase price of the stock is 85% of the lower of the closing price at the beginning of the twelve-month offering period or at the end of each six-month purchase period. We do not recognize compensation cost related to employee purchase rights under this plan.

Sales under the Employee Stock Purchase Plan were 1,162,856 shares of common stock at an average price of \$10.65 per share in 2003, 887,361 shares at an average price of \$12.75 per share in 2002, and 616,364 shares at \$20.06

per share in 2001. There were 2.6 million shares available for future purchases under the Employee Stock Purchase Plan as of December 31, 2003.

We received tax benefits of \$8.4 million in 2003, \$11.5 million in 2002, and \$27.9 million in 2001 on the exercise of non-qualified stock options and on the disposition of stock acquired by exercise of incentive stock options or through the Employee Stock Purchase Plan. Such benefits were recognized as an increase in stockholders equity.

Pro Forma Net Income and Net Income Per Share: The fair value of each option grant, as defined by SFAS No. 123, is estimated on the date of grant using the Black-Scholes option-pricing model. The Black-Scholes model was developed to estimate the fair value of freely tradable, fully transferable options without vesting restrictions. However, options granted under our stock option plans are not freely tradable, or fully transferable, and have vesting restrictions. The Black-Scholes model also require highly subjective assumptions, including future stock price volatility and expected time until exercise, which greatly affect the fair value.

To compute the estimated fair value of our stock option grants and shares purchased under the Employee Stock Purchase Plan, the Black-Scholes method was used with the following weighted-average assumptions and dividend yields of 0% for all years presented:

		Stock Options	3	
Years ended December 31,	200	3 2002	2001	
Expected life (in years)	3.	4 3.3	4.5	
Expected stock price volatility	71.5%	6 71.7%	63.8%	
Risk-free interest rate	1.9%	6 2.9%	4.4%	
Weighted average estimated fair value	\$ 8.7	4 \$ 7.19	\$ 13.94	
	Employee Stock Purchase Plan			
Years ended December 31,	200	3 2002	2001	
Expected life (in years)	0.	5 0.5	0.5	
Expected stock price volatility	64.69		91.5%	
Risk-free interest rate	1.3%		3.9%	
Weighted average estimated fair value	\$ 5.1		\$ 10.50	

The following table illustrates the effect on our net income (loss) and net income (loss) per share if we had recorded compensation costs based on the estimated grant date fair value as defined by SFAS No. 123 for all granted stock-based awards.

	Years Ended December 31,		,
(In thousands, except per share amounts)	2003	2002	2001

Reported net income (loss)	\$ 155,125	\$ 91,263	\$ (39,782)
Add: Stock-based employee compensation expense included in reported net			
income (loss), net of tax	7,589	8,197	13,256
Deduct: Stock-based employee compensation expense determined under fair			
value based method for all awards, net of tax	(94,035)	(96,423)	(97,298)
Pro forma net income (loss)	\$ 68,679	\$ 3,037	\$ (123,824)
Pro forma net income (loss) per share:			
Basic	\$ 0.18	\$ 0.01	\$ (0.32)
Diluted	0.18	0.01	(0.32)
Reported net income (loss) per share:			, ,
Basic	\$ 0.41	\$ 0.24	\$ (0.10)
Diluted	0.40	0.23	(0.10)

Note 10: Income Taxes

U.S. and foreign components of income (loss) before income taxes were:

	Y	Years Ended December 31,		
	2003	2002	2001	
(In thousands)				
United States	\$ 131,151	\$ 121,129	\$ 643	
Foreign	<u>81,350</u>	2,199	(13,646)	
Income (loss) before income taxes	\$ 212,501	\$ 123,328	\$ (13,003)	

Unremitted earnings of our foreign subsidiaries included in consolidated retained earnings aggregate to approximately \$178.9 million at December 31, 2003 and \$84.9 million at December 31, 2002. These earnings, which reflect full provisions for foreign income taxes, are indefinitely invested in foreign operations. If these earnings were remitted to the United States, they would be subject to domestic and/or foreign taxes. The provision for these taxes would likely raise our effective tax rate at the time the decision to remit the earnings is made.

The provision for income taxes consists of:

		Years Ended December 31,		
	2003	2002	2001	
(In thousands)				
Current tax provision (benefit):				
United States	\$ 39,065	\$ 9,180	\$ (25,468)	
State	49			
Foreign	20,422	1,175	1,864	
Total current tax provision (benefit)	59,536	10,355	(23,604)	
Deferred taxes:				
United States	(8,562)	22,334	63,568	
State	6,866	(1,255)	(3,368)	
Foreign	(464)	631	(9,817)	
Total deferred tax (benefit) provision	(2,160)	21,710	50,383	
Total provision for income taxes	\$ 57,376	\$ 32,065	\$ 26,779	

Deferred income tax assets were as follows:

	Decen	nber 31,
	2003	2002
(In thousands)		
Accrued expenses and reserves	\$ 67,473	\$ 60,584
Net operating loss		10,499
Acquisition costs	23,040	19,860
Deferred compensation	19,955	18,867
Other	6,322	8,389
Gross deferred tax assets	116,790	118,199
Depreciation	(5,141)	(5,961)
Deferred tax asset valuation allowance	(3,719)	(6,949)
		-
Net deferred tax assets	\$ 107,930	\$ 105,289

The non-current portion of deferred tax assets of \$34.1 million at December 31, 2003 and \$25.8 million at December 31, 2002 are included in intangible and other assets, net in our consolidated balance sheets. Prior year balances have been reclassified from deferred tax assets in order to conform to the current year presentation.

We are currently under examination by various taxing authorities. Although the outcome of any tax audit is uncertain, we believe we have adequately provided in our financial statements for any adjustments that may ultimately result from resolution of these audits.

The valuation allowances of \$3.7 million at December 31, 2003, and \$6.9 million at December 31, 2002 are attributable to acquired intangible assets. Sufficient uncertainty exists regarding the realizability of these assets and, accordingly, valuation allowances have been provided.

The exercise of non-qualified stock options and the disposition of stock acquired by exercise of incentive stock options or through the Employee Stock Purchase Plan resulted in a tax benefit of \$8.4 million in 2003, \$11.5 million in 2002, and \$27.9 million in 2001. We receive an income tax benefit calculated as the tax effect of the difference between the fair market value of the stock issued at the time of exercise and the option price. These benefits which reduce taxes payable are credited directly to stockholders equity.

The items accounting for the difference between income taxes computed at the federal statutory rate and the provision for income taxes are as follows:

	Y	Years Ended December 31,		
	2003	2002	2001	
(In thousands)				
Tax provision (benefit) at U.S. statutory rates	\$ 74,375	\$ 43,165	\$ (4,551)	
State taxes, net of federal benefit	5,313	3,330	(351)	
Foreign income taxed at different rates	(8,988)	(1,737)	39,992	
Tax exempt income	(4,144)	(4,637)	(6,454)	
Tax credits	(10,760)	(10,365)	(7,829)	
Other	1,580	2,309	5,972	
Total provision for income taxes	\$ 57,376	\$ 32,065	\$ 26,779	

Note 11: Litigation

In November 1999, we sued Clear Logic Inc., in the United States District Court for the Northern District of California, San Jose Division, alleging that Clear Logic is unlawfully appropriating our registered mask work technology in violation of the federal mask work statute and that Clear Logic has unlawfully interfered with our relationships and contracts with our customers. The lawsuit seeks compensatory and punitive damages and an injunction to stop Clear Logic from unlawfully using our mask work technology and from interfering with our customers. Clear Logic answered the complaint by denying that it is infringing our mask work technology and denying that it has unlawfully interfered with our relationships and contracts with our customers. Clear Logic also filed a counterclaim against us for unfair competition under California law alleging that we have made false statements to our customers regarding Clear Logic.

In October 2001, the District Court ruled on summary judgment motions filed by both parties. The Court denied Clear Logic s motion for summary judgment of our claim of tortious interference with our software license, ruling that using the bitstream [from our MAX+PLUS II software] to program a Clear Logic device violates Altera s software license. Further, the Court granted our motion for summary judgment disposing of Clear Logic s counterclaim of unfair competition. On January 4, 2002, Clear Logic filed a petition for Chapter 11 bankruptcy, which resulted in all proceedings in the lawsuit being automatically stayed. We moved to have this stay lifted, and the bankruptcy court granted our motion effective May 31, 2002. On July 9, 2002, the Court issued a preliminary injunction enjoining Clear Logic and its distributors from selling any semiconductor device that was made, designed, configured, programmed or otherwise manufactured through or with the aid of any bitstream file or other output generated by our MAX+PLUS II software. On November 25, 2002, a jury rendered a verdict in our favor on all issues in the lawsuit.

During the quarter ended September 30, 2003, the Court granted our motion for summary judgment on damages and awarded \$30.6 million. In the first quarter of 2004, Clear Logic filed a notice of appeal in the Ninth Circuit Court of Appeals. Because Clear Logic is in bankruptcy and because they are appealing the jury verdict and the rulings of the District Court, management cannot predict the likelihood of recovery nor the amount that might be recovered, if any; our consolidated financial statements do not reflect any anticipated recovery.

Due to the nature of the litigation with Clear Logic, our management cannot estimate the total expenses that we will incur prosecuting the lawsuit. Although we cannot make any assurances as to the results of this case, we intend to pursue our claims vigorously.

Note 12: Segment and Geographic Information

We operate in a single industry segment comprising of the design, development, manufacture, and sale of PLDs, IP cores, and associated development tools. Our sales by major geographic area are based on the geographic location of the distributor or OEM who purchased our products which may be different from the geographic locations of our end customers.

	,	Years Ended December 31,		
	2003	2002	2001	
(In thousands)				
North America:				
United States	\$ 235,598	\$ 241,530	\$ 323,310	
Other	34,119	40,817	53,965	
Total North America	269,717	282,347	377,275	
Europe	184,339	168,635	217,262	
Japan	198,551	153,155	166,565	
Asia Pacific	174,600	107,547	78,274	
Total	\$ 827,207	\$ 711,684	\$ 839,376	

Net property and equipment by country was as follows:

	Decen	December 31,	
	2003	2002	
(In thousands)			
United States	\$ 132,773	\$ 148,539	
Malaysia	19,891	22,954	
Other	8,260	12,506	
	<u></u>		
Total	\$ 160,924	\$ 183,999	

For the years ended December 31, 2003, 2002, and 2001, no single end customer accounted for more than 10% of our sales.

Note 13: Employee Benefits Plans

We have a plan to provide retirement benefits for our eligible employees, known as the Altera Corporation Savings and Retirement Plan, or the Plan. As allowed under Section 401(k) of the Internal Revenue Code, the Plan allows tax deferred salary deductions for eligible employees. Our Retirement Plans Committee administers the Plan. Participants in the Plan may make salary deferrals of up to 20% of the eligible annual salary, limited by the maximum dollar amount allowed by the Internal Revenue Code. For every dollar deferred under the Plan, we make a matching contribution equal to 100% up to the first 5% of the salary deferred with a maximum of \$2,000 per participant per year. Effective January 1, 2002, we accelerated the vesting of matching contributions from five to three years. This amendment applies to matching contributions made prior to January 1, 2002. Effective January 1, 2003, participants who have reached the age of fifty

before the close of the plan year may be eligible to make catch-up salary deferral contributions, limited by the maximum dollar amount allowed by the Internal Revenue Code. Catch-up contributions are not eligible for matching contributions. Our contributions to the Plan are charged to operations and were \$1.9 million in 2003, \$1.7 million in 2002, and \$2.2 million in 2001.

We allow our U.S.-based officers, director-level employees, and our board members to defer a portion of their compensation under the Altera Corporation Nonqualified Deferred Compensation Plan. Our Retirement Plans Committee administers the plan. Plan participants self-direct their investments deferred under the plan. In the event the company becomes insolvent, plan assets are subject to the claims of the general creditors. Since the inception of the plan, we have not made any matching or discretionary contributions to the plan. There are no plan provisions that provide for any guarantees or minimum return on investments. At December 31, 2003, there were approximately 128 participants in the plan and plan assets were approximately \$49.9 million.

In addition, we also sponsor a retiree medical plan providing medical benefits to eligible retirees and their spouses. Benefits are available to employees hired on or before July 1, 2002 who retire from Altera at or after age 55 if they have at least 10 years of service after age 45. To date, this plan has not had, and is not expected to have, a material effect on our consolidated financial statements.

REPORT OF INDEPENDENT AUDITORS

To the Stockholders and Board of Directors of Altera Corporation:

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of operations, of stockholders equity and of cash flows present fairly, in all material respects, the financial position of Altera Corporation and its subsidiaries at December 31, 2003 and 2002, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2003, in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company s management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with auditing standards generally accepted in the United States of America, which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP

San Jose, California

January 26, 2004

50

Supplementary Financial Data

Quarterly Financial Information (Unaudited)

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
(In thousands, except per share amounts)				
2003				
Net sales	\$ 195,076	\$ 205,259	\$ 209,446	\$ 217,426
Gross margin	130,818	139,835	143,868	146,813
Net income	30,122	36,098	43,763	45,142
Basic net income per share	0.08	0.09	0.11	0.12
Diluted net income per share	0.08	0.09	0.11	0.12
2002				
Net sales	\$ 171,957	\$ 178,936	\$ 180,144	\$ 180,647
Gross margin	103,374	108,771	114,955	121,517
Net income	19,015	21,729	23,396	27,123
Basic net income per share	0.05	0.06	0.06	0.07
Diluted net income per share	0.05	0.06	0.06	0.07

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

None.

ITEM 9A. Controls and Procedures.

We carried out an evaluation, under the supervision and with the participation of our Chief Executive Officer and our Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures as of December 31, 2003. Our disclosure controls and procedures are designed to ensure that information required to be disclosed in our reports filed under the Securities Exchange Act of 1934 is recorded, processed, summarized, and reported within the time periods specified in the SEC s rules and forms. Based on this evaluation, our Chief Executive Officer and our Chief Financial Officer concluded that our disclosure controls and procedures are effective in timely alerting them to material information required to be included in our periodic SEC filings. There has been no change in our internal controls over financial reporting that occurred during the quarter ended December 31, 2003 that has materially affected, or is reasonably likely to materially affect, our internal controls over financial reporting. Our internal controls over financial reporting are designed to provide reasonable assurance regarding the reliability of our financial reporting and preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

It should be noted that the design of any system of controls is based in part upon certain assumptions about the likelihood of future events, and we cannot assure you that our system of controls will succeed in achieving its stated goals under all conditions.

PART III

ITEM 10. Directors and Executive Officers of the Registrant.

The information concerning our executive officers required by this Item is incorporated by reference to the section in Item 1 of this report entitled Executive Officers of the Registrant and the section entitled Section 16(a) Beneficial Ownership Reporting Compliance in our Proxy Statement. The information concerning our directors and our nominees required by this Item is incorporated by reference to the section entitled Proposal One Election of Directors in our Proxy Statement.

The Board of Directors has determined that Robert W. Reed, Chair of the Audit Committee, is an audit committee financial expert as defined by Item 401(h) of Regulation S-K of the Securities Exchange Act of 1934, as amended (the Exchange Act) and is independent within the meaning of Item 7(d)(3)(iv) of Schedule 14A of the Exchange Act.

We have adopted a code of ethics that applies to our chief executive officer and our senior financial officers, including our principal financial officer and principal accounting officer. This code of ethics has been posted on our Website. The Internet address for our Website is www.altera.com, and the code of ethics can be found from our main Web page by clicking on Investor Relations under the Corporate heading, then clicking on Corporate Governance and choosing Code of Ethics for Senior Financial Officers. We will also provide a copy of the code of ethics, free of charge, upon request made to Altera Corporation, Attn: Investor Relations, 101 Innovation Drive, San Jose, California 95134. We intend to satisfy the disclosure requirement under Item 10 of Form 8-K regarding an amendment to, or waiver from, a provision of this code of ethics by posting such information on our Website, at the location specified above.

We have adopted Corporate Governance Guidelines, which are available from our main Web page by clicking on Investor Relations under the Corporate heading, then clicking on Corporate Governance. Stockholders may request a free copy of the Corporate Governance Guidelines from the address set forth in the prior paragraph.

ITEM 11. Executive Compensation.

The sections entitled Executive Compensation, Director Compensation, and Employment Contracts and Change of Control Arrangements in our Proxy Statement are incorporated herein by reference.

ITEM 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

The sections entitled Security Ownership of Certain Beneficial Owners and Management and Equity Compensation Plan Information in our Proxy Statement are incorporated herein by reference.

ITEM 13. Certain Relationships and Related Transactions.

The sections entitled Director Compensation and Certain Relationships and Related Transactions in our Proxy Statement are incorporated herein by reference.

ITEM 14. Principal Accountant Fees and Services.

The section entitled Audit Fees in our Proxy Statement is incorporated herein by this reference.

PART IV

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

- (a) The following documents are filed as part of this report:
 - 1. Financial Statements

The information required by this item is included in Item 8 of Part II of this report.

2. Financial Statement Schedules.

All schedules have been omitted as they are either not required, not applicable, or the required information is included in the financial statements or notes thereto.

3. Exhibits.

The exhibits listed in the Exhibit Index attached to this report are filed or incorporated by reference as part of this annual report.

(b) Reports on Form 8-K.

We furnished the following Current Report on Form 8-K during the quarter ended December 31, 2003. The information furnished under Item 12. Results of Operations and Financial Condition is not deemed to be filed for purposes of Section 18 of the Securities Exchange Act of 1934:

Current Report on Form 8-K furnished to the SEC on October 20, 2003 under Item 12. Results of Operations and Financial Condition.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report on Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized.

ALTERA CORPORATION

By: /s/ Nathan Sarkisian

Nathan Sarkisian

Senior Vice President and Chief Financial Officer

(Principal Financial and Accounting Officer)

March 15, 2004

POWER OF ATTORNEY

Know all persons by these present, that each person whose signature appears below constitutes and appoints Nathan Sarkisian, his or her attorney-in-fact, with the full power of substitution, for him or her, in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that said attorney-in-fact, or his or her substitute or substitutes, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report on Form 10-K has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated:

Signature	Capacity in Which Signed	Date
/s/ John P. Daane	President, Chief Executive Officer, and Director and Chairman of the Board of Directors (Principal	March 15, 2004
John P. Daane	Executive Officer)	
/s/ Nathan Sarkisian	Senior Vice President and Chief Financial Officer (Principal Financial and Accounting Officer)	March 15, 2004
Nathan Sarkisian	(i mopar i manolar and 7 toodanting emoor)	
/s/ Charles M. Clough	Director	March 15, 2004
Charles M. Clough		

	Director	March 15, 2004
Kevin McGarity		
/s/ Robert J. Finocchio, Jr.	Director	March 15, 2004
Robert J. Finocchio, Jr.		
/s/ Paul Newhagen	Director	March 15, 2004
Paul Newhagen		
/s/ Robert W. Reed	Director, Vice Chairman of the Board of Directors and Lead Independent Director	March 15, 2004
Robert W. Reed	and Load moopendent Shooter	

Index to Financial Statements		
Signature	Capacity in Which Signed	Date
/s/ Deborah D. Rieman	Director	March 15, 2004
Deborah D. Rieman		
/s/ William E. Terry	Director	March 15, 2004
William E. Terry		
/s/ Susan Wang	Director	March 15, 2004
Susan Wang		

EXHIBIT INDEX

Exhibit Number	Exhibit
#3.1	Amended and Restated Certificate of Incorporation, as currently in effect.
3.2	By-laws of the Registrant, as currently in effect. (19)
4.1	Specimen copy of certificate for shares of common stock of the Registrant. ⁽⁵⁾
10.1+	Altera Corporation 1987 Stock Option Plan, and forms of Incentive and Nonstatutory Stock Option Agreements, as amended March 22, 1995 and as restated effective May 10, 1995. (3)
10.2+	Altera Corporation 1987 Employee Stock Purchase Plan, as amended and restated April, 2002, and form of Subscription Agreement. (16)
10.3	Form of Indemnification Agreement entered into with each of the Registrant s officers and directors ⁵⁾
10.4+	Altera Corporation 1988 Director Stock Option Plan and form of Outside Director Nonstatutory Stock Option Agreement restated effective May 7, 1997. (8)
10.5	LSI Products Supply Agreement with Sharp Corporation, dated October 1, 1993. (1)
10.6	Letter Agreement, dated August 20, 1996, by and between the Registrant and Sharp Corporation, amending the LSI Product Supply Agreement, dated October 1, 1993. ⁽⁸⁾
10.7	Letter Agreement, dated May 22, 1997, by and between the Registrant and Sharp Corporation, amending the LSI Product Supply Agreement, dated October 1, 1993. ⁽⁸⁾
10.8	Letter Agreement, dated May 22, 1998, by and between the Registrant and Sharp Corporation, amending the LSI Product Supply Agreement, dated October 1, 1993. ⁽⁸⁾
10.9+	Altera Corporation Nonqualified Deferred Compensation Plan, as amended and restated effective January 1, 2002. (14)
10.10+	Form of Deferred Compensation Agreement. (14)
10.11*	Wafer Supply Agreement dated June 26, 1995 between the Registrant and Taiwan Semiconductor Manufacturing Co., Ltd. (2)
10.12*	Amendment No. 1 dated as of October 1, 1995 to Wafer Supply Agreement dated as of June 26, 1995 by and between the Registrant and Taiwan Semiconductor Manufacturing Co., Ltd. and to Option Agreement 1 dated as of June 26, 1995 between the Registrant and Taiwan Semiconductor Manufacturing Co., Ltd. ⁽⁴⁾
10.13	Amendment of Wafer Supply Agreement dated June 1, 1997 by and between the Registrant and Taiwan Semiconductor Manufacturing Co., Ltd. ⁽⁸⁾
10.14+	Altera Corporation 1996 Stock Option Plan, as amended effective as of January 1, 2003. (18)
10.15+	Form of Stock Option Agreement under 1996 Stock Option Plan. (17)
10.16+	1998 Director Stock Option Plan, as amended effective October 2001. (13)
10.17+	Form of Stock Option Agreement under 1998 Director Stock Option Plan. (12)
10.18	Product Distribution Agreement with Arrow Electronics Incorporated, effective January 26, 1999. (7)
10.19+	Stock Option Agreements between the Registrant and Paul Newhagen. (6)
10.20+	Restricted Stock Purchase Agreement between the Registrant and John Daane. (9)
10.21+	Severance Agreement, dated as of November 30, 2000, by and between John Daane and the Registrant. (10)
10.22+	Change in Control Severance Agreement, dated as of November 30, 2000, by and between John Daane and the Registrant. ⁽¹⁰⁾
10.23+	Letter Agreement, dated July 27, 2001, by and between the Registrant and John Daane. (13)
10.24+	Restricted Stock Purchase Agreement between the Registrant and Jordan Plofsky. (11)

Exhibit Number	Exhibit
10.25+	Form of Restricted Stock Purchase Agreement between the Registrant and George Papa. (15)
#11.1	Computation of Earnings per Share (included in note 4 of our consolidated financial statements).
#13.1	Selected Consolidated Financial Data from the Annual Report to Stockholders for the fiscal year ended December 31, 2003.
#21.1	Subsidiaries of the Registrant.
#23.1	Consent of PricewaterhouseCoopers LLP.
#24.1	Power of Attorney (included on page 54 of this Annual Report on Form 10-K).
#31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934.
#31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934.
#32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
#32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

- (1) Incorporated by reference to the Registrant s report on Form 10-K for the fiscal year ended December 31, 1993.
- (2) Incorporated by reference to the Registrant's report on Form 10-Q for the quarter ended June 30, 1995.
- (3) Incorporated by reference to the Registrant s Registration Statement on Form S-8 (File No. 33-61085), as amended, which became effective July 17, 1995.
- (4) Incorporated by reference to the Registrant s report on Form 10-K for the fiscal year ended December 31, 1995.
- (5) Incorporated by reference to the Registrant s report on Form 10-K for the fiscal year ended December 31, 1997.
- (6) Incorporated by reference to the Registrant s Registration Statement on Form S-8 (File No. 333-62917), filed on September 4, 1998.
- (7) Incorporated by reference to the Registrant s report on Form 10-Q for the guarter ended March 31, 1999.
- (8) Incorporated by reference to the Registrant s report on Form 10-K for the fiscal year ended December 31, 1999.
- (9) Incorporated by reference to the Registrant s Registration Statement on Form S-8 (File No. 333-54384), filed on January 26, 2001.
- (10) Incorporated by reference to the Registrant s report on Form 10-K for the fiscal year ended December 31, 2000.
- (11) Incorporated by reference to the Registrant s Registration Statement on Form S-8 (File No. 333-56776), filed on March 9, 2001.
- (12) Incorporated by reference to the Registrant s report on Form 10-Q for the quarter ended March 31, 2001.
- (13) Incorporated by reference to the Registrant s report on Form 10-K for the fiscal year ended December 31, 2001.
- (14) Incorporated by reference to the Registrant s report on Form 10-Q for the quarter ended March 31, 2002.
- (15) Incorporated by reference to the Registrant s Registration Statement on Form S-8 (File No. 333-87382), filed on May 1, 2002.
- (16) Incorporated by reference to the Registrant s report on Form 10-Q for the quarter ended June 30, 2002.
- (17) Incorporated by reference to the Registrant s report on Form 10-K for the fiscal year ended December 31, 2002.
- (18) Incorporated by reference to the Registrant s Schedule TO, filed on June 5, 2003.
- (19) Incorporated by reference to the Registrant s report on Form 10-Q for the quarter ended September 30, 2003.
 - # Filed herewith.
 - Confidential treatment has previously been requested for portions of this exhibit.
 - + Management contract or compensatory plan or arrangement required to be filed as an exhibit to this report on Form 10-K pursuant to Item 14(c) thereof.