



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

**Form 10-K**

(Mark One)

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

For the fiscal year ended October 30, 2004

OR

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

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

Commission file no. 1-7819

**Analog Devices, Inc.**

*(Exact name of registrant as specified in its charter)*

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

**04-2348234**  
*(I.R.S. Employer  
Identification No.)*

**One Technology Way, Norwood, MA**  
*(Address of principal executive offices)*

**02062-9106**  
*(Zip Code)*

**(781) 329-4700**

*(Registrant's telephone number, including area code)*

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

**Common Stock \$0.16 2/3 Par Value**  
*Title of Each Class*

**New York Stock Exchange**  
*Name of Each Exchange on Which Registered*

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

**None**

*Title of Each 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 such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. YES  NO

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in 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  NO

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant was approximately \$16,011,612,485 based on the last reported sale of the Common Stock on the New York Stock Exchange Composite Tape reporting system on April 30, 2004.

As of October 30, 2004 there were 375,840,444 shares of Common Stock, \$0.16 2/3 par value per share, outstanding.

**Documents Incorporated by Reference**

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Form 10-K Part



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**PART I**

**ITEM 1. BUSINESS**

**Company Overview**

We are a world leader in the design, manufacture and marketing of high-performance analog, mixed-signal and digital signal processing integrated circuits used in signal processing for industrial, communication, computer and consumer applications. Since our inception in 1965, we have focused on solving the engineering challenges associated with signal processing in electronic equipment. Signal processing is where the analog and digital worlds meet to provide the advantages of digital technologies to the real world. Our products play a fundamental role in converting real-world phenomena such as temperature, motion, pressure, light and sound into electrical signals to be used in a wide array of electronic equipment ranging from industrial process control, factory automation systems equipment, defense electronics, base stations, central office equipment, wireless telephones, computers, automobiles, CAT scanners, digital cameras and DVD players. Signal processing is the cornerstone of high-speed communications, digital entertainment, and other consumer, computer and industrial applications. As new generations of digital applications evolve, they generate new needs for high-performance analog and digital signal processing, or DSP, technology. We produce a wide range of products that are designed to meet the technology needs of a broad base of customers.

During fiscal 2004, approximately 36% of our revenue came from the industrial market, which includes factory automation, medical equipment, scientific instrumentation, automatic test equipment, automotive electronics, security equipment and aerospace and defense systems.

Revenues from the communications market represented approximately 37% of our fiscal 2004 revenue. Communications applications include wireless handsets and base stations, as well as products used for high-speed access to the Internet, including broadband modems and central office networking equipment.

We also serve the personal computer market with products that monitor and manage power usage, process signals used in flat panel displays and multimedia projectors and enable CD-quality audio. In fiscal 2004, the computer market accounted for approximately 14% of our revenue.

The demand for our products used in high-performance consumer electronics has been increasing and represented approximately 13% of our revenue for fiscal 2004. Applications in this market include digital cameras and camcorders, DVD players, advanced digital televisions and surround sound audio systems.

We sell our products worldwide through a direct sales force, third-party distributors and independent sales representatives. We have direct sales offices in 19 countries, including the United States.

We are headquartered near Boston, in Norwood, Massachusetts, and have manufacturing facilities in Massachusetts, California, North Carolina, Ireland and the Philippines. We were founded in 1965 and are incorporated in Massachusetts. As of October 30, 2004, we employed approximately 8,900 individuals worldwide. Our common stock is listed on the New York Stock Exchange under the symbol ADI and is included in the Standard & Poor's 500 Index.

We maintain a website with the address [www.analog.com](http://www.analog.com). We are not including the information contained on our website as a part of, or incorporating it by reference into, this Annual Report on Form 10-K. We make available free of charge through our website our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, and amendments to these reports, as soon as reasonably practicable after we electronically file such material with, or furnish such material to, the Securities and Exchange Commission. We also make available on our website our corporate governance guidelines, the charters for our audit committee, compensation committee and nominating and corporate governance committee, and our code of business conduct and ethics, and such information is available in print to any stockholder of Analog who requests it. In addition, we intend to disclose on our website any amendments to, or waivers from, our code of business conduct and ethics that are required to be publicly disclosed pursuant to rules of the Securities and Exchange Commission and the New York Stock Exchange.

## Industry Background

All electronic signals fall into one of two categories, analog or digital. Analog, also known as linear, signals represent real-world phenomena, such as temperature, pressure, sound, speed and motion. This information can be detected and measured using analog sensors, which represent real-world phenomena by generating continuously-varying voltages and currents. The signals from these sensors are initially processed using analog methods, such as amplification, filtering and shaping. They are then usually converted to digital form for storage or further manipulation. The further manipulation of the signals after conversion to digital form is called “digital signal processing.” Digital signals represent the “ones” and “zeros” of binary arithmetic and are either on or off. Digital signals are frequently converted back to analog form for functions such as video display, audio output or control. These manipulations and transformations from analog to digital and back to analog are known as “real-world signal processing” within the signal chain.

Significant advances in semiconductor technology in recent years have substantially increased the performance and functionality of integrated circuits, or ICs, used in signal processing applications. These advances include the ability to combine analog and digital signal processing capability on a single chip, thereby making possible more highly-integrated solutions. The widespread application of low-cost microprocessor-based systems and of digital communication technologies has increased the need for signal conditioning interfaces between the analog and digital world. At the same time, the convergence of computing and communications has resulted in end products that incorporate state-of-the-art signal processing capability onto as few chips as possible. Our products are designed to be used within electronic equipment to achieve higher performance, including greater speed, improved accuracy, more efficient signal processing and minimized power consumption.

## Principal Products

We design, manufacture and market a broad line of high-performance ICs that incorporate analog, mixed-signal and digital signal processing technologies. Our ICs are designed to address a wide range of real-world signal processing applications. Across the entire range of our signal processing ICs are both general purpose products used by a broad range of customers and applications as well as application-specific products designed for specific clusters of customers in vertical markets. By using readily available, high-performance, general-purpose products in their systems, our customers can reduce the time they need to bring new products to market. Given the high cost of developing customized ICs, our standard products often provide the most cost-effective solution for many low to medium volume applications. In some communications, computer and consumer products, we focus on working with leading customers to design application-specific solutions. We begin with our existing core technologies in analog and DSP, and devise a solution to more closely meet the needs of a specific customer or group of customers. Because we have already developed the core technology for our general-purpose products, we can create application-specific solutions quickly.

We produce and market several thousand products. Our ten highest revenue products accounted for approximately 17% of our revenue for fiscal 2004. The majority of our products are proprietary, meaning equivalent products are not available from competitors. A limited number of other companies may provide products with similar functions.

### *Analog Products*

Our analog IC technology has been the foundation of our business for nearly four decades, and we believe we are one of the world’s largest suppliers of analog ICs. Our analog ICs are primarily high-performance devices, generally defined as devices that support a minimum of 10-bits of accuracy and a minimum of 50 megahertz of speed. The principal advantages these applications have versus competitors’ products include higher accuracy, lower cost per function, smaller size, lower power consumption and fewer components for improved reliability. The majority of our analog IC product revenue is attributable to sales of data converters and amplifiers. The data converter and amplifier product categories represented approximately 60% of our fiscal 2004 revenue. Other analog IC products include analog signal processing devices such as analog multipliers, switches, multiplexers and comparators. Over the past several years we have been expanding our

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analog IC product offerings along the entire analog signal chain and into product areas such as radio frequency integrated circuits, or RF ICs, and power management products such as voltage regulators and thermal monitoring ICs.

The majority of our analog IC products are proprietary to us in their design and general purpose in their application. This allows customers to incorporate our products into a wide variety of electronic equipment and systems. Our product portfolio includes several thousand analog ICs, any one of which can have as many as several hundred customers. Our analog ICs typically have long product life cycles. Our analog IC customers include both original equipment manufacturers, or OEMs, and customers who build electronic subsystems for integration into larger systems.

Our analog technology base also includes products using an advanced IC technology known in the industry as surface micromachining, which is used to produce semiconductor products known as micro-electromechanical systems, or MEMS. This technology enables extremely small mechanical sensors to be built on the surface of a chip along with supporting circuitry. In addition to incorporating an electro-mechanical structure, these devices also have analog circuitry for conditioning signals obtained from the sensing element. The integration of signal conditioning and MEMS is a unique feature of our products which we call iMEMS®. Our iMEMS product portfolio includes accelerometers used to sense acceleration, and gyroscopes used to sense position. The majority of our current revenue from micromachined products is derived from accelerometers used by automotive manufacturers in airbag applications. However, revenue from consumer and industrial customers is increasing as we develop products using this technology for applications in these end markets.

### *DSP Products*

DSPs are processors that are optimized for high-speed numeric calculations, which are essential for real-time processing of digital data resulting from analog to digital signal conversion. Our DSP products are designed to be fully programmable and to efficiently execute specialized software programs, or algorithms, associated with processing digitized real-time, real-world data. Programmable DSPs provide the flexibility to modify the device's function quickly and inexpensively in software. We offer both general-purpose and application-specific DSP products. General-purpose DSP IC customers typically write their own algorithms using software tools that we provide and software tools they obtain from third-party suppliers. Our application-specific DSP products typically include analog and DSP technology and the DSPs are preprogrammed to execute software for applications such as wireless telecommunications or image processing. Our DSPs are designed in families of products that share a common architecture and therefore can execute the same software. We support these products with specialized applications and easy-to-use, low-cost development tools, which reduce our customers' product development costs and time-to-market.

Increasingly, many of our products combine analog and digital signal processing technology into multi-function mixed-signal devices and chipsets. The growing technological demands associated with the use of audio and video in computers and consumer products as well as the networking of communications systems has created new opportunities for these mixed-signal products. Examples of these products include chipsets for communication applications such as global system for mobile cellular phones, or GSM, cable modems, and broadband modems. Other examples include audio input/output devices for computer applications and electric motor control devices for industrial instrumentation.

### **Markets and Applications**

The following describes some of the characteristics of, and customer products within, our major markets:

***Industrial*** — Our industrial market includes the following areas:

***Industrial Process Automation*** — Our industrial process automation market includes applications such as factory automation systems, automatic process control systems, robotics, environmental control systems and automatic test equipment. These products generally require ICs that offer performance greater than that available from commodity-level ICs, but generally do not have production volumes that warrant custom or

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application-specific ICs. Combinations of analog mixed-signal and DSP ICs are usually employed to achieve the necessary functionality. Automatic test equipment applications have created opportunities for the design of system-level ICs that require a high level of electronic circuitry.

*Instrumentation* — Our instrumentation market includes engineering, medical and scientific instruments. These products are usually designed using the highest performance analog and mixed-signal ICs available. Customer products include oscilloscopes, logic analyzers, CAT scanners, MRI equipment, blood analyzers and microscopes.

*Defense/Aerospace* — The defense, commercial avionics and space markets all require high-performance ICs that meet rigorous environmental and reliability specifications. Many of our analog ICs can be supplied in versions that meet these standards. In addition, many products can be supplied to meet the standards required for broadcast satellites and other commercial space applications. Most of our products sold in this market are specifically-tested versions of products derived from our standard product offering. Customer products include navigation systems, flight simulators, radar systems and security devices.

*Automotive* — Although the automotive market has historically been served with low-cost, low-performance ICs, demand has emerged for higher performance devices for a wide range of safety and entertainment applications. In response, we are developing products specifically for the automotive market. We supply a micromachined IC used as a crash sensor in airbag systems. We believe that other micromachined devices derived from this product may be suitable for other automotive applications, such as roll-over sensing, global positioning satellite, or GPS, automotive navigation systems, anti-lock brakes and “smart” suspension systems. In addition, our analog and DSP ICs have application in engine control, in-cabin electronics, and collision avoidance systems.

*Communications* — The development of broadband, wireless and Internet infrastructures around the world has created an important market for our communications products. Communications technology involves the acquisition of analog signals that are converted from analog to digital and digital to analog form during the process of transmitting and receiving data. The need for higher speed and reduced power consumption, coupled with more reliable, bandwidth-efficient communications, has been creating demand for our products. Our products are used in the full spectrum of signal processing for audio, data, image and video communication. In wireless and broadband communication applications, our products are incorporated into cellular telephones, cellular base station equipment, modems, pagers, PBX switches, routers and remote access servers.

*Computers and Computer Peripherals* — Increased interface between users and PCs through monitors, printers, scanners and audio devices and the increasing need for power and thermal management capability in PCs have provided opportunities in the computer market. The computer industry seeks to develop and market ever smaller and lighter personal computers. This need increases demand for high-performance ICs that monitor power usage, enabling manufacturers to use smaller batteries and extend battery life between charges. In addition, we currently supply a variety of ICs used in this market for functions such as graphic displays, interfaces between PCs and peripherals such as LCD monitors and projectors, and enhanced audio input and output capability for business and entertainment applications.

*Consumer Electronics* — Increased market demand for digital entertainment systems for acquisition, display and digital processing of signals has allowed us to combine analog and digital design capability to provide solutions that are designed to meet the rigorous cost, size and reliability constraints of the consumer electronics market. The emergence of high-performance, feature-rich consumer products, such as digital camcorders and cameras, home theater systems, advanced digital televisions, video projectors and DVD recorders/players, has led to the need for high-performance, system-level ICs with a high level of specific functionality.

## **Research and Development**

Our markets are characterized by rapid technological changes and advances. Accordingly, we make substantial investments in the design and development of new products and processes, and the improvement of

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existing products and processes. We spent approximately \$512 million during fiscal 2004 on the design, development and improvement of new and existing products and processes, compared to approximately \$450 million during fiscal 2003 and approximately \$424 million during fiscal 2002.

Our research and development strategy focuses on building technical leadership in core technologies for signal conditioning, conversion and processing. In support of our research and development activities, we employ thousands of engineers involved in product and process development at over 28 design centers and manufacturing sites located throughout the world.

### **Patents and Other Intellectual Property Rights**

As of October 30, 2004, we held 935 United States patents and had 569 patent applications pending with the United States Patent and Trademark Office with expiration dates ranging from 2004 through 2023. We believe that while our patents may provide some advantage, our competitive position is largely determined by such factors as the system and application knowledge, ability and experience of our personnel, the range and number of new products being developed by us, our market brand recognition and ongoing marketing efforts, customer service and technical support. It is generally our policy to seek patent protection for significant inventions that may be patented, though we may elect, in certain cases, not to seek patent protection even for significant inventions, if other protection, such as maintaining the invention as a trade secret, is considered more advantageous. We also have trademarks that are used in the conduct of our business to distinguish genuine Analog Devices' products and we maintain cooperative advertising programs to promote our brands and identify products containing genuine Analog Devices' components. In addition, we have registered certain of our mask sets under the Semiconductor Chip Protection Act of 1984.

There can be no assurance that any patent will issue on pending applications or that any patent issued will provide substantive protection for the technology or product covered by it. There also can be no assurance that others will not develop or patent similar technology or reverse engineer our products or that our confidentiality agreements with employees, consultants, silicon foundries and other suppliers and vendors will be adequate to protect our interests. Moreover, the laws of countries in which we design, manufacture and market our products may afford little or no effective protection of our proprietary technology.

The semiconductor industry is characterized by frequent claims and litigation involving patent and other intellectual property rights, including claims arising under our contractual indemnification of our customers. We have received from time to time, and may receive in the future, claims from third parties asserting that our products or processes infringe their patents or other intellectual property rights. In the event a third party makes a valid intellectual property claim against us and a license is not available to us on commercially reasonable terms, or at all, we could be forced either to redesign or to stop production of products incorporating that intellectual property, and our operating results could be materially and adversely affected. Litigation may be necessary to enforce our patents or other of our intellectual property rights or to defend us against claims of infringement, and this litigation could be costly and divert the attention of our key personnel. See Note 11 in the Notes to our Consolidated Financial Statements contained in Item 8 of this Annual Report on Form 10-K for information concerning pending litigation that involves us. An adverse outcome in this or other litigation could have a material adverse effect on our consolidated financial position or on our consolidated results of operations or cash flows in the period in which the litigation is resolved.

### **Sales Channels**

We sell our products in North America and internationally through a direct sales force, third-party distributors, independent sales representatives and via our worldwide website on the Internet.

The fastest growing part of our business has been to customers in markets other than North America and Europe. Approximately 19% of our fiscal 2004 net sales were to customers in Japan. Approximately 14% of our fiscal 2004 net sales were to customers in China and approximately 22% were to customers elsewhere in Asia, principally Taiwan and Korea. As of October 30, 2004, we had direct sales offices in the Asia region in China, Hong Kong, India, Japan, Korea, Singapore and Taiwan.

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Approximately 25% of our fiscal 2004 net sales were to customers in North America. As of October 30, 2004, we had 10 direct sales offices in the United States.

Approximately 20% of our fiscal 2004 net sales were to customers in Europe. As of October 30, 2004, we had direct sales offices in Austria, Belgium, Denmark, France, Germany, Israel, Italy, the Netherlands, Sweden and the United Kingdom.

We also had sales representatives and/or distributors in over 45 countries outside North America, including countries where we also have direct sales offices. For further detail regarding financial information about geographic areas, see Note 3 in the Notes to our Consolidated Financial Statements contained in Item 8 of this Annual Report on Form 10-K.

Approximately 50% of our fiscal 2004 revenue was derived from sales made through distributors. Revenue is deferred on sales made through distributors until the distributors resell the products to the end users. These distributors typically maintain an inventory of our products. Some of them also sell products competitive with our products, including those for which we are an alternate source. Sales to certain distributors are made under agreements that provide protection to the distributors for their inventory of our products against price reductions and products that are slow-moving or that we have discontinued, including limited product return privileges.

Our worldwide technical direct field sales efforts are supported by an extensive promotional program that includes editorial coverage and paid advertising in trade publications, direct mail programs, promotional brochures, technical seminars and participation in trade shows. We publish and distribute full-length databooks, product catalogs, applications guides, technical handbooks and detailed data sheets for individual products. We also provide product and application information and sell products via our worldwide website on the Internet. We maintain a staff of field application engineers who aid customers in incorporating our products into their products.

We have tens of thousands of customers worldwide. Our largest single customer, excluding distributors, represented approximately 3% of our fiscal 2004 net sales, and our 20 largest customers, excluding distributors, accounted for approximately 29% of our fiscal 2004 net sales.

### **Foreign Operations**

Through subsidiaries and affiliates, we conduct business in numerous countries outside the United States. During fiscal 2004, approximately 75% of our revenue was derived from customers in international markets. Our international business is subject to risks customarily encountered in foreign operations, including fluctuations in foreign currency exchange rates and controls, import and export controls, and other laws, policies and regulations of foreign governments.

We have manufacturing facilities outside the United States in Ireland and the Philippines. In addition to being exposed to the ongoing economic cycles in the semiconductor industry, we are also subject to the economic and political risks inherent in international operations and their impact on the United States economy in general, including the risks associated with ongoing uncertainties and political and economic instability in many countries around the world as well as the economic disruption from acts of terrorism, and the response to them by the United States and its allies. These risks include air transportation disruptions, expropriation, currency controls, currency exchange rate movement, and additional costs related to tax, tariff and freight rates. Although we engage in hedging transactions to reduce our exposure to currency exchange rate fluctuations, there can be no assurance that our competitive position will not be adversely affected by changes in the exchange rate of the United States dollar against other currencies.

### **Production and Raw Materials**

Monolithic integrated circuit components are manufactured in a sequence of semiconductor production steps that include wafer fabrication, wafer testing, cutting the wafer into individual "chips," or dice, assembly of the dice into packages and electrical testing of the devices in final packaged form. The raw materials used to

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manufacture these devices include silicon wafers, processing chemicals (including liquefied gases), precious metals, ceramic and plastic used for packaging.

We develop and employ a wide variety of proprietary processes that are specifically tailored for use in fabricating high-performance linear, mixed-signal and MEMS ICs. We also use bipolar and CMOS wafer fabrication processes.

Our IC products are fabricated both at our production facilities and by third-party wafer fabricators. Most of our analog products are manufactured in our own wafer fabrication facilities using proprietary processes. Our DSP products, and a portion of our analog products, are manufactured at third-party wafer-fabrication foundries using sub-micron digital CMOS processes. We operate wafer fabrication facilities in Wilmington and Cambridge, Massachusetts; Sunnyvale, California and Limerick, Ireland. We also operate assembly and test facilities located in the Philippines and use third-party subcontractors.

Capital spending in fiscal 2004 was \$146 million, compared with \$68 million in fiscal 2003. We currently plan to make capital expenditures of approximately \$150 million in fiscal 2005. We believe we currently have ample installed capacity to significantly increase internal production levels with modest additional capital expenditures.

Our products require a wide variety of components and raw materials, most of which we purchase from third-party suppliers. We have multiple sources for the majority of the components and materials we purchase and incorporate into our products. However, in some cases, we purchase components from sole-source suppliers, such as external foundries. If these sole-source suppliers are unable or unwilling to manufacture and deliver sufficient quantities of components to us on the time schedule and of the quality that we require, we may be forced to engage additional or replacement suppliers, which could result in additional expenses and delays in product development or shipment of product to our customers. Although we have experienced shortages of components from time to time, these items have generally been available to us as needed.

### **Backlog**

Backlog at the end of fiscal 2004 was approximately \$329 million, down from approximately \$387 million at the end of fiscal 2003. This decrease was due to the reduced order levels and increased order cancellations as a result of what we believe was an inventory correction during our third and fourth fiscal quarters of 2004. We define backlog as of a particular date as firm orders with a customer requested delivery date within thirteen weeks. Backlog is impacted by the tendency of customers to rely on shorter lead times available from suppliers, including us, in periods of depressed demand. In periods of increased demand, there is a tendency towards longer lead times that has the effect of increasing backlog and, in some instances, we may not have manufacturing capacity sufficient to fulfill all orders. As is customary in the semiconductor industry, we allow most orders to be canceled or deliveries delayed by customers without significant penalty. Accordingly, we believe that our backlog at any time should not be used as an indication of our future revenue.

### **Government Contracts**

We estimate that approximately 3% of our fiscal 2004 revenue was attributable to sales to the U.S. government and government contractors and subcontractors. Our government contract business is predominantly in the form of negotiated, firm fixed-price subcontracts. All such contracts and subcontracts contain standard provisions relating to termination at the election of the United States government.

### **Competition**

We compete with a number of semiconductor companies in markets that are highly competitive. We believe we are one of the largest suppliers of high-performance analog and mixed-signal processing components. Competitors for our analog and DSP products include Cirrus Logic Inc., Linear Technology Corporation, Maxim Integrated Products, Inc., National Semiconductor Corporation, Phillips Semiconductor, ST Microelectronics and Texas Instruments, Inc. Sales of our micromachined products are currently

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comprised of acceleration sensors and gyroscopes, and our main competitors in that market are Bosch, Freescale Semiconductor, Inc., Denso Corporation and ST Microelectronics.

We believe that competitive performance in the marketplace for real-world signal processing components depends upon several factors, including technical innovation, product quality and reliability, range of products, product price, customer service and technical support. We believe our technical innovation emphasizing product performance and reliability, supported by our commitment to strong customer service and technical support, enables us to compete in our chosen markets against both foreign and domestic semiconductor manufacturers.

Many other companies offer products that compete with our products, and some have greater financial, manufacturing, technical and marketing resources than we have. Additionally, some formerly-independent competitors have been purchased by larger companies. Our competitors also include emerging companies selling specialized products to markets we serve. There can be no assurances that we will be able to compete successfully in the future against existing or new competitors, or that our operating results will not be adversely affected by increased price competition.

### **Environment**

Our manufacturing facilities are subject to numerous environmental laws and regulations, particularly with respect to industrial waste and emissions. Compliance with these laws and regulations has not had a material impact on our capital expenditures, earnings or competitive position.

We are committed to protecting the environment and the health and safety of our employees, customers and the public. We endeavor to adhere to the most stringent standards across all of our facilities, to encourage pollution prevention and to strive towards continual improvement. We strive to exceed compliance with regulatory standards in order to achieve a standard of excellence in environmental, health and safety management practices as an integral part of our total quality management system.

### **Employees**

As of October 30, 2004, we employed approximately 8,900 individuals worldwide. Our future success depends in large part on the continued service of our key technical and senior management personnel, and on our ability to continue to attract, retain and motivate qualified employees, particularly those highly-skilled design, process, test and applications engineers involved in the manufacture of existing products and the development of new products and processes. We believe that relations with our employees are good, however the competition for such personnel is intense, and the loss of key employees could have a material adverse effect on us.

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**ITEM 2. PROPERTIES**

Our corporate headquarters is located in Norwood, Massachusetts. Manufacturing and other operations are conducted in several locations worldwide. The following tables provide certain information about our principal general offices and manufacturing facilities:

Principal Properties Owned:	Use	Floor Space
Wilmington, MA	Wafer fabrication, testing, engineering, marketing and administrative offices	586,200 sq. ft.
Cavite, Philippines	Wafer probe and testing, engineering and administrative offices	459,800 sq. ft.
Limerick, Ireland	Wafer fabrication, wafer probe and testing, engineering and administrative offices	375,000 sq. ft.
Westwood, MA	Engineering, administrative offices and warehouse	100,500 sq. ft.
Greensboro, NC	Components and board assembly and testing, engineering and administrative offices	98,700 sq. ft.
San Jose, CA	Engineering, administrative offices	76,000 sq. ft.
Manila, Philippines	Components assembly and testing, engineering and administrative offices	74,000 sq. ft.

Principal Properties Leased:	Use	Floor Space	Lease Expiration (fiscal year)	Renewals
Norwood, MA	Corporate headquarters, engineering, components testing, sales and marketing offices	130,000 sq. ft.	2007	3, five-yr. periods
Cambridge, MA	Wafer fabrication, components testing and assembly engineering, marketing and administrative offices	117,000 sq. ft.	2006	1, five-yr. period
Sunnyvale, CA	Wafer fabrication	63,100 sq. ft.	2010	1, five-yr. period
Santa Clara, CA	Engineering and administrative offices	43,500 sq. ft.	2007	2, five-yr. periods
Greensboro, NC	Engineering and administrative offices	41,900 sq. ft.	2006	2, one two-yr. period and one three-yr. period

In addition to the principal leased properties listed in the previous table, we also lease sales offices and other premises at 28 locations in the United States and 31 locations overseas under operating lease agreements. These leases expire at various dates through the year 2015. We do not anticipate experiencing significant difficulty in retaining occupancy of any of our manufacturing, office or sales facilities through lease renewals prior to expiration or through month-to-month occupancy, or in replacing them with equivalent facilities. For information concerning our obligations under all operating leases see Note 10 in the Notes to our Consolidated Financial Statements contained in Item 8 of this Annual Report on Form 10-K.

### ITEM 3. LEGAL PROCEEDINGS

On June 17, 2002, we received a letter from Plasma Physics Corporation attaching a courtesy copy of a complaint it had filed against us in the Eastern District of New York alleging infringement by certain of our products of two patents held by Plasma Physics. In the letter, Plasma Physics indicated that it would like to license the patents to us. The letter further stated that Plasma Physics would forego service of the complaint for a period of 120 days, provided that we would agree to undertake negotiations over terms for licensing the above-referenced patents. On October 17, 2002, Plasma Physics served the complaint. We have answered the complaint denying the allegations. The case is proceeding through discovery and the ultimate outcome is unknown.

On March 4, 2003, Motorola, Inc. filed an action in the United States District Court for the Eastern District of Texas against us, alleging that we infringed five patents owned by Motorola relating to semiconductor processing and semiconductor chip design. On March 11, 2003, Motorola filed a first amended complaint asserting the same five patents. The first amended complaint sought injunctive relief and unspecified damages. On April 17, 2003, we filed a motion under the Federal Rules of Civil Procedure for a more definite statement of Motorola's allegations. Motorola opposed that motion, and, by order dated July 18, 2003, the Court denied our motion. On August 5, 2003, we filed an answer and also counterclaimed against Motorola. In the counterclaim, we asserted that Motorola infringed six of our patents relating to semiconductor technology. Motorola responded to our counterclaims on September 10, 2003. In 2004, a subsidiary of Motorola, Freescale Semiconductor, Inc., joined the case as a plaintiff and counterclaim-defendant. The parties have reached a settlement of the case, and on September 1, 2004 all claims and counterclaims were dismissed with prejudice. This settlement did not have a material impact on our financial position or results of operations.

On November 6, 2003, Enron Corporation commenced a proceeding in the United States Bankruptcy Court for the Southern District of New York. On December 1, 2003, Enron filed an amended complaint to add us as a defendant in such proceeding. The amended complaint alleges that transfers made by Enron in satisfaction of obligations it had under commercial paper are recoverable as preferential transfers and fraudulent transfers and are subject to avoidance under the United States Bankruptcy Code. It is alleged that payments made in premature satisfaction of obligations under commercial paper totaling approximately \$20 million are recoverable from J.P. Morgan Securities, Inc., Fleet Capital Markets, Fleet National Bank and/or us. We sold \$20 million of Enron commercial paper to Fleet and did not enter into any direct transactions with Enron. We filed a motion to dismiss the adversary proceeding. The motion to dismiss was argued at a hearing on September 21, 2004. The court took the matter under advisement and we are awaiting a decision. We intend to vigorously defend against these claims. Although we believe we have meritorious defenses to the asserted claims, we are unable at this time to predict the outcome of this proceeding.

We are currently under audit by the United States Internal Revenue Service for fiscal years 2001, 2002 and 2003. The audit has not been completed and the IRS has not issued a report on its audit.

We have received notice that the SEC is conducting an inquiry into our granting of stock options over the last five years to officers and directors. We believe that other companies have received similar inquiries. Each year, we grant stock options to a broad base of employees (including officers and directors) and in some years those grants have occurred shortly before our issuance of favorable annual financial results. The SEC has requested information regarding our stock option grants and we intend to cooperate with the SEC. We are unable to predict the outcome of the inquiry.

From time to time as a normal incidence of the nature of our business, various claims, charges and litigation are asserted or commenced against us arising from, or related to, contractual matters, patents, trademarks, personal injury, environmental matters, product liability, insurance coverage and personnel and employment disputes. As to such claims and litigation, including those items discussed above, we can give no assurance that we will prevail. However, we do not believe that these matters will have a material adverse effect on our consolidated financial position, although an adverse outcome of any of these matters could have a material adverse effect on our consolidated results of operations or cash flows in the quarter or annual period in which one or more of these matters are resolved.

**ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS**

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

**EXECUTIVE OFFICERS OF THE COMPANY**

The following table sets forth (i) the name, age and position of each of our executive officers as of October 30, 2004, and (ii) the business experience of each person named in the table during at least the past five years. There is no family relationship among any of the named executive officers.

<u>Executive Officer</u>	<u>Age</u>	<u>Position(s)</u>	<u>Business Experience</u>
Ray Stata	70	Chairman of the Board	Chairman of the Board since 1973; Chief Executive Officer from 1973 to November 1996; President from 1971 to November 1991.
Jerald G. Fishman	59	President, Chief Executive Officer and Director	Chief Executive Officer since November 1996; President and Director since November 1991; Executive Vice President from 1988 to November 1991; Group Vice President — Components from 1982 to 1988.
Samuel H. Fuller	58	Vice President, Research and Development	Vice President, Research and Development since March 1998; Vice President of Research and Chief Scientist of Digital Equipment Corp. from 1983 to 1998.
William N. Giudice	50	Vice President and General Manager, Micromachined Products Division	Vice President and General Manager, Micromachined Products Division since January 2003; President, CEO and Chairman of the Board of Telephotronics from March 2001 to 2003; Vice President and General Manager of Conexant Systems from March 2000 to March 2001; Co-founder, CEO, President, and Chairman of the Board of Maker Communications from 1994 to March 2000.
Tracy S. Keogh	43	Vice President, Human Resources	Vice President, Human Resources since April 2003; Senior Vice President responsible for people-related strategy and operations for Sapient from January 1999 to April 2003; Director of Global Recruiting for Arthur D. Little from 1997 to January 1999.

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<u>Executive Officer</u>	<u>Age</u>	<u>Position(s)</u>	<u>Business Experience</u>
Robert R. Marshall	50	Vice President, Worldwide Manufacturing	Vice President, Worldwide Manufacturing since February 1994; Vice President, Manufacturing, Limerick Site, Analog Devices, B.V. — Limerick, Ireland from November 1991 to February 1994; Plant Manager, Analog Devices, B.V. — Limerick, Ireland from January 1991 to November 1991.
William A. Martin	45	Treasurer	Treasurer since March 1993; Assistant Treasurer from October 1991 to March 1993; Manager of Treasury Finance from March 1987 to October 1991; Manager of International Treasury from October 1985 to March 1987.
Robert McAdam	54	Vice President and General Manager, Analog Semiconductor Components	Vice President and General Manager, Analog Semiconductor Components since February 1994; Vice President and General Manager, Analog Devices, B.V. — Limerick, Ireland from January 1991 to February 1994; Product Line Manager, Analog Devices, B.V. — Limerick, Ireland from October 1988 to January 1991.
Brian P. McAloon	54	Vice President, DSP and Systems Products Group	Vice President, DSP and Systems Products Group since March 2001; Vice President, Sales from May 1992 to March 2001; Vice President, Sales and Marketing — Europe and Southeast Asia from 1990 to 1992; General Manager, Analog Devices, B.V. — Limerick, Ireland from 1987 to 1990.
Joseph E. McDonough	57	Vice President, Finance and Chief Financial Officer	Vice President, Finance and Chief Financial Officer since November 1991; Vice President since 1988 and Treasurer from 1985 to March 1993; Director of Taxes from 1983 to 1985.
Vincent Roche	44	Vice President, Worldwide Sales	Vice President, Worldwide Sales since March 2001; Vice President and General Manager, Silicon Valley Business Units and Computer & Networking from 1999 to March 2001; Product Line Director from 1995 to 1999; Product Marketing Manager from 1988 to 1995.

**PART II**

**ITEM 5. MARKET FOR REGISTRANT’S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASE OF EQUITY SECURITIES**

Our common stock is listed on the New York Stock Exchange under the symbol ADI. The tables below set forth the high and low sales prices per share of our common stock on the New York Stock Exchange and the dividends declared for each quarterly period within our two most recent fiscal years.

Period	Fiscal 2004		Fiscal 2003	
	High	Low	High	Low
First Quarter	\$50.99	\$43.10	\$32.60	\$22.58
Second Quarter	\$52.37	\$42.52	\$40.40	\$22.82
Third Quarter	\$50.17	\$37.25	\$40.33	\$32.11
Fourth Quarter	\$41.45	\$31.36	\$45.54	\$35.20

**Dividends Declared Per Outstanding Share of Common Stock**

Period	Fiscal 2004	Fiscal 2003
First Quarter	\$0.04	—
Second Quarter	\$0.04	—
Third Quarter	\$0.06	—
Fourth Quarter	\$0.06	—

During the first quarter of fiscal 2005, on November 22, 2004, our Board of Directors declared a cash dividend of \$0.06 per outstanding share of common stock. The dividend will be paid on December 22, 2004 to all stockholders of record at the close of business on December 3, 2004.

**Issuer Purchase of Equity Securities**

Period	Total Number of Shares Purchased(a)	Average Price Paid Per Share(b)	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs(c)	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs
August 1, 2004 through August 28, 2004	2,397,000	\$35.75	2,397,000	\$414,309,218
August 29, 2004 through September 25, 2004	1,466,900	\$35.03	1,466,900	\$362,917,348
September 26, 2004 through October 30, 2004	4,835	\$39.96	—	\$362,917,348
<b>Total</b>	<b>3,868,735</b>	<b>\$35.48</b>	<b>3,863,900</b>	<b>\$362,917,348</b>

- (a) The total number of shares purchased from September 26, 2004 through October 30, 2004 represents 4,835 shares (valued at the closing price per share of Analog Devices common stock as reported on the NYSE on the date immediately preceding the date of each such exercise) that were surrendered to Analog in payment of the exercise price of options to purchase shares of our common stock granted under our 1998 Stock Option Plan.
- (b) The average price paid per share of stock repurchased under the stock repurchase program includes the commissions paid to the brokers.
- (c) Repurchased pursuant to the stock repurchase program publicly announced on August 12, 2004 under which our Board of Directors authorized the repurchase of up to an aggregate of \$500 million of our

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common stock. Under the repurchase program, we may repurchase outstanding shares of our common stock from time to time in the open market and through privately negotiated transactions. Unless terminated earlier by resolution of our Board of Directors, the repurchase program will expire when we have repurchased all shares authorized for repurchase under the repurchase program. Our previous repurchase plan publicly announced on August 15, 2002, was terminated by resolution of our Board of Directors on August 11, 2004.

The number of holders of record of our common stock at October 29, 2004 was 4,426. This number does not include stockholders for whom shares are held in a "nominee" or "street" name. On October 29, 2004, the last reported sales price of our common stock on the New York Stock Exchange was \$40.26 per share.

On December 15, 2003, we issued and delivered an aggregate of 10,000 shares of our common stock to four individuals in partial fulfillment of the payment by us of consideration to the four former stockholders of Integrated Micro Instruments, Inc., which we acquired on December 15, 2000. We issued and delivered these shares in reliance upon an exemption from registration under Section 4(2) of the Securities Act of 1933.

On February 5, 2004, we issued and delivered an aggregate of 27,136 shares of our common stock to three individuals in partial fulfillment of the payment by us of consideration to the three former stockholders of White Mountain DSP, Inc., which we acquired on February 5, 1999. We issued and delivered these shares in reliance upon an exemption from registration under Section 4(2) of the Securities Act of 1933.

## **ITEM 6. SELECTED FINANCIAL DATA**

(thousands except per share amounts)	2004	2003	2002	2001	2000
<b>Statement of Operations data:</b>					
Net sales	\$2,633,800	\$2,047,268	\$1,707,508	\$2,276,915	\$2,577,547
Net income*	570,738	298,281	105,299	356,377	607,132
Net income per share*:					
Basic	1.52	0.82	0.29	1.00	1.71
Diluted	1.45	0.78	0.28	0.93	1.59
Dividend declared per share	0.20	—	—	—	—
<b>Balance Sheet data:</b>					
Total assets	\$4,720,083	\$4,092,877	\$4,980,191	\$4,884,863	\$4,411,337
Long-term debt and non-current obligations under capital leases	—	—	1,274,487	1,206,038	1,212,960

\* Acquisition-related goodwill is no longer amortized effective November 3, 2002, in accordance with FAS 142.

**ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (all tabular amounts in thousands except per share amounts and as noted)****Results of Operations***Overview*

	Fiscal Year		
	2004	2003	2002
Net Sales	\$2,633,800	\$2,047,268	\$1,707,508
Gross Margin %	59%	54.9%	53%
Diluted EPS	\$ 1.45	\$ 0.78	\$ 0.28
Net Income	\$ 570,738	\$ 298,281	\$ 105,299
Net Income as a % of Sales	21.7%	14.6%	6.2%

Fiscal years 2004 and 2003 were successful years for Analog Devices. During these two fiscal years we experienced a continuation of what we believe is a broad-based cyclical improvement in the semiconductor industry that began for us in the second quarter of fiscal 2002. We began fiscal year 2004 with a plan to increase net sales by approximately 25% and for gross margins to continue to improve during the year. Net sales increased by 29% to \$2,634 million in fiscal 2004 up from the \$2,047 million recorded in the prior year. Our gross margins improved by 410 basis points to 59% in fiscal 2004, up from 54.9% recorded in fiscal 2003. For fiscal 2004 we had anticipated that operating expenses would grow at a rate significantly less than that of our revenue growth rate. Operating expenses for the fiscal year increased 14% year-to-year, or slightly less than half the growth rate of net sales for the year. Diluted earnings per share improved to \$1.45 per share in fiscal 2004, up 86% from the \$0.78 per share recorded in fiscal 2003. Net cash provided by operations was \$778 million, or 29.5% of net sales, in fiscal 2004.

*Sales*

Net sales recorded in fiscal 2004 were \$2,634 million, an increase of 29% over net sales of \$2,047 million recorded in fiscal 2003. The \$587 million increase in net sales in fiscal 2004 was a result of what we believe was a broad-based increase in demand for our products used in every end market we serve. Increased demand for our products used in industrial products and communications products accounted for approximately 77% of this year-to-year increase and increased demand for our products used in consumer and computer end markets accounted for the remaining increase in net sales. Increased demand for our products used in wireless handsets and infrastructure was the main reason for our increased sales in the communications end market.

For fiscal 2003, net sales of \$2,047 million increased by 20% from the \$1,708 million recorded in fiscal 2002. During fiscal 2003, demand was very strong for our products used in consumer products, while demand was relatively flat for our products used in applications that depend on industrial, enterprise or carrier capital spending. As a result, demand for analog and DSP products used in wireless handsets, desktop and laptop computers, consumer products such as digital cameras and flat panel displays increased in fiscal 2003 above the levels experienced in fiscal 2002.

In fiscal 2004, analog product sales increased 31% from the levels recorded in fiscal 2003. In fiscal 2003, analog product sales increased 16% from the levels recorded in fiscal 2002. In fiscal 2004, DSP product sales increased by 21% from the levels recorded in fiscal 2003 after increasing 35% from the levels recorded in fiscal 2002. Over the last three fiscal years, net sales from analog products were in the range of 78% to 80% of net sales and sales of DSP products represented the remaining 20% to 22% of net sales.

Sales of new products, which we define as sales of products introduced in the prior six quarters, were 21% of net sales in fiscal 2004 as compared to 19% in fiscal 2003 and 21% in fiscal 2002. The year-over-year dollar increase in sales of new products was 45% in fiscal 2004 and was attributable to increased demand and design wins for some of our products used in communications, industrial, consumer and computer applications. This increase followed a year-to-year dollar increase in sales of new products of 8% in fiscal 2003 and a year-to-year

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decline of sales of new products of 17% in fiscal 2002 as we went through a down-turn in the semiconductor industry.

The percentage of sales by geographic region, based upon point of sale, for the last three years is as follows:

Region	Fiscal Year		
	2004	2003	2002
North America	25%	26%	30%
Europe	20%	21%	22%
Japan	19%	18%	17%
China	14%	11%	8%
Rest of Asia	22%	24%	23%

The decrease in North American and European sales and the increase in sales in Asia and Japan as a percentage of total net sales for fiscal 2004 and fiscal 2003 were attributable to the ongoing transfer of customer manufacturing activity to Asia and increased demand for our products in Japan and in Asia, particularly in China. The increase in sales in dollar terms in Japan was 36% and 29%, respectively, for fiscal 2004 and fiscal 2003, and was the result of a general recovery in demand for our products in Japan and in particular an increase in demand for our products used in the manufacture of automatic test equipment and consumer products. Sales in dollars increased in fiscal 2004 and fiscal 2003 by 73% and 75%, respectively, in China and by 16% and 27%, respectively, in the Rest of Asia as a result of increased demand for products used in communications, industrial, consumer, and computer products. In fiscal 2004, sales in dollar terms increased by 20% in Europe and 24% in North America because of the broad-based improvement in demand for our products used in industrial, communications, consumer and computer products. Sales in dollars in fiscal 2003 increased by 12% as compared to fiscal 2002 in Europe as a result of the steady improvement in demand for our products during the year. The slight increase in fiscal 2003 North America sales in dollars as compared to fiscal 2002 was attributable to increased demand for our products that was largely offset by the transfer of customer manufacturing activity to locations in Asia.

### *Gross Margin*

Gross margin improved in fiscal 2004 to \$1,554 million, or 59% of net sales, up 410 basis points from the gross margin of \$1,124 million, or 54.9% of net sales, recorded in fiscal 2003. In fiscal 2002, gross margins were \$905 million, or 53% of net sales. The improvement in gross margins for both fiscal 2003 and fiscal 2004 was primarily the result of spreading fixed manufacturing costs over an increasing sales level and, to a lesser extent, the impact of restructuring actions taken in recent years as well as continued tight cost control at our manufacturing operations.

### *Research and Development*

	Fiscal Year		
	2004	2003	2002
Research and Development (R&D) Expenses	\$511,732	\$450,232	\$423,869
R&D Expenses as a % of Net Sales	19.4%	22.0%	24.8%

R&D expenses for fiscal 2004 increased by \$62 million, or 14%, to \$512 million from the \$450 million recorded in fiscal 2003. R&D expenses increased \$26 million, or 6%, to \$450 million in fiscal 2003 from the \$424 million recorded in fiscal 2002. R&D expenses declined as a percentage of net sales to 19.4% in fiscal 2004 from 22% in fiscal 2003 and from 24.8% in fiscal 2002 as a result of the 29% and 20% year-to-year increase in revenue for fiscal 2004 and fiscal 2003, respectively. R&D expenses increased by 14% year-to-year in fiscal 2004 primarily as a result of additional salary and benefit costs associated with a 5% increase in engineering headcount during the year. These expenses also increased as a result of annual salary increases and increased bonus payments and, to a lesser extent, an increase in other engineering expenses reflecting the increased R&D activity during the year. For fiscal 2003, the year-to-year increase in R&D expenses was

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limited to 6% as a result of acquisition-related expenses declining year-to-year by \$5.6 million and the company limiting discretionary expenses including salary increases for higher paid employees and curtailing hiring to strategically important new hires and college hires. The reduction in acquisition-related expenses to \$8.2 million in fiscal 2003 from \$13.8 million in fiscal 2002 arose primarily because fiscal 2002 costs included additional expenses related to fixed-value contingent compensation and the achievement of final performance-based criteria that did not recur in fiscal 2003.

R&D expense as a percentage of net sales will fluctuate from year-to-year depending on the amount of net sales and the success of new product development efforts, which we view as critical to our future growth. At any point in time we have hundreds of R&D projects underway, and we believe that none of these projects is material on an individual basis. We expect to continue the development of innovative technologies and processes for new products and we believe that a continued commitment to R&D is essential in order to maintain product leadership with our existing products and to provide innovative new product offerings, and therefore, we expect to continue to make significant R&D investments in the future.

### *Selling, Marketing, General and Administrative (SMG&A)*

	2004	Fiscal Year 2003	2002
SMG&A Expenses	\$340,036	\$288,009	\$257,054
SMG&A Expenses as a % of Net Sales	12.9%	14.0%	15.1%

SMG&A expenses increased in fiscal 2004 by \$52 million, or 18%, from the levels recorded in fiscal 2003. In fiscal 2003, the increase in SMG&A expenses was \$31 million, or 12%, from the \$257 million recorded in fiscal 2002. As a percentage of net sales, SMG&A declined over the past two fiscal years primarily due to the increases in net sales for each of those years. For fiscal 2004, the increase in SMG&A expenses over the levels recorded in fiscal 2003 was primarily a result of increased salary and employee benefit costs and bonus payments to employees, increased commission payments as a result of the 29% year-to-year increase in net sales and, to a lesser extent, increased legal costs associated with patent and intellectual property activity and other expense increases associated with selling and marketing activities. The increase in SMG&A expenses in fiscal 2003 over fiscal 2002 was primarily the result of increased commission amounts paid due to the 20% year-to-year increase in net sales, the decision to add additional field application engineers to assist existing and potential customers to design products that incorporate ADI technology to address their specific requirements, as well as initiatives to publicize new products. These increases were offset by limitations on discretionary expenses including salary increases for higher paid employees.

### *Amortization of Intangibles*

Amortization of intangibles was \$3 million for fiscal 2004 and fiscal 2003 compared with \$57 million for fiscal 2002. The decrease in amortization expense in fiscal 2003 from the levels recorded in fiscal 2002 was the result of our adoption of Statement of Financial Accounting Standards No. 142, or FAS 142, *Goodwill and Other Intangible Assets*, effective November 3, 2002, which results in goodwill no longer being amortized.

### *Special Charges*

During fiscal 2003, we recorded special charges of \$9.5 million, and during fiscal 2002 we recorded special charges totaling \$48.5 million. Special charges recorded in fiscal years 2003 and 2002 are more fully described under the heading "Special Charges" below. There were no special charges recorded in fiscal 2004.

### *Operating Income*

Our operating income was \$699 million, or 26.6% of net sales, in fiscal 2004, compared to \$374 million, or 18.3% of net sales, in fiscal 2003. The improvement in operating income as a percentage of net sales in fiscal 2004 over the levels recorded in fiscal 2003 was a result of the 410 basis point year-to-year improvement in gross margin combined with operating expense increases that were limited to 14%, which was less than half

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the 29% increase in net sales for the year. Operating income was \$118 million, or 6.9% of net sales, in fiscal 2002.

### *Nonoperating Income and Expense*

Interest expense was \$0.2 million in fiscal 2004, \$32 million in fiscal 2003 and \$44 million in fiscal 2002. Fiscal 2003 included interest expense for only 11 months and fiscal 2002 included interest expense for 12 months as we redeemed our \$1,200 million 4.75% Convertible Subordinated Notes, or notes, on October 1, 2003. In addition, an interest rate swap agreement we entered into in January 2002 had the effect of swapping the 4.75% fixed rate of our notes into a LIBOR-based floating rate that was 1.61% as of November 6, 2002 and was 1.14% at the time we redeemed our notes on October 1, 2003. These two items resulted in the year-to-year decline in interest expense from fiscal 2002 to fiscal 2003.

Interest income was \$36 million in fiscal 2004 compared to \$41 million in fiscal 2003 and \$65 million in fiscal 2002. The year-to-year decrease in interest income in fiscal 2004 compared to fiscal 2003 was attributable to lower average invested cash balances in fiscal 2004 due to the note redemption in 2003. This was partially mitigated by our decision in fiscal 2004 to increase our holdings of longer term, high-credit quality bonds, which offer higher yields than shorter-term investments, and higher interest rates later in fiscal 2004 as a result of actions taken by the Federal Reserve Board. The year-to-year decrease in interest income in fiscal 2003 as compared to fiscal 2002 was attributable to less income earned on our invested cash balances due to the decline in interest rates during fiscal 2003 as a result of actions taken by the Federal Reserve Board and our decision to increase our holdings of higher credit quality yet lower interest-bearing investments.

### *Provision for Income Taxes*

Our effective income tax rate was 22% for fiscal 2004 and fiscal 2003 as compared to 25% for fiscal 2002. The decrease in the effective rate from fiscal 2002 to fiscal 2003 was primarily the result of the discontinuance of non-deductible goodwill amortization in the first quarter of fiscal 2003 as a result of our adoption of FAS 142. Goodwill was treated as a permanent difference in the fiscal 2002 tax provision, which had the effect of increasing our effective income tax rate.

### *Net Income*

	Fiscal Year		
	2004	2003	2002
Net Income	\$570,738	\$298,281	\$105,299
Net Income as a % of Net Sales	21.7%	14.6%	6.2%
Diluted EPS	\$ 1.45	\$ 0.78	\$ 0.28

Fiscal 2004 net income was \$571 million, or 21.7% of net sales, and diluted earnings per share was \$1.45 compared to net income in fiscal 2003 of \$298 million, or 14.6% of net sales, and diluted earnings per share of \$0.78. The fiscal 2004 increase in net income of \$272 million from the level recorded in fiscal 2003 was primarily due to the year-to-year increase in net sales and, to a lesser extent, the improvement in operating income as a percentage of net sales from 18.3% recorded in fiscal 2003 to 26.6% recorded in fiscal 2004. For fiscal 2002 net income was \$105 million, or 6.2% of net sales. The improvement in net income in fiscal 2003 compared to fiscal 2002 was the result of an increase in net sales, the cessation of goodwill amortization and reduced expenses related to special charges.

The impact of inflation on our business during the past three fiscal years has not been significant.

### *Related Party Transactions*

One of our directors, who has been a director since 1988, became a director of Taiwan Semiconductor Manufacturing Company, or TSMC, in fiscal 2002. We purchased approximately \$337 million, \$232 million and \$206 million of products from TSMC in fiscal years 2004, 2003 and 2002, respectively. We believe that the terms and prices for the purchases of these products are at terms no less favorable than those that could be

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obtained from unaffiliated parties. Approximately \$15 million and \$14 million was payable to TSMC as of October 30, 2004 and November 1, 2003, respectively. We anticipate that we will make significant purchases from TSMC in fiscal year 2005.

### Liquidity and Capital Resources

	Fiscal Year		
	2004	2003	2002
Net Cash Provided by Operations	\$778,045	\$432,963	\$226,126
Net Cash Provided by Operations as a % of Net Sales	29.5%	21.1%	13.2%

During fiscal 2004, net cash provided by operations increased by \$345 million from the amount recorded in the prior year primarily due to the year-to-year increase in net income of \$272 million. During fiscal 2004 we received \$124 million in proceeds from our various employee stock programs. These cash inflows were partially offset by the repurchase of approximately \$137 million of our common stock, additions to property, plant and equipment of \$146 million and our payment of cash dividends of \$75 million in fiscal 2004. Cash, cash equivalents and short-term investments increased by \$568 million during fiscal 2004 to \$2,685 million at October 30, 2004.

During fiscal 2003, net cash from operations increased by \$207 million from the amount recorded in fiscal 2002, primarily due to a year-to-year increase in net income of \$193 million. In fiscal 2003, we received \$71 million from our employee stock plans. Cash inflows in fiscal 2003 were offset by additions to property, plant and equipment of \$68 million and by a net payment of \$1,198 million related to the redemption of all of our outstanding notes together with the associated redemption premium and the termination of the related interest rate swap and loan agreement. Cash, cash equivalents and short-term investments decreased by \$781 million during fiscal 2003 to \$2,117 million at November 1, 2003 from \$2,898 million at November 2, 2002, primarily as a result of these activities.

Accounts receivable of \$329 million at the end of fiscal 2004 increased by \$34 million, or 12%, from \$295 million at the end of fiscal 2003. This increase resulted principally from a \$75 million increase in net sales during the fourth quarter of fiscal 2004 as compared to the fourth quarter of fiscal 2003. Accounts receivable of \$295 million at the end of fiscal 2003 increased \$67 million, or 29%, from \$228 million at the end of fiscal 2002. This increase resulted principally from a \$102 million increase in net sales during the fourth quarter of fiscal 2003 as compared to the fourth quarter of fiscal 2002. Days sales outstanding increased from 46 days at the end of the fourth quarter of fiscal 2002 to 48 days at the end of the fourth quarter of fiscal 2003 and fiscal 2004. The year-to-year increase in days sales outstanding at the end of fiscal 2003 was due to a higher level of sales in the latter part of the fourth quarter of fiscal 2003 as compared to the fourth quarter of fiscal 2002.

Inventories increased by \$58 million, or 20%, from the end of fiscal 2003 to \$346 million at the end of fiscal 2004. Days cost of sales in inventory increased by 17 days to 123 days as of the end of the fourth quarter of fiscal 2004. The increase in inventory in dollars was the result of an increase in internal production and purchases of fabricated wafers from external foundries in response to the increases in demand for our products, particularly in the first half of fiscal 2004, combined with the impact of a decline in net sales in the fourth quarter of fiscal 2004 compared to the levels recorded in the prior quarter. Net sales in the fourth quarter of 2004 declined 12% from the levels recorded in the prior quarter because incoming order rates from our customers slowed as a result of what we believe is an inventory correction at our customers. Inventories declined by \$19 million, or 6%, from the end of fiscal 2002 to \$288 million at the end of fiscal 2003. Days cost of sales in inventory declined by 29 days to 106 days as of the end of the fourth quarter of fiscal 2003 as compared to the fourth quarter of fiscal 2002. The decrease in inventory in dollars was attributable to tight control of inventory levels as well as increasing demand for our products as the fiscal year 2003 progressed.

Net additions to property, plant and equipment were \$146 million in fiscal 2004, \$68 million in fiscal 2003 and \$57 million in fiscal 2002. The increase in capital expenditures in fiscal 2004 compared to the prior year was principally the result of additions to manufacturing capacity at our facilities in response to the increased

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demand levels for our products we experienced in fiscal 2003 and 2004. Fiscal 2005 capital expenditures are expected to be approximately \$150 million.

In the fourth quarter of fiscal 2003, we redeemed all of our outstanding notes for cash. The redemption price was 101.90% of the principal amount of the notes, or \$1,223 million. A net pre-tax loss of \$0.2 million was recognized in other expense as a result of the redemption, comprised of a \$10.8 million gain on the redemption of the notes that was offset by a write-off of \$11 million of deferred financing costs. The gain on the redemption of the notes was due to the carrying value of the notes being greater than the redemption value as a result of the mark-to-market of the interest rate component of the notes to fair value. As a result, apart from operating lease obligations, we had no debt outstanding at the end of fiscal year 2003 or fiscal year 2004.

During fiscal 2004, our Board of Directors declared cash dividends totaling \$0.20 per outstanding share of common stock, which were paid during the fiscal year. These dividend payments amounted in total to approximately \$75 million. The payment of future dividends, if any, will be based on our quarterly financial performance.

On August 11, 2004, our Board of Directors authorized the repurchase of up to an aggregate of \$500 million of our common stock. We may repurchase outstanding shares of our common stock from time to time on the open market or in privately negotiated transactions. Management will determine the timing and amount of share repurchases. During fiscal 2004, we repurchased approximately \$137 million of our common stock under this plan. Our previous repurchase program announced on August 15, 2002 was terminated by resolution of our Board of Directors on August 11, 2004.

The table below summarizes our significant contractual obligations as of October 30, 2004:

(thousands)	Total	Less than 1 Year	Payment due by period		More than 5 Years
			1-3 Years	4-5 Years	
Contractual obligations:					
Operating leases <sup>a</sup>	\$ 42,729	\$16,177	\$16,274	\$6,516	\$ 3,762
Software licenses <sup>b</sup>	35,801	9,375	26,426	—	—
Deferred compensation plan <sup>c</sup>	322,304	5,388	3,320	934	312,662
Pension funding <sup>d</sup>	5,094	5,094	—	—	—
Total	\$405,928	\$36,034	\$46,020	\$7,450	\$316,424

- (a) Certain of our operating lease obligations include escalation clauses. These escalating payment requirements are reflected in the table.
- (b) Software licenses relate to contractual obligations we have to license electronic design automation software from third parties.
- (c) These payments relate to obligations under the Analog Devices, Inc. Deferred Compensation Plan, or the Deferred Compensation Plan. The Deferred Compensation Plan allows certain members of management and other highly-compensated employees and non-employee directors to defer receipt of all or any portion of their compensation and gains on stock options and restricted stock granted before July 23, 1997. The payment obligations reflected in the table include the planned distributions from the Deferred Compensation Plan for participants who have terminated employment prior to October 30, 2004 and elected to have their plan balance distributed in installments. The amount in the "More than 5 Years" column of the table represents the remaining total balance under the Deferred Compensation Plan to be paid to participants who have not terminated employment or elected to withdraw their balances prior to October 30, 2004. Since we cannot reasonably estimate the timing of withdrawals for participants who have not yet terminated employment or elected to withdraw their balances, we have included the future obligation to these participants in the "More than 5 Years" column of the table.

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- (d) Our funding policy for our foreign defined benefit plans is consistent with the local requirements of each country. The payment obligations in the table are estimates of our expected contributions to these plans for fiscal year 2005. The actual future payments may differ from the amounts presented in the table and reasonable estimates of payments beyond one year are not practical because of potential future changes in variables such as plan asset performance, interest rates and the rate of increase in compensation levels.

Purchase orders for the purchase of raw materials and other goods and services are not included in the table above. We are not able to determine the total amount of these purchase orders that represent contractual obligations, as purchase orders may represent authorizations to purchase rather than binding agreements. In addition, our purchase orders generally allow for cancellation without significant penalties. We do not have significant agreements for the purchase of raw materials or other goods specifying minimum quantities or set prices that exceed our expected short term requirements.

The expected timing of payment and amounts of the obligations discussed above are estimated based on current information.

At October 30, 2004, our principal source of liquidity was \$2,685 million of cash, cash equivalents and short-term investments. We believe that our existing sources of liquidity and cash expected to be generated from future operations, together with anticipated available long-term financing, will be sufficient to fund operations, capital expenditures and research and development efforts for at least the next twelve months and thereafter for the foreseeable future.

## **Outlook**

During fiscal years 2003 and 2004, we experienced the continuation of what we believe is a broad-based cyclical improvement in the semiconductor industry that started for us in the second quarter of fiscal 2002. However, during the third quarter of fiscal 2004, incoming order rates from our customers slowed and order cancellations increased. We believe this is the result of an inventory correction at our customers. The level of incoming order rates remained low through the end of the fourth quarter of fiscal 2004. As a result, net sales in the fourth quarter of fiscal 2004 declined 12% from the levels recorded in the prior quarter. Net sales declined in all geographic regions but especially in China and Japan where the effects of the inventory correction and the economic constraints imposed by the Chinese government impacted demand for our products used in wireless handsets, wireless infrastructure, semiconductor capital equipment, in particular automatic test equipment, and to a lesser extent consumer and computer products.

We are entering fiscal 2005 with a cautious outlook particularly for the first fiscal quarter of the year. Much of the order rate decline we have experienced appears to be related to inventory adjustments and we believe we have already absorbed significant inventory reductions at our customers. There continues to be much uncertainty about interest rate levels and higher energy prices and their potential impact on consumer spending and, as a result, our customers continue to be cautious. Accordingly, we are entering fiscal 2005 with low levels of backlog, which limits our visibility and makes it very difficult to predict revenue levels for fiscal 2005.

Against this background, we are planning for revenue in the first quarter of fiscal 2005 to be in the range of \$575 million to \$600 million and we expect gross margins to remain at 58% to 59% and operating expenses to decline sequentially by between 3% and 4%. Based on these assumptions we expect diluted earnings per share to be in the range of \$0.28 to \$0.31 for the first quarter of fiscal 2005. While our current lack of visibility causes us to be cautious about fiscal 2005, we are planning for demand for our products to recover in the second quarter of fiscal 2005 and throughout the fiscal year and for our financial results to reflect this improvement in line with the expected recovery in demand. We currently plan to make capital expenditures of approximately \$150 million in fiscal 2005. Depreciation expense is expected to increase to approximately \$160 million in fiscal 2005 from \$150 million in fiscal 2004. We anticipate that our effective tax rate will remain relatively flat year-to-year at approximately 22%.

## Special Charges

### *Fiscal 2003 Special Charges*

During the third quarter of fiscal 2003, we recorded a special charge of \$0.3 million. The charge included a \$2.0 million write-down of equipment to fair value due to a decision to outsource the assembly of products in plastic packages, which had been done internally at our facility in the Philippines. This amount was the net book value of the assets used in plastic assembly, net of proceeds received from the sale in the third quarter of a portion of the assets. We also decided to abandon efforts to develop a particular expertise in optical communications that resulted in the write-down of \$2.7 million of equipment to its fair value. During the quarter ended August 2, 2003, we determined that costs remaining to be paid for certain restructuring charges would be less than the amount originally recorded. Accordingly, we recorded a change in estimate reducing the restructuring accruals by \$4.4 million related to prior restructuring charges as more fully described below.

During the fourth quarter of fiscal 2003, we recorded a special charge of \$9.2 million as a result of a decision to close a small manufacturing facility in Belfast, Northern Ireland that supplied foundry substrate services for optical applications. The charge included \$2.0 million of severance and fringe benefit costs for approximately 57 manufacturing employees and 14 engineering and administrative employees all of which had been paid by the end of the second quarter of fiscal 2004. The charge also included \$6 million related to the write-down of property, plant and equipment to its fair value and \$1.2 million related to the write-down of various other assets to their fair values. The closure was completed during the second quarter of fiscal 2004.

### *Fiscal 2002 Special Charges*

During the second quarter of fiscal 2002, we recorded special charges of approximately \$27.2 million. The second quarter charge was comprised of \$25.7 million related to the planned transfer of production from our three older four-inch wafer fabrication facilities to our three six-inch and one eight-inch wafer fabrication facilities, and \$3 million primarily related to the impairment of an investment, which was partially offset by an adjustment of \$1.5 million related to equipment cancellation fees recorded in fiscal year 2001. The investment impairment, which was related to an equity investment in a private company, was due to our decision to abandon the product strategy for which the investment was made. Included in the \$25.7 million special charge were severance and fringe benefit costs of \$15.3 million for 509 manufacturing employees in the United States and Ireland, \$2.3 million related to the write-down of equipment to be abandoned and \$8.1 million of other charges, primarily related to lease termination and cleanup costs. The write-down of equipment was principally due to a decision to discontinue various product development strategies. In the third quarter of fiscal 2003, we reversed \$2.9 million of the accrual primarily due to lower than previously expected severance costs. The lower severance costs were the result of a reduction in the number of separated employees and, to a lesser extent, the average tenure of separated employees differing from estimates. The 509 employees projected to be terminated at the time of the original charge was adjusted down to 439 and, as of May 1, 2004, all of the employees had been terminated. The reduction in the number of employees to be terminated was due to the transfer of employees, which primarily occurred in the third quarter of fiscal 2003, to positions in our six-inch wafer fabrication facilities where we experienced an unexpected increase in demand for our products. All the planned closure and consolidation actions related to our four-inch wafer fabrication facilities are now complete. Since severance costs are paid as income continuance at some locations, these amounts will be expended over time subsequent to the final termination of employment.

During the third quarter of fiscal 2002, we recorded special charges of approximately \$12.8 million. The charges included severance and fringe benefit costs of \$3.7 million related to cost reduction actions taken in several product groups and, to a lesser extent, in manufacturing, \$3.8 million related to the impairment of an investment, \$3.4 million related to the impairment of goodwill associated with the closing of an Austrian design center acquired in fiscal 2001 and \$1.9 million primarily related to the abandonment of equipment and lease cancellation fees. The investment impairment, which was related to an equity investment in a private company, was due to our decision to abandon the product strategy for which the investment was made. The severance and fringe benefit costs were for approximately 70 engineering employees in the United States,

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Europe and Canada, and approximately 30 manufacturing employees in the United States, all of whom had been terminated as of the end of the second quarter of fiscal 2004.

During the fourth quarter of fiscal 2002, we recorded special charges of approximately \$8.4 million. The charges included severance and fringe benefit costs of \$2.5 million related to cost reduction actions taken in the sales group, several product groups and our manufacturing test operations for approximately 65 employees in the United States and Europe, all of whom had been terminated as of November 1, 2003. The charges also included \$2.1 million related to the impairment of investments, \$1.8 million primarily related to the abandonment of equipment and lease cancellation fees and a change in estimate of \$2.0 million for additional estimated cleanup costs originally recorded in the second quarter of fiscal 2002. The investment impairment charges were related to the decline in fair value of a publicly traded equity investment to less than its cost basis that was determined to be other-than-temporary, and to an equity investment in a private company. The private company equity investment was part of a product strategy that we decided to abandon.

### *Fiscal 2001 Special Charges*

During fiscal 2001, we recorded special charges of approximately \$47 million related to cost reduction actions taken in response to the economic climate at that time. The actions consisted of workforce reductions in manufacturing and, to a lesser extent, in selling, marketing and administrative areas as well as a decision to consolidate worldwide manufacturing operations and rationalize production planning and quality activities. The cost reductions included severance and fringe benefit costs of \$29.6 million for approximately 1,200 employees in the United States, Europe, Asia and the Philippines, all of whom had been terminated as of January 31, 2004. The special charges also included \$11.6 million related to the abandonment of equipment resulting from the consolidation of worldwide manufacturing operations and \$5.8 million of other charges primarily related to equipment and lease cancellation fees. Based on the results of negotiations with vendors regarding purchase order cancellation fees, the amount paid was \$1.5 million less than the amount recorded for such charges and, accordingly, we adjusted the provision for purchase order cancellation fees by \$1.5 million in the second quarter of fiscal 2002 to reflect this change in estimate. In the third quarter of fiscal 2003, we determined that the severance costs remaining to be paid would be \$1.3 million less than the amount originally recorded for these charges and also determined that \$0.2 million originally reserved for the termination of two leases would not be required. Therefore, we adjusted the provision for these severance and other costs in the third quarter of fiscal 2003 to reflect this change in estimate.

### **New Accounting Pronouncements**

In January 2003, the Financial Accounting Standards Board, or FASB, issued Financial Accounting Standards Board Interpretation No. 46 (FIN 46), *Consolidation of Variable Interest Entities*, and amended it by issuing FIN 46R in December 2003. FIN 46R requires that if an entity has a controlling financial interest in a variable interest entity, the assets, liabilities and results of activities of the variable interest entity should be included in the consolidated financial statements of the entity. Because we do not have any variable interest entities, the adoption of FIN 46R in the second quarter of fiscal 2004 did not have any effect on our financial position or results of operations.

In December 2003, the FASB issued SFAS No. 132 (Revised 2003), *Employers' Disclosures about Pensions and Other Postretirement Benefits*, which enhanced the required disclosures about pension plans and other postretirement benefit plans, but did not change the measurement or recognition principles for those plans. The statement requires additional interim and annual disclosures about the assets, obligations, cash flows and net periodic benefit cost of defined benefit pension plans and other defined benefit postretirement plans. The required interim disclosures were effective for us in the second quarter of fiscal year 2004, and the required annual disclosures are included in Note 13 to our consolidated financial statements contained in Item 8 of this annual report on Form 10-K.

In December 2003, the SEC issued Staff Accounting Bulletin No. 104, *Revenue Recognition* (SAB 104). SAB 104 updates portions of the interpretive guidance included in Topic 13 of the codification of Staff

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Accounting Bulletins in order to make the interpretive guidance consistent with current authoritative accounting and auditing guidance and SEC rules and regulations. We are following the guidance of SAB 104.

In March 2004, the FASB issued EITF Issue No. 03-1, *The Meaning of Other-Than-Temporary Impairment and Its Application to Certain Investments*, which provides new guidance for assessing impairment losses on debt and equity investments. Additionally, EITF Issue No. 03-1 includes new disclosure requirements for investments that are deemed to be temporarily impaired. In September 2004, the FASB delayed the accounting provisions of EITF Issue No. 03-1; however, the disclosure requirements remain effective and have been adopted for our fiscal year ended October 30, 2004. We will evaluate the effect, if any, of EITF Issue No. 03-1 when final guidance is released.

### **Critical Accounting Policies and Estimates**

Management's discussion and analysis of the financial condition and results of operations is based upon the consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. We base our estimates and judgments on historical experience, knowledge of current conditions and beliefs of what could occur in the future given available information. We consider the following accounting policies to be both those most important to the portrayal of our financial condition and those that require the most subjective judgment. If actual results differ significantly from management's estimates and projections, there could be a material effect on our financial statements. We also have other policies that we consider key accounting policies, such as our policy for revenue recognition, including the deferral of revenue on sales to distributors until the products are sold to the end user; however, the application of these policies does not require us to make estimates or judgments that are difficult or subjective.

#### *Inventory Valuation*

Inventories are valued at the lower of cost (first-in, first-out method) or market. Because of the cyclical nature of the semiconductor industry, changes in inventory levels, obsolescence of technology, and product life cycles, we write down inventories to net realizable value. We employ a variety of methodologies to determine the amount of inventory reserves necessary. While a portion of the reserve is determined via reference to the age of inventory and lower of cost or market calculations, an element of the reserve is subject to significant judgments made by us about future demand for our inventory. If actual demand for our products is less than our estimates, additional reserves for existing inventories may need to be recorded in future periods.

#### *Allowance for Doubtful Accounts*

We maintain allowances for doubtful accounts, when appropriate, for estimated losses resulting from the inability of our customers to make required payments. If the financial condition of our customers were to deteriorate, our actual losses may exceed our estimates, and additional allowances would be required.

#### *Long-Lived Assets*

We review property, plant, and equipment for impairment whenever events or changes in circumstances indicate that the carrying value of assets may not be recoverable. Recoverability of these assets is measured by comparison of their carrying value to future undiscounted cash flows the assets are expected to generate over their remaining economic life. If such assets are considered to be impaired, the impairment to be recognized in earnings equals the amount by which the carrying value of the assets exceeds their fair market value determined by either a quoted market price, if any, or a value determined by utilizing a discounted cash flow technique. Although we have recognized no material impairment adjustments related to our property, plant, and equipment during the past three fiscal years, except those made in conjunction with restructuring actions, deterioration in our business in the future could lead to such impairment adjustments in future periods. Evaluation of impairment of long-lived assets requires estimates of future operating results that are used in the

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preparation of the expected future undiscounted cash flows. Actual future operating results and the remaining economic lives of our long-lived assets could differ from the estimates used in assessing the recoverability of these assets. These differences could result in impairment charges, which could have a material adverse impact on our results of operations.

### *Goodwill*

In June 2001, the FASB issued Statement of Financial Accounting Standards No. 142, or FAS 142, *Goodwill and Other Intangible Assets*. In the first quarter of fiscal 2003, we adopted the new rules of FAS 142 for measuring and assessing goodwill for impairment. As required by FAS 142, all remaining and future acquired goodwill is subject to annual impairment tests, or earlier if indicators of potential impairment exist and suggest that the carrying value of goodwill may not be recoverable from estimated discounted future cash flows. Because we have one reporting segment under FAS 142, we utilize the entity-wide approach to assess goodwill for impairment and compare our market value to our net book value to determine if an impairment exists. These impairment tests may result in impairment losses that could have a material adverse impact on our results of operations.

### *Accounting for Income Taxes*

We account for income taxes in accordance with Statement of Financial Accounting Standards No. 109, or FAS 109, *Accounting for Income Taxes*, which requires that deferred tax assets and liabilities be recognized using enacted tax rates for the effect of temporary differences between the book and tax bases of recorded assets and liabilities. FAS 109 also requires that deferred tax assets be reduced by a valuation allowance if it is more likely than not that some portion or all of the deferred tax asset will not be realized. We evaluate the realizability of our deferred tax assets quarterly. At October 30, 2004, we had gross deferred tax assets of \$144 million primarily resulting from temporary differences between the book and tax bases of assets and liabilities. We have conducted an assessment of the likelihood of realization of those deferred tax assets and concluded that a \$33 million valuation allowance is needed to reserve the amount of the deferred tax assets that may not be realized due to the expiration of state credit carryovers. In reaching our conclusion, we evaluated certain relevant criteria including the existence of deferred tax liabilities that can be used to absorb deferred tax assets, the taxable income in prior carryback years that can be used to absorb net operating losses and taxable income in future years. Our judgments regarding future profitability may change due to future market conditions, changes in U.S. or international tax laws and other factors. These changes, if any, may require material adjustments to these deferred tax assets, resulting in a reduction in net income or an increase in net loss in the period when such determinations are made.

In addition, we have provided for potential liabilities due in various jurisdictions. Judgment is required in determining our worldwide income tax expense provision. In the ordinary course of global business, there are many transactions and calculations where the ultimate tax outcome is uncertain. Some of these uncertainties arise as a consequence of cost reimbursement arrangements among related entities. Although we believe our estimates are reasonable, no assurance can be given that the final tax outcome of these matters will not be different than that which is reflected in our historical income tax provisions and accruals. Such differences could have a material impact on our income tax provision and operating results in the period in which such determination is made.

### *Contingencies*

From time to time, we receive notices that our products or manufacturing processes may be infringing the patent or intellectual property rights of others. We periodically assess each matter to determine if a contingent liability should be recorded in accordance with Statement of Financial Accounting Standards No. 5, or FAS 5, *Accounting for Contingencies*. In making this determination, we may, depending on the nature of the matter, consult with internal and external legal counsel and technical experts. Based on the information we obtain, combined with our judgment regarding all the facts and circumstances of each matter, we determine whether it is probable that a contingent loss may be incurred and whether the amount of such loss can be reasonably estimated. Should a loss be probable and reasonably estimable, we record a contingent loss in accordance with

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FAS 5. In determining the amount of a contingent loss, we consider advice received from experts in the specific matter, current status of legal proceedings, settlement negotiations that may be ongoing, prior case history and other factors. Should the judgments and estimates made by us be incorrect, we may need to record additional contingent losses that could materially adversely impact our results of operations. See Note 11 to our Consolidated Financial Statements contained in Item 8 of this Annual Report on Form 10-K.

### **Forward-Looking Statements**

This Annual Report on Form 10-K contains or incorporates forward-looking statements within the meaning of section 27A of the Securities Act of 1933 and section 21E of the Securities Exchange Act of 1934. These forward-looking statements are based on current expectations, estimates, forecasts and projections about the industry and markets in which we operate and management's beliefs and assumptions. In addition, other written or oral statements that constitute forward-looking statements may be made by or on our behalf. Words such as "expect," "anticipate," "intend," "plan," "believe," "seek," "estimate," variations of such words and similar expressions are intended to identify such forward-looking statements. These statements are not guarantees of future performance and involve certain risks, uncertainties and assumptions that are difficult to predict. We have included important factors in the cautionary statements below under the heading "Factors That May Affect Future Results" that we believe could cause our actual results to differ materially from the forward-looking statements we make. We do not intend to update publicly any forward-looking statements, whether as a result of new information, future events or otherwise.

### **Factors That May Affect Future Results**

*Our future operating results are difficult to predict and may materially fluctuate.*

Our future operating results are difficult to predict and may be materially affected by a number of factors, including the timing of new product announcements or introductions by us or our competitors, competitive pricing pressures, fluctuations in manufacturing yields, adequate availability of wafers and manufacturing capacity, the risk that our backlog could decline significantly, our ability to hire, retain and motivate adequate numbers of engineers and other qualified employees to meet the demands of our customers, changes in product mix, and the effect of adverse changes in economic conditions in the United States and international markets. In addition, the semiconductor market has historically been cyclical and subject to significant economic downturns. Our business is subject to rapid technological changes and there can be no assurance, depending on the mix of future business, that products stocked in inventory will not be rendered obsolete before we ship them. As a result of these and other factors, there can be no assurance that we will not experience material fluctuations in future operating results on a quarterly or annual basis.

*Long-term contracts are not typical for us and reductions, cancelations or delays in orders for our products could adversely affect our operating results.*

In certain markets where end-user demand may be particularly volatile and difficult to predict, some customers place orders that require us to manufacture product and have it available for shipment, even though the customer is unwilling to make a binding commitment to purchase all, or even any, of the product. At any given time, this situation could affect a portion of our backlog. As a result, we are subject to the risk of cancellation of orders leading to a sharp fall-off of sales and backlog. Further, those orders may be for products that meet the customer's unique requirements so that those canceled orders would, in addition, result in an inventory of unsaleable products, resulting in potential inventory write-offs. As a result of lengthy manufacturing cycles for certain of the products subject to these uncertainties, the amount of unsaleable product could be substantial. Reductions, cancelations or delays in orders for our products could adversely affect our operating results.

*Our future success depends upon our ability to develop and market new products and enter new markets.*

Our success significantly depends on our continued ability to develop and market new products. There can be no assurance that we will be able to develop and introduce new products in a timely manner or that new

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products, if developed, will achieve market acceptance. In addition, our growth is dependent on our continued ability to penetrate new markets where we have limited experience and competition is intense. There can be no assurance that the markets we serve will grow in the future, that our existing and new products will meet the requirements of these markets, that our products will achieve customer acceptance in these markets, that competitors will not force prices to an unacceptably low level or take market share from us, or that we can achieve or maintain profits in these markets. Furthermore, a decline in demand in one or several of our end-user markets could have a material adverse effect on the demand for our products and our results of operations. Also, some of our customers in these markets are less established, which could subject us to increased credit risk.

*We may not be able to compete successfully in the semiconductor industry in the future.*

Many other companies offer products that compete with our products. Some have greater financial, manufacturing, technical and marketing resources than we have. Additionally, some formerly independent competitors have been purchased by larger companies. Our competitors also include emerging companies selling specialized products to markets we serve. There can be no assurance that we will be able to compete successfully in the future against existing or new competitors, or that our operating results will not be adversely affected by increased price competition.

*We rely on third-party subcontractors and manufacturers for some industry-standard wafers and assembly/test services, and therefore cannot control their availability or conditions of supply.*

We rely, and plan to continue to rely, on assembly and test subcontractors and on third-party wafer fabricators to supply most of our wafers that can be manufactured using industry-standard submicron processes. This reliance involves several risks, including reduced control over delivery schedules, manufacturing yields and costs. Additionally, we utilize third-party wafer fabricators as sole-source suppliers, primarily Taiwan Semiconductor Manufacturing Company. These suppliers manufacture components in accordance with our proprietary designs and specifications. We have no written supply agreements with these sole-source suppliers and purchase our custom components through individual purchase orders. If these sole-source suppliers are unable or unwilling to manufacture and deliver sufficient quantities of components to us, on the time schedule and of the quality that we require, we may be forced to seek to engage additional or replacement suppliers, which could result in additional expenses and delays in product development or shipment of product to our customers.

*We may not be able to satisfy increasing demand for our products, and increased production may lead to overcapacity and lower prices.*

The cyclical nature of the semiconductor industry has resulted in sustained and short-term periods when demand for our products has increased or decreased rapidly. During these periods of rapid increases in demand, our available capacity may not be sufficient to satisfy the available demand. We, and the semiconductor industry generally, expand production facilities and access to third-party foundries in response to these periods of increased demand. These capacity expansions by us and other semiconductor manufacturers could lead to overcapacity in our target markets which could lead to price erosion that would adversely impact our operating results.

*Our revenue may not increase enough to offset the expense of additional capacity.*

We, and the semiconductor industry generally, expand production facilities and access to third-party foundries in response to periods of increased demand which can cause operating expenses to increase. Should customer demand fail to increase or should the semiconductor industry enter a period of reduced customer demand, our financial position and results of operations could be adversely impacted as a result of underutilization of capacity or asset impairment charges.

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*We may be unable to adequately protect our proprietary rights, which may limit our ability to compete effectively.*

We rely primarily upon know-how, rather than on patents, to develop and maintain our competitive position. There can be no assurance that others will not develop or patent similar technology or reverse engineer our products or that the confidentiality agreements upon which we rely will be adequate to protect our interests. Other companies have obtained patents covering a variety of semiconductor designs and processes, and we might be required to obtain licenses under some of these patents or be precluded from making and selling the infringing products, if such patents are found to be valid. There can be no assurance that we would be able to obtain licenses, if required, upon commercially reasonable terms, or at all. Moreover, the laws of foreign countries in which we design, manufacture and market our products may afford little or no effective protection of our proprietary technology.

*We are involved in frequent litigation regarding intellectual property rights, which could be costly to defend and could require us to redesign products or pay significant royalties.*

There can be no assurance that any patent will issue on pending applications or that any patent issued will provide substantive protection for the technology or product covered by it. We believe that patent and mask set protection is of less significance in our business than experience, innovation and management skill. There also can be no assurance that others will not develop or patent similar technology, or reverse engineer our products, or that our confidentiality agreements with employees, consultants, silicon foundries and other suppliers and vendors will be adequate to protect our interests.

The semiconductor industry is characterized by frequent claims and litigation involving patent and other intellectual property rights, including claims arising under our contractual indemnification of our customers. We have received from time to time, and may receive in the future, claims from third parties asserting that our products or processes infringe their patents or other intellectual property rights. In the event a third party makes a valid intellectual property claim against us and a license is not available to us on commercially reasonable terms, or at all, we could be forced either to redesign or to stop production of products incorporating that intellectual property, and our operating results could be materially and adversely affected. Litigation may be necessary to enforce our patents or other of our intellectual property rights or to defend us against claims of infringement, and this litigation could be costly and divert the attention of our key personnel. See Note 11 in the Notes to our Consolidated Financial Statements contained in Item 8 of this Annual Report on Form 10-K for information concerning pending litigation that involves us. An adverse outcome in this or other litigation could have a material adverse effect on our consolidated financial position or on our consolidated results of operations or cash flows in the period in which the litigation is resolved.

*If we do not retain our key personnel, our ability to execute our business strategy will be limited.*

Our success depends to a significant extent upon the continued service of our executive officers and key management and technical personnel, particularly our experienced engineers, and on our ability to continue to attract, retain, and motivate qualified personnel. The competition for these employees is intense. The loss of the services of one or more of our key personnel could have a material adverse effect on our operating results. In addition, there could be a material adverse effect on us should the turnover rates for engineers and other key personnel increase significantly or if we are unable to continue to attract qualified personnel. We do not maintain any key person life insurance policy on any of our officers or employees.

*We rely on manufacturing capacity located in geologically unstable areas, which could affect the availability of supplies and services.*

We, and many companies in the semiconductor industry, rely on internal manufacturing capacity located in California as well as wafer fabrication foundries in Taiwan and other sub-contractors in geologically unstable locations around the world. This reliance involves risks associated with the impact of earthquakes on us and the semiconductor industry, including temporary loss of capacity, availability and cost of key raw materials and equipment and availability of key services including transport. In addition, California has

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experienced intermittent interruption in the availability of electricity. To date, the impact on us has been negligible. However, electricity is a critical resource for us, without which our products could not be manufactured at factories exposed to continued lengthy power interruptions. Any prolonged inability to utilize one of our manufacturing facilities as a result of fire, natural disaster, unavailability of electric power or otherwise, would have a material adverse effect on our results of operations and financial condition.

*We are exposed to economic, political and other risks through our significant worldwide operations.*

During fiscal year 2004, approximately 75% of our revenues were derived from customers in international markets. Although we engage in hedging transactions to reduce our exposure to currency exchange rate fluctuations, there can be no assurance that our competitive position will not be adversely affected by changes in the exchange rate of the United States dollar against other currencies. Potential interest rate increases, particularly in the United States and China, as well as high energy costs could have an adverse impact on industrial and consumer spending patterns and could adversely impact demand for our products. We have manufacturing facilities outside the United States in Ireland and the Philippines. In addition to being exposed to the ongoing economic cycles in the semiconductor industry, we are also subject to the economic and political risks inherent in international operations and their impact on the United States economy in general, including the risks associated with ongoing uncertainties and political and economic instability in many countries around the world as well as the economic disruption from acts of terrorism, and the response to them by the United States and its allies. These risks include air transportation disruptions, expropriation, currency controls, currency exchange rate movement, and additional costs related to tax, tariff and freight rate increases.

*Our future operating results are dependent on the performance of independent distributors and sales representatives.*

A significant portion of our sales are through independent distributors that are not under our control. These independent distributors generally represent product lines offered by several companies and thus could reduce their sales efforts applied to our products or terminate their representation of us. We generally do not require letters of credit from our distributors and are not protected against accounts receivable default or bankruptcy by these distributors. Our inability to collect open accounts receivable could adversely affect our results of operations. Termination of a significant distributor, whether at our initiative or the distributor's initiative, could disrupt our current business. If we are unable to find suitable replacements in the event of terminations by significant distributors or sales representatives, our operating results could be adversely affected.

*Our manufacturing processes are highly complex and may be interrupted.*

We have manufacturing processes that utilize a substantial amount of technology as the fabrication of integrated circuits is a highly complex and precise process. Minute impurities, contaminants in the manufacturing environment, difficulties in the fabrication process, defects in the masks used in the wafer manufacturing process, manufacturing equipment failures, wafer breakage or other factors can cause a substantial percentage of wafers to be rejected or numerous dice on each wafer to be nonfunctional. While we have significant expertise in semiconductor manufacturing, it is possible that some processes could become unstable. This instability could result in manufacturing delays and product shortages, which could have a material adverse effect on our financial position or results of operations.

## **ITEM 7A. QUALITATIVE AND QUANTITATIVE DISCLOSURES ABOUT MARKET RISK**

### *Interest Rate Exposure*

Our annual interest income would change by approximately \$19 million in fiscal 2004 and \$29 million in fiscal 2003 for each 100 basis point increase or decrease in interest rates. The fair values of our investment portfolio at October 30, 2004 would change by approximately \$24 million for each 100 basis point increase or decrease in rates. The fair values of our investment portfolio at November 1, 2003 would not be significantly

impacted by either an increase or decrease in interest rates primarily due to the short-term nature of a major portion of our investment portfolio.

*Foreign Currency Exposure*

As more fully described in Note 2 (i) in the Notes to our Consolidated Financial Statements contained in Item 8 of this Annual Report on Form 10-K, we regularly hedge our non-U.S. dollar-based exposures by entering into forward exchange contracts. The terms of these contracts are for periods matching the duration of the underlying exposure and generally range from one month to six months. The short-term nature of these contracts has resulted in these instruments having insignificant fair values at October 30, 2004 and November 1, 2003. Currently, our largest foreign currency exposure is against the Euro, primarily because Europe has a higher proportion of our local currency denominated expenses. Relative to foreign currency exposures existing at October 30, 2004 and November 1, 2003, a 10% unfavorable movement in foreign currency exchange rates would not expose us to significant losses in earnings or cash flows or significantly diminish the fair value of our foreign currency financial instruments, primarily due to the short lives of the affected financial instruments that effectively hedge substantially all of our year-end exposures against fluctuations in foreign currency exchange rates. The calculation assumes that each exchange rate would change in the same direction relative to the U.S. dollar. In addition to the direct effects of changes in exchange rates, such changes typically affect the volume of sales or the foreign currency sales price as competitors' products become more or less attractive. Our sensitivity analysis of the effects of changes in foreign currency exchange rates does not factor in a potential change in sales levels or local currency selling prices.

## ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

## ANALOG DEVICES, INC.

CONSOLIDATED STATEMENTS OF INCOME  
Years ended October 30, 2004, November 1, 2003 and November 2, 2002

	2004	2003	2002
(thousands, except per share amounts)			
<b>Revenue</b>			
Net sales	\$2,633,800	\$2,047,268	\$1,707,508
<b>Costs and Expenses</b>			
Cost of sales	1,079,999	923,160	802,980
Gross margin	1,553,801	1,124,108	904,528
Operating expenses:			
Research and development	511,732	450,232	423,869
Selling, marketing, general and administrative	340,036	288,009	257,054
Amortization of intangibles	2,710	2,624	56,873
Special charges	—	9,534	48,494
Operating income	699,323	373,709	118,238
Nonoperating (income) expenses:			
Interest expense	224	32,230	44,458
Interest income	(36,047)	(41,195)	(64,893)
Other, net	2,410	838	(1,677)
	(33,413)	(8,127)	(22,112)
<b>Earnings</b>			
Income before income taxes	732,736	381,836	140,350
Provision for income taxes:			
Payable currently	135,067	81,398	75,614
Deferred	26,931	2,157	(40,563)
	161,998	83,555	35,051
Net income	\$ 570,738	\$ 298,281	\$ 105,299
Shares used to compute earnings per share — Basic	375,031	365,485	364,194
Shares used to compute earnings per share — Diluted	392,854	382,227	381,245
Earnings per share — Basic	\$ 1.52	\$ 0.82	\$ 0.29
Earnings per share — Diluted	\$ 1.45	\$ 0.78	\$ 0.28
Dividends declared per share	\$ 0.20	\$ —	\$ —

See accompanying Notes.

## ANALOG DEVICES, INC.

CONSOLIDATED BALANCE SHEETS  
October 30, 2004 and November 1, 2003

(thousands, except share amounts)	2004	2003
<b>ASSETS</b>		
<b>Current Assets</b>		
Cash and cash equivalents	\$ 518,940	\$ 517,874
Short-term investments	2,166,030	1,598,869
Accounts receivable less allowances of \$12,303 (\$10,059 in 2003)	329,499	294,781
Inventories	345,903	287,502
Deferred tax assets	111,585	144,249
Prepaid expenses and other current assets	56,654	42,441
Total current assets	3,528,611	2,885,716
<b>Property, Plant and Equipment, at Cost</b>		
Land and buildings	301,439	294,349
Machinery and equipment	1,317,874	1,275,544
Office equipment	89,205	93,768
Leasehold improvements	106,826	118,054
	1,815,344	1,781,715
Less accumulated depreciation and amortization	1,147,565	1,110,575
Net property, plant and equipment	667,779	671,140
<b>Other Assets</b>		
Deferred compensation plan investments	318,551	304,008
Other investments	3,854	37,565
Goodwill, net	163,373	163,373
Other intangible assets, net	6,009	8,646
Other assets	31,906	22,429
Total other assets	523,693	536,021
	\$4,720,083	\$4,092,877
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
<b>Current Liabilities</b>		
Accounts payable	\$ 126,845	\$ 99,336
Deferred income on shipments to distributors	157,951	121,345
Income taxes payable	157,511	129,810
Accrued liabilities	124,695	112,986
Total current liabilities	567,002	463,477
<b>Noncurrent Liabilities</b>		
Deferred income taxes	10,716	16,562
Deferred compensation plan liability	322,304	308,435
Other noncurrent liabilities	20,489	16,329
Total noncurrent liabilities	353,509	341,326
Commitments and contingencies		
<b>Stockholders' Equity</b>		
Preferred stock, \$1.00 par value, 471,934 shares authorized, none outstanding	—	—
Common stock, \$0.16 2/3 par value, 1,200,000,000 shares authorized, 375,840,444 shares issued and outstanding (370,234,242 on November 1, 2003)	62,641	61,707
Capital in excess of par value	759,551	745,501
Retained earnings	2,973,631	2,477,900
Accumulated other comprehensive income	3,749	2,966
Total stockholders' equity	3,799,572	3,288,074

\$4,720,083

\$4,092,877

See accompanying Notes.

## ANALOG DEVICES, INC.

**CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY**  
**Years ended October 30, 2004, November 1, 2003 and November 2, 2002**

(thousands)	Common Stock		Capital in Excess of Par Value	Retained Earnings	Accumulated Other Comprehensive Income (Loss)
	Shares	Amount			
<b>BALANCE, NOVEMBER 3, 2001</b>	363,250	\$60,543	\$ 708,367	\$2,074,320	\$ (204)
<b>Activity in Fiscal 2002</b>					
Net income — 2002				105,299	
Issuance of stock under stock plans and other, net of repurchases	4,296	716	36,465		
Compensation recognized under Restricted Stock Plan			1,421		
Forfeitures of restricted stock	(66)	(11)	(508)		
Tax benefit-stock option exercises			908		
Issuance of common stock in connection with acquisitions	57	9	2,788		
Amortization of deferred stock-based compensation related to acquisitions			9,357		
Other comprehensive loss					(1,704)
Common stock repurchased	(4,350)	(725)	(97,025)		
<b>BALANCE, NOVEMBER 2, 2002</b>	<u>363,187</u>	<u>60,532</u>	<u>661,773</u>	<u>2,179,619</u>	<u>(1,908)</u>
<b>Activity in Fiscal 2003</b>					
Net income — 2003				298,281	
Issuance of stock under stock plans and other, net of repurchases	7,012	1,169	70,527		
Compensation recognized under Restricted Stock Plan			395		
Tax benefit-stock option exercises			6,137		
Issuance of common stock in connection with acquisitions	37	6	1,150		
Amortization of deferred stock-based compensation related to acquisitions			5,571		
Other comprehensive income					4,874
Common stock repurchased	(2)		(52)		
<b>BALANCE, NOVEMBER 1, 2003</b>	<u>370,234</u>	<u>61,707</u>	<u>745,501</u>	<u>2,477,900</u>	<u>2,966</u>
<b>Activity in Fiscal 2004</b>					
Net income — 2004				570,738	
Dividends declared and paid				(75,007)	
Issuance of stock under stock plans and other, net of repurchases	9,433	1,572	123,684		
Tax benefit-stock option exercises			20,279		
Issuance of common stock in connection with acquisitions	37	6	955		
Amortization of deferred stock-based compensation related to acquisitions			5,571		
Other comprehensive income					783
Common stock repurchased	(3,864)	(644)	(136,439)		
<b>BALANCE, OCTOBER 30, 2004</b>	<u>375,840</u>	<u>\$62,641</u>	<u>\$ 759,551</u>	<u>\$2,973,631</u>	<u>\$ 3,749</u>

See accompanying Notes.

## ANALOG DEVICES, INC.

**CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME**  
**Years ended October 30, 2004, November 1, 2003 and November 2, 2002**

(thousands)	2004	2003	2002
Net income	\$570,738	\$298,281	\$105,299
Foreign currency translation adjustment	1,328	3,047	950
Minimum pension liability adjustment (net of taxes of \$585 in 2004, \$218 in 2003 and \$1,140 in 2002)	(1,085)	(404)	(2,117)
Net unrealized gains (losses) on securities:			
Net unrealized holding gains (losses) (net of taxes of \$564 in 2004 and \$2,105 in 2002) on Securities classified as short-term investments	(1,046)	—	(3,908)
Net unrealized holding gains (losses) (net of taxes of \$652 in 2004 and \$1,477 in 2003) classified as Other Investments	1,210	2,743	—
Less: reclassification adjustment for losses included in Net Income	1,090	—	226
Net unrealized gains (losses) on securities	1,254	2,743	(3,682)
Derivative instruments designated as cash flow hedges:			
Changes in fair value of derivatives	5,526	6,608	2,878
Less: reclassification into earnings	(6,240)	(7,120)	267
Net change in derivative instruments designated as cash flow hedges	(714)	(512)	3,145
Other comprehensive income (loss)	783	4,874	(1,704)
Comprehensive income	\$571,521	\$303,155	\$103,595

See accompanying Notes.

**ANALOG DEVICES, INC.**
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
**Years ended October 30, 2004, November 1, 2003 and November 2, 2002**

(thousands)	2004	2003	2002
<b>Operations</b>			
Cash flows from operations:			
Net income	\$ 570,738	\$ 298,281	\$ 105,299
Adjustments to reconcile net income to net cash provided by operations:			
Depreciation	149,920	165,659	181,129
Amortization of intangibles	2,710	2,624	56,873
Loss on sale of investments	1,676	—	—
Non-cash portion of special charges	—	11,845	15,841
Other non-cash expense	9,251	15,898	9,602
Tax benefit — stock option exercises	20,279	6,137	908
Deferred income taxes	26,931	2,157	(40,563)
Change in operating assets and liabilities:			
Increase in accounts receivable	(32,771)	(63,070)	(10,771)
(Increase) decrease in inventories	(58,401)	18,202	(59,382)
(Increase) decrease in prepaid expenses and other current assets	(15,472)	(4,152)	4,018
Increase in investments — trading	(14,543)	(26,413)	(35,093)
Increase (decrease) in accounts payable, deferred income and accrued liabilities	73,203	(22,796)	(45,285)
Increase in income taxes payable	27,590	3,111	4,524
Increase in other liabilities	16,934	25,480	39,026
Total adjustments	207,307	134,682	120,827
Net cash provided by operations	778,045	432,963	226,126
<b>Investments</b>			
Cash flows from investments:			
Additions to property, plant and equipment, net	(146,245)	(67,735)	(57,412)
Purchases of short-term available-for-sale investments	(4,013,786)	(4,666,572)	(3,405,217)
Maturities of short-term available-for-sale investments	3,445,015	4,317,703	3,555,238
Proceeds from sale of investment	35,574	—	—
Proceeds from sale of fixed assets	—	1,500	—
Payments for acquisitions, net of cash acquired	—	—	(5,245)
(Increase) decrease in other assets	(10,449)	69,126	2,846
Net cash (used) provided by investments	(689,891)	(345,978)	90,210
<b>Financing Activities</b>			
Cash flows from financing activities:			
Payment of Convertible Subordinated Notes	—	(1,222,800)	—
Dividend payments to stockholders	(75,007)	—	—
Repurchase of common stock	(137,083)	(52)	(97,750)
Proceeds from employee stock plans	124,115	70,862	37,305
Payments on capital lease obligations	—	(4,178)	(7,830)
Net decrease in variable rate borrowings	—	(27,444)	(437)
Net cash used by financing activities	(87,975)	(1,183,612)	(68,712)
Effect of exchange rate changes on cash	887	748	1,180
Net increase (decrease) in cash and cash equivalents	1,066	(1,095,879)	248,804
Cash and cash equivalents at beginning of year	517,874	1,613,753	1,364,949
Cash and cash equivalents at end of year	\$ 518,940	\$ 517,874	\$ 1,613,753

See accompanying Notes.

ANALOG DEVICES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
Years ended October 30, 2004, November 1, 2003 and November 2, 2002  
(all tabular amounts in thousands except per share amounts)

**1. Description of Business**

Analog Devices, Inc. (“Analog” or the “Company”) is a world leader in the design, manufacture and marketing of high-performance analog, mixed-signal and digital signal processing integrated circuits used in signal processing for industrial, communication, computer and consumer applications. Since the Company’s inception in 1965, it has focused on solving the engineering challenges associated with signal processing in electronic equipment. Signal processing is where the analog and digital worlds meet to provide the advantages of digital technologies to the real world. The Company’s products play a fundamental role in converting real-world phenomena such as temperature, motion, pressure, light and sound into electrical signals to be used in a wide array of electronic equipment ranging from industrial process control, factory automation systems equipment, defense electronics, base stations, central office equipment, wireless telephones, computers, automobiles, CAT scanners, digital cameras and DVD players. Signal processing is the cornerstone of high-speed communications, digital entertainment, and other consumer, computer and industrial applications. As new generations of digital applications evolve, they generate new needs for high-performance analog and digital signal processing technology. The Company produces a wide range of products that are designed to meet the technology needs of a broad base of customers.

**2. Summary of Significant Accounting Policies**

**a. Principles of Consolidation**

The consolidated financial statements include the accounts of the Company and all of its wholly owned subsidiaries. Upon consolidation, all intercompany accounts and transactions are eliminated. The Company’s fiscal year ends on the 52-week or 53-week period ending on the Saturday closest to the last day in October. Fiscal years 2004, 2003 and 2002 were 52-week years.

Certain amounts reported in previous years have been reclassified to conform to the fiscal 2004 presentation. Such reclassifications were immaterial.

**b. Cash, Cash Equivalents and Short-term Investments**

Cash and cash equivalents are highly liquid investments with insignificant interest rate risk and maturities of three months or less at the time of acquisition. Cash, cash equivalents and short-term investments consist primarily of corporate obligations such as commercial paper and corporate bonds, and Treasury and government agency notes and bonds. They also include bank time deposits, institutional money market funds and taxable municipal bonds.

The Company classifies its investments in readily marketable debt and equity securities as “held-to-maturity,” “available-for-sale” or “trading” at the time of purchase. There were no transfers between investment classifications in any of the periods presented. Held-to-maturity securities, which are carried at amortized cost, include only those securities the Company has the positive intent and ability to hold to maturity. Securities, such as bank time deposits, which by their nature are typically held to maturity, are classified as such. The Company’s other readily marketable investments are classified as available-for-sale. Available-for-sale securities are carried at fair value with unrealized gains and losses, net of related tax, if any, reported in accumulated other comprehensive income, which is a separate component of stockholders’ equity. Realized gains and losses, as well as interest, and dividends on all securities, are included in earnings.

The Company’s short-term investments are adjusted to fair value at the end of each quarter. These adjustments to fair value are recorded as an increase or decrease in accumulated other comprehensive income. No realized gains or losses were recorded during any period presented.

## ANALOG DEVICES, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The Company periodically evaluates these investments for impairment in accordance with EITF Issue No. 03-01, *The Meaning of Other-Than-Temporary Impairment and Its Application to Certain Investments*. When a decline in fair value is deemed to be other-than-temporary, the Company records an impairment adjustment in the statement of income. There were no other-than-temporary impairments of short-term investments in any of the fiscal years presented.

Unrealized gains and losses on available-for-sale marketable securities were as follows:

	2004	2003	2002
Unrealized gains (net of tax of \$949 in 2004)	\$ 1,763	\$ —	\$ —
Unrealized losses (net of tax of \$1,513 in 2004 and \$2,105 in 2002)	(2,809)	—	(3,908)
Net unrealized gains (losses)	<u>\$(1,046)</u>	<u>\$ —</u>	<u>\$(3,908)</u>

There were no unrealized gains and losses on held-to-maturity investments in any of the fiscal years presented.

There were no cash equivalents or short-term investments classified as trading at October 30, 2004 and November 1, 2003. All of the Company's short-term investments were classified as available-for-sale. The components of the Company's cash, cash equivalents and short-term investments as of October 30, 2004 and November 1, 2003 were as follows:

	2004	2003
<b>Cash and cash equivalents:</b>		
Cash	\$ 50,084	\$ 54,074
Available-for-sale:		
Institutional money market funds	230,131	11,396
Municipal notes	—	10,000
Corporate obligations	74,815	280,101
Held-to-maturity:		
Euro time deposits	163,910	162,303
<b>Total cash and cash equivalents</b>	<u>\$ 518,940</u>	<u>\$ 517,874</u>
<b>Short-term investments:</b>		
Securities with one year or less to maturity:		
Corporate obligations	\$1,000,305	\$1,404,869
U.S. Government Treasury, agency and municipal notes	125,000	70,000
Total maturities less than 1 year	<u>1,125,305</u>	<u>1,474,869</u>
Securities with greater than one year to maturity:		
Corporate obligations	—	99,000
U.S. Government Treasury, agency and municipal bonds	1,040,725	25,000
Total maturities greater than 1 year	<u>1,040,725</u>	<u>124,000</u>
<b>Total short-term investments</b>	<u>\$2,166,030</u>	<u>\$1,598,869</u>

## ANALOG DEVICES, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

**c. Supplemental Cash Flow Statement Information**

	2004	2003	2002
Cash paid during the fiscal year for:			
Income taxes	\$84,987	\$72,378	\$67,709
Interest, net of capitalized interest	\$ 224	\$29,790	\$42,899

The Company's primary non-cash financing activities in fiscal 2004 resulted from the Company's 2001 acquisitions for which 1,462,066 shares of common stock were issued (valued at approximately \$81.8 million) and unvested stock options with an intrinsic value of approximately \$11.9 million were assumed. As a result, the Company recognized approximately \$6.1 million of stock-based compensation expense in both fiscal 2004 and 2003. The Company's primary non-cash financing activities in fiscal 2003 were the result of the restructuring of an interest rate swap in October 2002 (see Note 2i.). At the time of the restructuring of the swap, the fair value of the interest rate component of the debt was greater than the related carrying value. This difference was amortized over the remaining life of the swap as an adjustment to interest expense. As a result, the Company recognized \$7.5 million of expense in fiscal year 2003. The Company's primary non-cash financing activities in fiscal 2002 were a result of fiscal 2001 acquisitions. The Company recognized approximately \$11.1 million of stock-based compensation expense in fiscal 2002.

**d. Inventories**

Inventories are valued at the lower of cost (first-in, first-out method) or market. Inventories at October 30, 2004 and November 1, 2003 were as follows:

	2004	2003
Raw materials	\$ 11,281	\$ 7,864
Work in process	226,106	217,963
Finished goods	108,516	61,675
Total inventories	\$345,903	\$287,502

**e. Property, Plant and Equipment**

Property, plant and equipment is recorded at cost less allowances for depreciation. The straight-line method of depreciation is used for all classes of assets for financial statement purposes; both straight-line and accelerated methods are used for income tax purposes. Capitalized leases and leasehold improvements are amortized based on the lesser of the term of the lease or the useful life of the asset. Depreciation and amortization are based on the following useful lives:

Buildings & Building Equipment	Up to 25 years
Machinery & Equipment	3-10 years
Office Equipment	3-8 years

Total depreciation of property, plant and equipment was \$150 million, \$166 million, and \$181 million in fiscal 2004, 2003 and 2002, respectively. Property, plant and equipment included \$73 million and \$77 million of capitalized leases in fiscal 2004 and fiscal 2003, net of \$70 million and \$72 million, respectively, of accumulated depreciation. The Company did not capitalize interest in fiscal 2003 or 2004. The Company recorded \$1.7 million of capitalized interest in fiscal 2002.

The Company reviews property, plant, and equipment for impairment whenever events or changes in circumstances indicate that the carrying amount of assets may not be recoverable. Recoverability of these assets is measured by comparison of their carrying amount to the future undiscounted cash flows the assets are

## ANALOG DEVICES, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

expected to generate over their remaining economic life. If such assets are considered to be impaired, the impairment to be recognized in earnings equals the amount by which the carrying value of the assets exceeds their fair market value determined by either a quoted market price, if any, or a value determined by utilizing a discounted cash flow technique.

**f. Goodwill and Other Acquisition-related Intangibles**

Beginning in fiscal 2003, the Company adopted Statement of Financial Accounting Standards No. 142 (FAS 142), *Goodwill and Other Intangible Assets*. As a result, the Company discontinued amortizing the remaining balances of goodwill effective November 3, 2002. Instead, the Company annually evaluates goodwill for impairment as well as whenever events or changes in circumstances suggest that the carrying amount may not be recoverable from estimated discounted future cash flows. Because the Company has one reporting segment under FAS 142, the Company utilizes the entity-wide approach for assessing goodwill for impairment and compares its market value to its net book value to determine if an impairment exists. No impairment of goodwill resulted from the Company's evaluation of goodwill in any of the years presented.

Other intangible assets, which will continue to be amortized, consisted of the following:

	October 30, 2004		November 1, 2003	
	Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
Technology-based	\$16,923	\$11,387	\$16,923	\$ 8,994
Tradenname	1,167	696	1,167	572
Other	6,147	6,145	6,147	6,025
Total	\$24,237	\$18,228	\$24,237	\$15,591

Intangible assets' lives range from five to ten years and are amortized on the straight-line basis over their useful lives. Amortization expense relating to goodwill and other acquisition-related intangibles was:

	2004	2003	2002
Goodwill	\$ —	\$ —	\$53,861
Other intangibles	2,710	2,624	3,012
Total	\$2,710	\$2,624	\$56,873

The Company expects annual amortization expense for these intangible assets to be:

Fiscal Years	Amortization Expense
2005	2,306
2006	1,312
2007	1,312
2008	938
2009	141

## ANALOG DEVICES, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The following table provides a reconciliation of reported net income to adjusted net income had FAS 142 been applied as of the beginning of fiscal 2002:

	2004	2003	2002
Reported net income	\$570,738	\$298,281	\$105,299
Add back: Goodwill and workforce amortization (net of tax)	—	—	43,566
Adjusted net income	\$570,738	\$298,281	\$148,865
Basic earnings per share:			
Reported net income	\$ 1.52	\$ 0.82	\$ 0.29
Goodwill and workforce amortization (net of tax)	—	—	0.12
Adjusted net income	\$ 1.52	\$ 0.82	\$ 0.41
Diluted earnings per share:			
Reported net income	\$ 1.45	\$ 0.78	\$ 0.28
Goodwill and workforce amortization (net of tax)	—	—	0.11
Adjusted net income	\$ 1.45	\$ 0.78	\$ 0.39

**g. Grant Accounting**

The Company's manufacturing facility in Limerick, Ireland has received various grants from the Industrial Development Authority of the Republic of Ireland. These grants include capital, employment and research and development grants. Capital grants for the acquisition of property and equipment are netted against the related capital expenditures and amortized as a credit to depreciation expense over the useful life of the related asset. Employment grants, which relate to employee hiring and training, and research and development grants are recognized in earnings in the period in which the related expenditures are incurred by the Company.

**h. Translation of Foreign Currencies**

The functional currency for the Company's foreign sales operations is the applicable local currency. Gains and losses resulting from translation of these foreign currencies into U.S. dollars are recorded in accumulated other comprehensive income. Transaction gains and losses and remeasurement of foreign currency denominated assets and liabilities are included in income currently, including those at the Company's principal foreign manufacturing operations where the functional currency is the U.S. dollar. Foreign currency transaction gains or losses included in other expenses, net, were not material in fiscal 2004, 2003 and 2002.

**i. Derivative Instruments and Hedging Agreements**

The Company enters into forward foreign exchange contracts to offset certain operational and balance sheet exposures from the impact of changes in foreign currency exchange rates. Such exposures result from the portion of the Company's operations, assets and liabilities that are denominated in currencies other than the U.S. dollar, primarily Japanese Yen, Euro, and British Pounds Sterling. These foreign exchange contracts are entered into to support product sales, purchases and financing transactions made in the normal course of business, and accordingly, are not speculative in nature.

The Company records all derivative financial instruments in the consolidated financial statements at fair value regardless of the purpose or intent for holding the instrument. Changes in the fair value of the derivative financial instruments are either recognized periodically in earnings or in stockholders' equity as a component of accumulated other comprehensive income (OCI) depending on whether the derivative financial instrument

## ANALOG DEVICES, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

qualifies for hedge accounting as defined by Statement of Financial Accounting Standards No. 133 (FAS 133), *Accounting for Derivative Instruments and Hedging Activities*. Changes in fair values of derivatives not qualifying for hedge accounting are reported in earnings as they occur.

*Foreign Exchange Exposure Management* — The Company has significant international sales and purchase transactions in foreign currencies and has a policy of hedging forecasted and actual foreign currency risk with forward foreign exchange contracts. The Company's forward foreign exchange contracts are denominated in Japanese Yen, British Pounds Sterling and the Euro and are for periods consistent with the terms of the underlying transactions, generally one year or less. Derivative instruments are employed to eliminate or minimize certain foreign currency exposures that can be confidently identified and quantified. In accordance with FAS 133, hedges related to anticipated transactions are designated and documented at the inception of the respective hedges as cash flow hedges and are evaluated for effectiveness monthly. As the terms of the contract and the underlying transaction are matched at inception, forward contract effectiveness is calculated by comparing the change in fair value of the contract to the change in the forward value of the anticipated transaction, with the effective portion of the gain or loss on the derivative instrument reported as a component of OCI in stockholders' equity and reclassified into earnings in the same period during which the hedged transaction affects earnings. Any residual change in fair value of the instruments, or ineffectiveness, is recognized immediately in other income/expense. No ineffectiveness was recognized in fiscal 2004, 2003 or 2002.

Additionally, the Company enters into forward foreign currency contracts that economically hedge the gains and losses generated by the remeasurement of certain recorded assets and liabilities in a non-functional currency. Changes in the fair value of these undesignated hedges are recognized in other income/expense immediately as an offset to the changes in the fair value of the asset or liability being hedged.

*Interest Rate Exposure Management* — In the fourth quarter of fiscal 2003, the Company terminated a swap agreement that had the effect of swapping the 4.75% fixed rate of the Company's Convertible Subordinated Notes (the "Notes") into a LIBOR-based floating rate. The swap was terminated due to the Company's decision to call for the redemption of the Notes (see Note 8). The terminated swap was originally entered into in January 2002 and hedged the benchmark interest rate of the \$1,200 million Notes. The swap was a derivative instrument as defined by FAS 133 and was designated as a fair value hedge at inception. As the critical terms of the interest rate swap and the underlying interest component of the Company's Notes were matched at inception, effectiveness was calculated by comparing the change in the fair value of the contract to the change in the fair value of the interest rate component, with the effective portion of the gain or loss on the derivative instrument reported in other income/expense. The Company evaluated this fair value hedge for effectiveness quarterly, and restructured certain terms in October 2002 to provide for an even more highly effective hedge relationship with the Notes. The restructuring resulted in an interest rate swap with terms more favorable to the Company, offset by a promise to pay a fixed amount over time to the counterparty regardless of when the swap was terminated. The restructuring, which had no impact on earnings, increased the interest rate swap asset by \$27 million, with an offsetting debt liability of an equal amount. The fair value hedge was determined to be highly effective during each quarter, and a minor amount of ineffectiveness was recorded in other income/expense during fiscal year 2003 and fiscal year 2002.

Derivative financial instruments involve, to a varying degree, elements of market and credit risk not recognized in the consolidated financial statements. The market risk associated with these instruments resulting from currency exchange rate or interest rate movements is expected to offset the market risk of the underlying transactions, assets and liabilities being hedged. The counterparties to the agreements relating to the Company's foreign exchange and interest rate instruments consist of a number of major international financial institutions with high credit ratings. The Company does not believe that there is significant risk of nonperformance by these counterparties because the Company continually monitors the credit ratings of such counterparties, and limits the financial exposure with any one financial institution. While the contract or

## ANALOG DEVICES, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

notional amounts of derivative financial instruments provide one measure of the volume of these transactions, they do not represent the amount of the Company's exposure to credit risk. The amounts potentially subject to credit risk (arising from the possible inability of counterparties to meet the terms of their contracts) are generally limited to the amounts, if any, by which the counterparties' obligations under the contracts exceed the obligations of the Company to the counterparties.

**Accumulated Derivative Gains or Losses**

The following table summarizes activity in other comprehensive income related to derivatives classified as cash flow hedges held by the Company during the period of November 3, 2002 through October 30, 2004:

	2004	2003
Balance at beginning of year	\$ 2,809	\$ 3,321
Changes in fair value of derivatives — gain	5,526	6,608
Reclassifications into earnings from other comprehensive income	(6,240)	(7,120)
Balance at end of year	\$ 2,095	\$ 2,809

All of the accumulated gain will be reclassified into earnings over the next twelve months.

**j. Fair Values of Financial Instruments**

The following estimated fair value amounts have been determined by the Company using available market information and appropriate valuation methodologies. The estimates presented herein are not necessarily indicative of the amounts that the Company could realize in a current market exchange.

	October 30, 2004		November 1, 2003	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
<b>Assets:</b>				
Cash and cash equivalents	\$ 518,940	\$ 518,940	\$ 517,874	\$ 517,874
Short-term investments	2,166,030	2,166,030	1,598,869	1,598,869
Deferred compensation investments	318,551	318,551	304,008	304,008
Other investments	3,854	3,854	37,565	37,565
<b>Foreign Currency Instruments &amp; Interest Rate Agreements:</b>				
Interest rate swap and cap agreements	854	854	1,190	1,190
Forward foreign currency exchange contracts	2,157	2,157	1,861	1,861

The following methods and assumptions were used by the Company in estimating its fair value disclosures for financial instruments:

**Cash, cash equivalents and short-term investments** — These investments, except those classified as held-to-maturity, which are carried at amortized cost, are adjusted to fair value based on quoted market values.

**Deferred compensation plan investments and other investments** — The fair value of these investments is based on quoted market values, with the exception of private-company equity investments that are carried at cost.

ANALOG DEVICES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

**Interest rate swap and cap agreements** — The fair value of interest rate swap and cap agreements is obtained from dealer quotes. These values represent the estimated amount the Company would receive or pay to terminate the agreements taking into consideration current interest rates.

**Forward foreign currency exchange contracts** — The estimated fair value of forward foreign currency exchange contracts is based on the estimated amount at which they could be settled based on forward market exchange rates.

**k. Use of Estimates**

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingencies at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Such estimates relate to the useful lives of fixed assets, allowances for doubtful accounts and customer returns, the net realizable value of inventory, potential reserves relating to litigation matters, accrued liabilities, accrued taxes, deferred tax valuation allowances and other reserves. Actual results could differ from those estimates, and such differences may be material to the financial statements.

**l. Concentrations of Credit Risk**

Financial instruments that potentially subject the Company to concentrations of credit risk consist principally of investments and trade accounts receivable.

The Company maintains cash, cash equivalents and short-term investments and long-term investments with high credit quality financial institutions and monitors the amount of credit exposure to any one financial institution.

The Company sells its products to distributors and original equipment manufacturers involved in a variety of industries including industrial process automation, instrumentation, defense/aerospace, automotive, communications, computers and computer peripherals and consumer electronics. The Company has adopted credit policies and standards to accommodate growth in these markets. The Company performs continuing credit evaluations of its customers' financial condition and although the Company generally does not require collateral, letters of credit may be required from its customers in certain circumstances. Reserves are provided for estimated amounts of accounts receivable that may not be collected.

**m. Concentration of Other Risks**

The semiconductor industry is characterized by rapid technological change, competitive pricing pressures and cyclical market patterns. The Company's financial results are affected by a wide variety of factors, including general economic conditions worldwide, economic conditions specific to the semiconductor industry, the timely implementation of new manufacturing technologies, the ability to safeguard patents and intellectual property in a rapidly evolving market and reliance on assembly and test subcontractors, third-party wafer fabricators and independent distributors. In addition, the semiconductor market has historically been cyclical and subject to significant economic downturns at various times. The Company is exposed to the risk of obsolescence of its inventory depending on the mix of future business. As a result, the Company may experience significant period-to-period fluctuations in future operating results due to the factors mentioned above or other factors.

**n. Revenue Recognition**

Revenue and the related cost of sales on shipments to distributors are deferred until the distributors resell the products to end-users. Deferred amounts are presented net and included as "Deferred income on

## ANALOG DEVICES, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

shipments to distributors” in the Company’s consolidated balance sheets. Revenue from product sales to end-users is recognized when title passes, which for shipments to certain foreign countries is subsequent to product shipment. Title for these shipments ordinarily passes within a week of shipment. A reserve for sales returns and allowances for customers is recorded based on historical experience or specific identification of an event necessitating a reserve.

Shipping costs are charged to cost of sales as incurred.

The Company generally offers a 12-month warranty for its products. The Company’s warranty policy provides for replacement of the defective product. Specific accruals are recorded for known product warranty issues. Product warranty expenses during fiscal 2004, 2003 and 2002 were not material.

***o. Accumulated Other Comprehensive Income***

Other comprehensive income includes certain transactions that have generally been reported in the consolidated statement of stockholders’ equity. Accumulated other comprehensive income is comprised of currency translation adjustments, minimum pension liability adjustments, unrealized gains (losses) on available-for-sale securities, and net gain or loss on derivative instruments designated as cash flow hedges.

The components of accumulated other comprehensive income at October 30, 2004 and November 1, 2003 consisted of the following:

	2004	2003
Minimum pension liability adjustments	\$(3,606)	\$(2,521)
Unrealized gains (losses) on available-for-sale securities	89	(1,165)
Foreign currency translation	5,171	3,843
Unrealized gains on derivative instruments	2,095	2,809
Total accumulated other comprehensive income	\$ 3,749	\$ 2,966

***p. Advertising Expense***

Advertising costs are expensed as incurred. Advertising expense was \$11.9 million in fiscal 2004, \$12.1 million in fiscal 2003 and \$9.0 million in fiscal 2002.

***q. Income Taxes***

Deferred tax assets and liabilities are determined based on the differences between financial reporting and tax bases of assets and liabilities and are measured using the enacted income tax rates and laws that are expected to be in effect when the temporary differences are expected to reverse. Additionally, deferred tax assets and liabilities are separated into current and noncurrent amounts based on the classification of the related assets and liabilities for financial reporting purposes.

***r. Earnings Per Share of Common Stock***

Basic earnings per share is computed based only on the weighted average number of common shares outstanding during the period. Diluted earnings per share is computed using the weighted average number of common shares outstanding during the period, plus the dilutive effect of potential future issuances of common stock relating to stock option programs and other potentially dilutive securities. In calculating diluted earnings per share, the dilutive effect of stock options is computed using the average market price for the respective period. Potential shares related to convertible debt and certain of the Company’s outstanding stock options were excluded because they were anti-dilutive. Those potential shares related to the Company’s outstanding

## ANALOG DEVICES, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

stock options could be dilutive in the future. The following table sets forth the computation of basic and diluted earnings per share:

	2004	2003	2002
<b>Basic:</b>			
Net income	\$570,738	\$298,281	\$105,299
Weighted average shares outstanding	375,031	365,485	364,194
Earnings per share	\$ 1.52	\$ 0.82	\$ 0.29
<b>Diluted:</b>			
Net income	\$570,738	\$298,281	\$105,299
Weighted average shares outstanding	375,031	365,485	364,194
Assumed exercise of common stock equivalents	17,823	16,742	17,051
Weighted average common and common equivalent shares	392,854	382,227	381,245
Earnings per share	\$ 1.45	\$ 0.78	\$ 0.28
<b>Weighted average anti-dilutive shares related to:</b>			
Outstanding stock options	14,058	35,487	25,877
Convertible debt	—	6,935	9,247
Employee stock purchase plan	—	—	113

s. **Stock-Based Compensation**

The Company adopted the disclosure requirements of Statement of Financial Accounting Standards No. 148 (FAS 148), *Accounting for Stock-Based Compensation — Transition and Disclosure* effective November 3, 2002. FAS 148 amends Statement of Financial Accounting Standards No. 123 (FAS 123), *Accounting for Stock-Based Compensation*, to provide alternative methods of transition for a voluntary change to the fair value method of accounting for stock-based compensation and also amends the disclosure requirements of FAS 123 to require prominent disclosures in both annual and interim financial statements about the methods of accounting for stock-based employee compensation and the effect of the method used on reported results. As permitted by FAS 148 and FAS 123, the Company continues to apply the accounting provisions of Accounting Principle Board Opinion No. 25, *Accounting for Stock Issued to Employees*, and related interpretations, with regard to the measurement of compensation cost for options granted under the Company's equity compensation plans, consisting of the 2001 Broad-Based Stock Option Plan, the 1998 Stock Option Plan, the Restated 1994 Director Option Plan, the Restated 1988 Stock Option Plan, the 1992 Employee Stock Purchase Plan and the 1998 International Employee Stock Purchase Plan.

Pro forma information regarding net income and earnings per share is required by FAS 123 for awards granted after October 28, 1995 as if the Company had accounted for its stock-based awards to employees under the fair value method of FAS 123. The fair value of the Company's stock-based awards to employees was estimated using the Black-Scholes option valuation model. The Black-Scholes option valuation model was developed for use in estimating the fair value of traded options that have no vesting restrictions and are fully transferable. In addition, option valuation models require the input of highly subjective assumptions, including the expected stock price volatility. Because the Company's stock-based awards to employees have characteristics significantly different from those of traded options, and because changes in the subjective input assumptions can materially affect the fair value estimate, in management's opinion, the existing models do not necessarily provide a reliable single measure of the fair value of its stock-based awards to employees. The fair

ANALOG DEVICES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

value of the Company's stock-based awards to employees was estimated using the following weighted average assumptions.

	Options			ESPP		
	2004	2003	2002	2004	2003	2002
Expected life (years)	5.8	5.2	5.2	1.0	1.0	1.0
Expected stock price volatility	69.2%	72.2%	70.5%	66.3%	66.3%	65.0%
Risk-free interest rate	3.5%	2.7%	3.5%	1.2%	2.3%	3.9%
Dividend yield	0.36%	0%	0%	0.42%	0%	0%

The following is a summary of weighted average grant date values generated by application of the Black-Scholes model:

	Weighted Average Grant Date Value		
	2004	2003	2002
Stock option plans	\$27.99	\$20.18	\$18.89
ESPP	\$13.91	\$13.85	\$17.40

Had expense been recognized using the fair value method described in FAS 123, using the Black-Scholes option-pricing model, the Company would have reported the following results of operations:

	2004	2003	2002
Net income, as reported	\$ 570,738	\$ 298,281	\$ 105,299
Add: Stock-based employee compensation expense included in reported net income, net of related tax effects	5,653	5,746	10,031
Deduct: Total stock-based compensation expense determined under the fair value based method for all awards, net of related tax effects	(213,266)	(222,562)	(229,924)
Pro forma net income (loss)	\$ 363,125	\$ 81,465	\$(114,594)
Earnings (loss) per share:			
Basic — as reported	\$ 1.52	\$ 0.82	\$ 0.29
Basic — pro forma	\$ 0.97	\$ 0.22	\$ (0.31)
Diluted — as reported	\$ 1.45	\$ 0.78	\$ 0.28
Diluted — pro forma	\$ 0.91	\$ 0.22	\$ (0.31)

The effects of applying FAS 123 on pro forma disclosures are not likely to be representative of the effects on pro forma disclosures of future years.

**t. New Accounting Standards**

In January 2003, the Financial Accounting Standards Board, or FASB, issued Financial Accounting Standards Board Interpretation No. 46 (FIN 46), *Consolidation of Variable Interest Entities*, and amended it by issuing FIN 46R in December 2003. FIN 46R requires that if an entity has a controlling financial interest in a variable interest entity, the assets, liabilities and results of activities of the variable interest entity should be included in the consolidated financial statements of the entity. Because the Company does not have any variable interest entities, the adoption of FIN 46R in the second quarter of fiscal 2004 did not have any effect on the Company's financial position or results of operations.

ANALOG DEVICES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

In December 2003, the FASB issued SFAS No. 132 (Revised 2003), *Employers' Disclosures about Pensions and Other Postretirement Benefits*, which enhanced the required disclosures about pension plans and other postretirement benefit plans, but did not change the measurement or recognition principles for those plans. The statement requires additional interim and annual disclosures about the assets, obligations, cash flow, and net periodic benefit cost of defined benefit pension plans and other defined benefit postretirement plans. The required interim disclosures were effective for the Company in the second quarter of fiscal year 2004, and the required annual disclosures are included in Note 13 to the Consolidated Financial Statements contained in Item 8 of this Annual Report on Form 10-K.

In December 2003, the SEC issued Staff Accounting Bulletin No. 104, *Revenue Recognition* (SAB 104). SAB 104 updates portions of the interpretive guidance included in Topic 13 of the codification of Staff Accounting Bulletins in order to make the interpretive guidance consistent with current authoritative accounting and auditing guidance and SEC rules and regulations. The Company follows the guidance of SAB 104.

In March 2004, the FASB issued EITF Issue No. 03-1, *The Meaning of Other-Than-Temporary Impairment and Its Application to Certain Investments*, which provides new guidance for assessing impairment losses on debt and equity investments. Additionally, EITF Issue No. 03-1 includes new disclosure requirements for investments that are deemed to be temporarily impaired. In September 2004, the FASB delayed the accounting provisions of EITF Issue No. 03-1; however, the disclosure requirements remain effective and have been adopted for the Company's fiscal year ended October 30, 2004. The Company will evaluate the effect, if any, of EITF Issue No. 03-1 when final guidance is released.

**3. Industry and Geographic Segment Information**

The Company operates and tracks its results in one reportable segment. The Company designs, develops, manufactures and markets a broad range of integrated circuits. The Chief Executive Officer has been identified as the Chief Operating Decision Maker as defined by Statement of Financial Accounting Standards No. 131 (SFAS 131), *Disclosures about Segments of an Enterprise and Related Information*.

*Geographic Information*

The Company operates in the following major geographic areas. Trade sales data is based upon point of sale and property, plant and equipment data is based upon physical location. The predominant countries

ANALOG DEVICES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

comprising European operations are Ireland, England, France and Germany. The predominant countries comprising Rest of Asia are Taiwan and Korea.

Geographic Segment Information	2004	2003	2002
<b>Sales</b>			
North America	\$ 649,515	\$ 523,075	\$ 516,509
Europe	513,625	428,578	382,007
Japan	508,941	373,753	288,686
China	378,688	219,019	125,401
Rest of Asia	583,031	502,843	394,905
<b>Total sales</b>	<b>\$2,633,800</b>	<b>\$2,047,268</b>	<b>\$1,707,508</b>
<b>Property, plant and equipment</b>			
Ireland	\$ 229,297	\$ 279,089	\$ 299,061
All other European Countries	3,491	3,195	12,085
Subtotal Europe	232,788	282,284	311,146
North America	303,713	318,385	391,145
Philippines	125,570	66,709	70,160
Japan	737	667	739
China and Rest of Asia	4,971	3,095	7,714
<b>Total property, plant and equipment</b>	<b>\$ 667,779</b>	<b>\$ 671,140</b>	<b>\$ 780,904</b>

**4. Special Charges**

A summary of the Company's special charges is as follows:

Income Statement	Fiscal 2003			Fiscal 2002			Fiscal 2001 Special Charges	
	4th Quarter Special Charges	3rd Quarter Special Charges	Fiscal 2003 Total	2nd Quarter Special Charges	3rd Quarter Special Charges	4th Quarter Special Charges		Fiscal 2002 Total
Workforce reductions	\$2,027		\$ 2,027	\$15,284	\$ 3,676	\$2,512	\$21,472	\$29,636
Abandonment of equipment	5,965	\$ 4,694	10,659	2,327	700	859	3,886	11,573
Equipment/lease cancelation and cleanup fees				8,076			8,076	3,298
Investment impairments				2,125	3,779	2,090	7,994	2,500
Other asset impairments	1,186		1,186					
Other	15		15	903	1,258	944	3,105	
Change in estimate		(4,353)	(4,353)	(1,465)		2,000	535	
Goodwill impairment					3,426		3,426	
<b>Total Special Charges</b>	<b>\$9,193</b>	<b>\$ 341</b>	<b>\$ 9,534</b>	<b>\$27,250</b>	<b>\$12,839</b>	<b>\$8,405</b>	<b>\$48,494</b>	<b>\$47,007</b>

ANALOG DEVICES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

A summary of the activity in accrued restructuring is as follows:

Accrued Restructuring	Fiscal 2003		Fiscal 2002			Fiscal 2001 Special Charges	Total
	4th Quarter Special Charges	3rd Quarter Special Charges	2nd Quarter Special Charges	3rd Quarter Special Charges	4th Quarter Special Charges		
Special charges						\$ 47,007	\$ 47,007
Severance payments						(6,178)	(6,178)
Non-cash impairment charge						(14,073)	(14,073)
<b>Balance at November 3, 2001</b>						<b>\$ 26,756</b>	<b>\$ 26,756</b>
Special charges			\$27,250	\$12,839	\$ 8,405		48,494
Severance payments			(583)	(680)	(110)	(16,824)	(18,197)
Other cash payments			(988)		(200)		(1,188)
Change in estimate			3,465		(2,000)	(1,465)	—
Non-cash impairment charge			(4,127)	(7,905)	(2,949)	(860)	(15,841)
<b>Balance at November 2, 2002</b>			<b>\$25,017</b>	<b>\$ 4,254</b>	<b>\$ 3,146</b>	<b>\$ 7,607</b>	<b>\$ 40,024</b>
Special charges	\$ 9,193	\$ 341					9,534
Severance payments			(8,845)	(1,714)	(2,073)	(4,204)	(16,836)
Other cash payments			(7,197)	(1,521)	(395)	(527)	(9,640)
Change in estimate		4,353	(2,900)			(1,453)	—
Non-cash impairment charge	(7,151)	(4,694)					(11,845)
Effect of foreign currency translation on accrual				95			95
<b>Balance at November 1, 2003</b>	<b>\$ 2,042</b>	<b>\$ —</b>	<b>\$ 6,075</b>	<b>\$ 1,114</b>	<b>\$ 678</b>	<b>\$ 1,423</b>	<b>\$ 11,332</b>
Severance payments	(2,027)		(3,709)	(825)	(427)	(1,413)	(8,401)
Other cash payments	(15)		(2,238)	(309)	(251)	(4)	(2,817)
Effect of foreign currency translation on accrual				20			20
<b>Balance at October 30, 2004</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ 128</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ 6</b>	<b>\$ 134</b>

**Fiscal 2003 Special Charges**

During the third quarter of fiscal 2003, the Company recorded a special charge of \$0.3 million. The charge included a \$2.0 million write-down of equipment to fair value due to a decision to outsource the assembly of products in plastic packages, which had been done internally at the Company's facility in the Philippines. This amount was the net book value of the assets used in plastic assembly, net of proceeds received from the sale in the third quarter of a portion of the assets. The Company also decided to abandon efforts to develop a particular expertise in optical communications that resulted in the write-down of \$2.7 million of equipment to its fair value. During the quarter ended August 2, 2003, the Company determined that costs remaining to be paid for certain restructuring charges would be less than the amount originally recorded. Accordingly, the Company recorded a change in estimate reducing the restructuring accruals by \$4.4 million related to prior restructuring charges as more fully described below.

During the fourth quarter of fiscal 2003, the Company recorded a special charge of \$9.2 million as a result of a decision to close a small manufacturing facility in Belfast, Northern Ireland that supplied foundry substrate services for optical applications. The charge included \$2.0 million of severance and fringe benefit costs for approximately 57 manufacturing employees and 14 engineering and administrative employees all of which had been paid by the end of the second quarter of fiscal 2004. The charge also included \$6 million related to the write-down of property, plant and equipment to its fair value and \$1.2 million related to the write-down of various other assets to their fair values. The closure was completed during the second quarter of fiscal 2004.

## ANALOG DEVICES, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

**Fiscal 2002 Special Charges**

During the second quarter of fiscal 2002, the Company recorded special charges of approximately \$27.2 million. The second quarter charge was comprised of \$25.7 million related to the planned transfer of production from the Company's three older four-inch wafer fabrication facilities to the Company's three six-inch and one eight-inch wafer fabrication facilities, and \$3 million primarily related to the impairment of an investment, which was partially offset by an adjustment of \$1.5 million related to equipment cancellation fees recorded in fiscal year 2001. The investment impairment, which was related to an equity investment in a private company, was due to the Company's decision to abandon the product strategy for which the investment was made. Included in the \$25.7 million special charge were severance and fringe benefit costs of \$15.3 million for 509 manufacturing employees in the United States and Ireland, \$2.3 million related to the write-down of equipment to be abandoned and \$8.1 million of other charges, primarily related to lease termination and cleanup costs. The write-down of equipment was principally due to a decision to discontinue various product development strategies. In the third quarter of fiscal 2003, the Company reversed \$2.9 million of the accrual primarily due to lower than previously expected severance costs. The lower severance costs were the result of a reduction in the number of separated employees and, to a lesser extent, the average tenure of separated employees differing from estimates. The 509 employees projected to be terminated at the time of the original charge was adjusted down to 439 and, as of May 1, 2004, all of the employees had been terminated. The reduction in the number of employees to be terminated was due to the transfer of employees, which primarily occurred in the third quarter of fiscal 2003, to positions in the Company's six-inch wafer fabrication facilities where the Company experienced an unexpected increase in demand for its products. All the planned closure and consolidation actions related to the Company's four-inch wafer fabrication facilities are now complete. Since severance costs are paid as income continuance at some locations, these amounts will be expended over time subsequent to the final termination of employment.

During the third quarter of fiscal 2002, the Company recorded special charges of approximately \$12.8 million. The charges included severance and fringe benefit costs of \$3.7 million related to cost reduction actions taken in several product groups and, to a lesser extent, in manufacturing, \$3.8 million related to the impairment of an investment, \$3.4 million related to the impairment of goodwill associated with the closing of an Austrian design center acquired in fiscal 2001 and \$1.9 million primarily related to the abandonment of equipment and lease cancellation fees. The investment impairment, which was related to an equity investment in a private company, was due to the Company's decision to abandon the product strategy for which the investment was made. The severance and fringe benefit costs were for approximately 70 engineering employees in the United States, Europe and Canada, and approximately 30 manufacturing employees in the United States, all of whom had been terminated as of the end of the second quarter of fiscal 2004.

During the fourth quarter of fiscal 2002, the Company recorded special charges of approximately \$8.4 million. The charges included severance and fringe benefit costs of \$2.5 million related to cost reduction actions taken in the sales group, several product groups and the Company's manufacturing test operations for approximately 65 employees in the United States and Europe, all of whom had been terminated as of November 1, 2003. The charges also included \$2.1 million related to the impairment of investments, \$1.8 million primarily related to the abandonment of equipment and lease cancellation fees and a change in estimate of \$2.0 million for additional estimated cleanup costs originally recorded in the second quarter of fiscal 2002. The investment impairment charges were related to the decline in fair value of a publicly traded equity investment to less than its cost basis that was determined to be other-than-temporary, and to an equity investment in a private company. The private company equity investment was part of a product strategy that the Company decided to abandon.

## ANALOG DEVICES, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

**Fiscal 2001 Special Charges**

During fiscal 2001, the Company recorded special charges of approximately \$47 million related to cost reduction actions taken in response to the economic climate at that time. The actions consisted of workforce reductions in manufacturing and, to a lesser extent, in selling, marketing and administrative areas as well as a decision to consolidate worldwide manufacturing operations and rationalize production planning and quality activities. The cost reductions included severance and fringe benefit costs of \$29.6 million for approximately 1,200 employees in the United States, Europe, Asia and the Philippines, all of whom had been terminated as of January 31, 2004. The special charges also included \$11.6 million related to the abandonment of equipment resulting from the consolidation of worldwide manufacturing operations and \$5.8 million of other charges primarily related to equipment and lease cancellation fees. Based on the results of negotiations with vendors regarding purchase order cancellation fees, the amount paid was \$1.5 million less than the amount recorded for such charges and, accordingly, the Company adjusted the provision for purchase order cancellation fees by \$1.5 million in the second quarter of fiscal 2002 to reflect this change in estimate. In the third quarter of fiscal 2003, the Company determined that the severance costs remaining to be paid would be \$1.3 million less than the amount originally recorded for these charges and also determined that \$0.2 million originally reserved for the termination of two leases would not be required. Therefore, the Company adjusted the provision for these severance and other costs in the third quarter of fiscal 2003 to reflect this change in estimate.

**5. Deferred Compensation Plan Investments**

Deferred compensation plan investments are classified as trading and the components of the investments as of October 30, 2004 and November 1, 2003 were as follows:

	2004	2003
Corporate obligations	\$181,396	\$174,776
Money market funds	33,866	83,845
Mutual funds	23,129	20,375
U.S. Government agency	80,160	25,012
Total deferred compensation plan investments	<u>\$318,551</u>	<u>\$304,008</u>

The fair values of these investments are based on published market quotes on October 30, 2004 and November 1, 2003, respectively. Adjustments to fair value of, and income pertaining to, deferred compensation plan investments are recorded in operating income/expense. Gross realized and unrealized gains and losses from trading securities were not material in fiscal 2004, fiscal 2003 and fiscal 2002.

Investments are offset by a corresponding noncurrent liability to the plan participants (see Note 9). These investments are specifically designated as available to the Company solely for the purpose of paying benefits under the Company's deferred compensation plan. However, in the event the Company became insolvent, the investments would be available to all unsecured general creditors.

**6. Other Investments**

Other investments consist of equity securities and other long-term investments. Investments are stated at fair value, which is based on market quotes, interest rates or management estimates, as appropriate. Adjustments to fair value of investments classified as available-for-sale are recorded as an increase or decrease in accumulated other comprehensive income, unless the adjustment is considered an other-than-temporary impairment, in which case the adjustment is expensed in the statement of income.

Realized losses of \$1.7 million were recorded in fiscal 2004. There were no realized gains or losses recorded in fiscal 2003. Realized losses of \$6.9 million were recorded in fiscal 2002.

## ANALOG DEVICES, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Unrealized gains of \$1.8 million (\$1.2 million net of tax) were recorded in fiscal 2004, unrealized gains of \$4.2 million (\$2.7 million net of tax) were recorded in fiscal 2003 and unrealized losses of \$1.1 million (\$0.7 million net of tax) were recorded in fiscal 2002. The unrealized loss recorded in fiscal 2002 related to an other-than-temporary impairment, therefore, this adjustment was included in other expense in fiscal 2002.

Long-term investments classified as available-for-sale were approximately \$3.9 million and \$37.6 million at October 30, 2004 and November 1, 2003, respectively.

**7. Accrued Liabilities**

Accrued liabilities at October 30, 2004 and November 1, 2003 consisted of the following:

	2004	2003
Accrued compensation and benefits	\$ 73,756	\$ 56,082
Special charges	134	11,332
Other	50,805	45,572
Total accrued liabilities	\$124,695	\$112,986

**8. Debt and Credit Facilities**

The Company had no debt or short-term borrowings outstanding at October 30, 2004 and November 1, 2003.

On October 1, 2003, the Company redeemed its \$1,200 million 4.75% Convertible Subordinated Notes (Notes), which were due in October 2005 but allowed for early redemption. The redemption price was 101.90% of the principal amount of the Notes or \$1,223 million. The Company recognized a net loss on debt extinguishment of \$0.2 million in fiscal 2003, which was comprised of a gain on the Notes redemption of \$10.8 million due to the carrying value of the Notes being greater than the redemption value as a result of the mark-to-market of the interest rate component, which was being hedged by an interest rate swap agreement, of the Notes to fair value. This gain was offset by a write-off of \$11.0 million of deferred financing fees. This net loss is included in fiscal 2003 in Other, net in the consolidated statements of income.

**9. Deferred Compensation Plan Liability and Other Noncurrent Liabilities**

The deferred compensation plan liability relates to obligations due under the Analog Devices, Inc. Deferred Compensation Plan (the "Deferred Compensation Plan"). The Deferred Compensation Plan allows certain members of management and other highly-compensated employees and non-employee directors to defer receipt of all or any portion of their compensation and gains on stock options and restricted stock granted before July 23, 1997. The balance represents Deferred Compensation Plan participant accumulated deferrals, and earnings thereon, since the inception of the Deferred Compensation Plan, net of withdrawals. The total expense to the Company of the Deferred Compensation Plan was \$15.9 million in fiscal 2004, \$17.8 million in fiscal 2003 and \$20.1 million in fiscal 2002. The Company's liability under the Deferred Compensation Plan is an unsecured general obligation of the Company. The other items included in other noncurrent liabilities primarily relate to pension liabilities.

**10. Lease Commitments**

The Company leases certain of its facilities and equipment under various operating leases that expire at various dates through 2015. The lease agreements frequently include renewal and escalation clauses and require the Company to pay taxes, insurance and maintenance costs. Total rental expense under operating leases was approximately \$20 million in fiscal 2004, and \$21 million in both fiscal 2003 and fiscal 2002.

## ANALOG DEVICES, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The following is a schedule of future minimum rental payments required under long-term operating leases at October 30, 2004:

Fiscal Years	Operating Leases
2005	\$16,177
2006	9,686
2007	6,588
2008	3,725
2009	2,791
Later Years	3,762
Total	\$42,729

**11. Commitments and Contingencies***Litigation*

On June 17, 2002, the Company received a letter from Plasma Physics Corporation (“Plasma Physics”) attaching a courtesy copy of a complaint it had filed against the Company in the Eastern District of New York alleging infringement by certain of the Company’s products of two patents held by Plasma Physics. In the letter, Plasma Physics indicated that it would like to license the patents to the Company. The letter further stated that Plasma Physics would forego service of the complaint for a period of 120 days, provided that the Company would agree to undertake negotiations over terms for licensing the above-referenced patents. On October 17, 2002, Plasma Physics served the complaint. Analog has answered the complaint denying the allegations. The case is proceeding through discovery and the ultimate outcome is unknown.

On March 4, 2003, Motorola, Inc. filed an action in the United States District Court for the Eastern District of Texas against the Company, alleging that the Company infringed five patents owned by Motorola relating to semiconductor processing and semiconductor chip design. On March 11, 2003, Motorola filed a first amended complaint asserting the same five patents. The first amended complaint sought injunctive relief and unspecified damages. On April 17, 2003, the Company filed a motion under the Federal Rules of Civil Procedure for a more definite statement of Motorola’s allegations. Motorola opposed that motion, and, by order dated July 18, 2003, the Court denied the Company’s motion. On August 5, 2003, the Company filed an answer and also counterclaimed against Motorola. In the counterclaim, the Company asserted that Motorola infringed six of the Company’s patents relating to semiconductor technology. Motorola responded to the Company’s counterclaims on September 10, 2003. In 2004, a subsidiary of Motorola, Freescale Semiconductor, Inc., joined the case as a plaintiff and counterclaim-defendant. The parties have reached a settlement of the case, and on September 1, 2004 all claims and counterclaims were dismissed with prejudice. This settlement did not have a material impact on the Company’s financial position or results of operations.

On November 6, 2003, Enron Corporation commenced a proceeding in the United States Bankruptcy Court for the Southern District of New York. On December 1, 2003, Enron filed an amended complaint to add the Company as a defendant in such proceeding. The amended complaint alleges that transfers made by Enron in satisfaction of obligations it had under commercial paper are recoverable as preferential transfers and fraudulent transfers and are subject to avoidance under the United States Bankruptcy Code. It is alleged that payments made in premature satisfaction of obligations under commercial paper totaling approximately \$20 million are recoverable from J.P. Morgan Securities, Inc., Fleet Capital Markets, Fleet National Bank and/or the Company. The Company sold \$20 million of Enron commercial paper to Fleet and did not enter into any direct transactions with Enron. The Company filed a motion to dismiss the adversary proceeding. The motion to dismiss was argued at a hearing on September 21, 2004. The court took the matter under

ANALOG DEVICES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

advisement and the Company is awaiting a decision. The Company intends to vigorously defend against these claims. Although the Company believes it has meritorious defenses to the asserted claims, it is unable at this time to predict the outcome of this proceeding.

The Company is currently under audit by the United States Internal Revenue Service (the "IRS") for fiscal years 2001, 2002 and 2003. The audit has not been completed and the IRS has not issued a report on its audit.

The Company has received notice that the SEC is conducting an inquiry into the Company's granting of stock options over the last five years to officers and directors. The Company believes that other companies have received similar inquiries. Each year, the Company grants stock options to a broad base of employees (including officers and directors) and in some years those grants have occurred shortly before Analog's issuance of favorable annual financial results. The SEC has requested information regarding Analog's stock option grants and the Company intends to cooperate with the SEC. The Company is unable to predict the outcome of the inquiry.

From time to time as a normal incidence of the nature of the Company's business, various claims, charges and litigation are asserted or commenced against the Company arising from, or related to, contractual matters, patents, trademarks, personal injury, environmental matters, product liability, insurance coverage and personnel and employment disputes. As to such claims and litigation, including those items discussed above, the Company can give no assurance that it will prevail. However, the Company does not believe that these matters will have a material adverse effect on the Company's consolidated financial position, although an adverse outcome of any of these matters could have a material adverse effect on the Company's consolidated results of operations or cash flows in the quarter or annual period in which one or more of these matters are resolved.

## 12. Stockholders' Equity

### *Stock Plans*

On December 5, 2001, the Board of Directors approved the 2001 Broad-Based Stock Option Plan (2001 Plan), which provides for the issuance of stock options to purchase up to 50 million shares of common stock. The 2001 Plan provides for the issuance of stock options to non-officer employees, consultants and advisors at a price not less than 100% of the fair market value of the common stock at the time the option is granted. The Company cannot grant options under the 2001 Plan to directors or officers.

In fiscal 1998, the stockholders approved the 1998 Stock Option Plan (1998 Plan), which provides for the issuance of nonstatutory and incentive stock options to purchase up to 30 million shares of common stock. In March 2000, the stockholders approved an amendment to the 1998 Plan to increase the shares reserved for issuance by an additional 34 million shares. Officers, employees, directors, consultants and advisors of the Company and its subsidiaries are eligible to be granted options under this plan at a price not less than 100% (110% in the case of incentive stock options granted to 10% or greater stockholders) of the fair market value of the common stock on the date the option is granted. The Company's 1988 Stock Option Plan (1988 Plan) was terminated upon adoption of the 1998 Plan; however, options to purchase common stock remain outstanding under the 1988 Plan.

While the Company may grant to employees options that become exercisable at different times or within different periods, the Company has generally granted to employees options that are exercisable on a cumulative basis in annual installments of 33 1/3% on each of the third, fourth and fifth anniversaries of the date of grant or in annual installments of 25% on each of the second, third, fourth and fifth anniversaries of the date of grant.

ANALOG DEVICES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The Board of Directors authorized that from and after March 14, 2000, all options granted to non-employee directors will be granted under the 1998 Plan, under which each non-employee director is granted annually a non-statutory stock option to purchase 18,000 shares of common stock at an exercise price equal to the fair market value on the date of grant. The options granted to directors under the 1998 Plan are exercisable on a cumulative basis in annual installments of 33 1/3% on each of the first, second and third anniversaries of the date of grant. The Company's 1994 Director Option Plan, which was restated in 1998, was terminated effective March 14, 2000; however, options to purchase shares of common stock remain outstanding under the 1994 Director Option Plan.

Information with respect to activity under the stock option plans is set forth below:

Stock Option Activity	Shares Available for Grant	Options Outstanding	
		Number	Weighted Average Price Per Share
<b>Balance, November 3, 2001</b>	22,184	63,737	\$22.28
Shares authorized for 2001 Broad-Based Stock Option Plan	50,000	—	—
Shares canceled upon termination of expired stock plans	(2,196)	—	—
Options granted	(28,127)	28,127	30.57
Options exercised	—	(3,869)	6.51
Options canceled	2,144	(2,144)	34.24
<b>Balance, November 2, 2002</b>	44,005	85,851	25.41
Shares canceled upon termination of expired stock plans	(83)	—	6.42
Options granted	(1,422)	1,422	33.10
Options exercised	—	(6,617)	8.87
Options canceled	2,092	(2,092)	36.06
<b>Balance, November 1, 2003</b>	44,592	78,564	26.66
Options granted	(12,888)	12,888	45.38
Options exercised	—	(9,031)	12.44
Options canceled	2,145	(2,145)	34.54
<b>Balance, October 30, 2004</b>	33,849	80,276	\$31.00

The following table summarizes information about options outstanding at October 30, 2004:

Range of Exercise Price	Outstanding Options			Options Exercisable	
	Number Outstanding At 10/30/04	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price	Number Exercisable at 10/30/04	Weighted Average Exercise Price
\$ 3.52-\$ 9.93	14,123	3.0	\$ 7.13	14,119	\$ 7.13
\$ 9.94-\$19.85	514	3.8	13.57	505	13.46
\$19.86-\$29.78	24,857	6.6	24.20	10,556	26.14
\$29.79-\$59.55	40,277	7.5	43.26	7,215	42.76
\$59.56-\$99.25	505	5.6	73.92	293	76.06
<b>\$ 3.52-\$99.25</b>	<b>80,276</b>	<b>6.4</b>	<b>\$31.00</b>	<b>32,688</b>	<b>\$21.85</b>

Options exercisable at November 1, 2003 and November 2, 2002 were 29,097,000 and 19,625,000, respectively.

ANALOG DEVICES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The Company has an employee stock purchase plan (ESPP) that allows eligible employees to purchase, through payroll deductions, shares of the Company's common stock at 85% of the fair market value at specified dates. Employees purchased a total of 411,355 shares of common stock under this plan in fiscal 2004 (414,382 shares and 436,885 shares in fiscal 2003 and fiscal 2002, respectively) for a total purchase price of \$13.1 million (\$12.9 million and \$13.6 million in fiscal 2003 and fiscal 2002, respectively). At October 30, 2004, a total of 1,728,245 common shares remained available for issuance under the ESPP.

Under the 1991 Restricted Stock Plan, which expired in December 2000, a maximum of 5,400,000 shares of common stock were authorized for awards by the Company to key employees for nominal consideration. Shares awarded under the plan were restricted as to transfer, usually for a period of five years and, under certain conditions, were subject to repurchase by the Company at the original purchase price per share. During fiscal 2004, 2003 and 2002, \$0 million, \$0.4 million and \$0.9 million, respectively, of compensation expense was recorded in connection with grants made under this plan. As of October 30, 2004, 4,000 common shares remained subject to forfeiture under the 1991 Restricted Stock Plan.

As of October 30, 2004, a total of 115,853,685 common shares were reserved for issuance under the Company's stock plans.

*Common Stock Repurchase*

In August 2004, the Company's Board of Directors approved the repurchase of up to \$500 million of the Company's common stock. Under the repurchase program, the Company may repurchase outstanding shares of its common stock from time to time in the open market and through privately negotiated transactions. Unless terminated earlier by resolution of the Company's Board of Directors, the repurchase program will expire when the Company has repurchased all shares authorized for repurchase under the repurchase program. As of October 30, 2004, the Company had repurchased 3,863,900 shares of its common stock under this plan for approximately \$137 million at an average purchase price of \$35.48 per share. The Company's previous repurchase plan, publicly announced on August 15, 2002, was terminated by resolution of the Company's Board of Directors on August 11, 2004.

Effective July 1, 2004, companies incorporated in Massachusetts became subject to Chapter 156D of the Massachusetts Business Corporation Act. Chapter 156D eliminates the concept of treasury shares and provides that shares reacquired by a company are to be treated as authorized but unissued shares of common stock. As a result of this change, the Company has reclassified, for the balance sheets presented, shares previously classified as treasury shares as authorized, but unissued shares of common stock. At November 1, 2003, the Company had 4,040,414 shares at a cost of \$91.4 million that was classified as treasury stock and has been reclassified to common stock and capital in excess of par value.

*Preferred Stock*

The Company has 471,934 authorized shares of \$1.00 par value preferred stock, none of which is issued or outstanding. The Board of Directors is authorized to fix designations, relative rights, preferences and limitations on the preferred stock at the time of issuance. An aggregate of 300,000 shares of preferred stock have been designated as Series A Junior Participating Preferred Stock for issuance in connection with the Company's Stockholder Rights Plan.

*Common Stock Purchase Rights*

In March 1998, the Board of Directors adopted a Stockholder Rights Plan (the Stockholder Rights Plan) that replaced a plan adopted by the Board in 1988. Pursuant to the Stockholder Rights Plan, after giving effect to the Company's two-for-one stock split effected on March 15, 2000, each share of the Company's common stock currently has an associated one-half of a right. Under certain circumstances, each whole right would

ANALOG DEVICES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

entitle the registered holder to purchase from the Company one one-thousandth of a share of Series A Junior Participating Preferred Stock at a purchase price of \$180 in cash, subject to adjustment.

The rights are not exercisable and cannot be transferred separately from the common stock until ten business days (or such later date as may be determined by the Board of Directors) after (i) the public announcement that a person or group of affiliated or associated persons has acquired (or obtained rights to acquire) beneficial ownership of 15% or more of common stock or (ii) the commencement of a tender offer or exchange offer that would result in a person or group beneficially owning 20% or more of the outstanding common stock. If and when the rights become exercisable, each holder of a right shall have the right to receive, upon exercise, that number of shares of common stock (or in certain circumstances, cash, property or other securities of the Company) that equals the exercise price of the right divided by 50% of the current market price (as defined in the Stockholder Rights Plan) per share of common stock at the date of the occurrence of such event. In the event that at any time after any person becomes an acquiring person, (i) the Company is consolidated with, or merged with and into, another entity and the Company is not the surviving entity of such consolidation or merger or if the Company is the surviving entity, but shares of its outstanding common stock are changed or exchanged for stock or securities or cash or any other property, or (ii) 50% or more of the Company's assets or earning power is sold or transferred, each holder of a right shall thereafter have the right to receive upon exercise, that number of shares of common stock of the acquiring company that equals the exercise price of the right divided by 50% of the current market price of such common stock at the date of the occurrence of the event.

The rights have certain anti-takeover effects, in that they would cause substantial dilution to a person or group that attempts to acquire a significant interest in the Company on terms not approved by the Board of Directors. The rights expire on March 17, 2008 but may be redeemed by the Company for \$.001 per right at any time prior to the tenth day following a person's acquisition of 15% or more of the Company's common stock. So long as the rights are not separately transferable, each new share of common stock issued will have one-half of a right associated with it.

**13. Retirement Plans**

The Company and its subsidiaries have various savings and retirement plans covering substantially all employees. The Company maintains a defined contribution plan for the benefit of its eligible United States employees. This plan provides for Company contributions of up to 5% of each participant's total eligible compensation. In addition, the Company contributes an amount equal to each participant's pre-tax contribution, if any, up to a maximum of 3% of each participant's total eligible compensation. The total expense related to the defined contribution plan was \$22.1 million in fiscal 2004, \$21.6 million in fiscal 2003 and \$21.3 million in fiscal 2002. The Company also has various defined benefit pension and other retirement plans for certain non-U.S. employees that are consistent with local statutory requirements and practices. The total expense related to the various defined benefit pension and other retirement plans for certain non-U.S. employees was \$10.2 million in fiscal 2004, \$8.9 million in fiscal 2003 and \$6.3 million in fiscal 2002.

*Non-U.S. Plan Disclosures*

The Company's funding policy for its foreign defined benefit pension plans is consistent with the local requirements of each country. The plans' assets consist primarily of U.S. and non-U.S. equity securities, bonds, property and cash. The benefit obligations and related assets under these plans have been measured at September 30, 2004 and September 30, 2003.

ANALOG DEVICES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Net annual periodic pension cost of non-U.S. plans is presented in the following table:

	2004	2003	2002
Service cost	\$ 7,108	\$ 5,794	\$ 5,144
Interest cost	5,690	4,680	4,023
Expected return on plan assets	(6,518)	(5,833)	(5,115)
Amortization of prior service cost	178	161	136
Amortization of transitional asset	(37)	(114)	(81)
Recognized actuarial loss	350	362	359
Net periodic pension cost	<u>\$ 6,771</u>	<u>\$ 5,050</u>	<u>\$ 4,466</u>
Settlement impact	\$ 194	\$ —	\$ —
Special termination benefits	\$ 633	\$ —	\$ —

The special termination benefits recognized in fiscal 2004 relate to certain early retirement benefits provided in Ireland.

Obligation and asset data of the plans at each fiscal year end is presented in the following table:

	2004	2003
<b>Change in Benefit Obligation</b>		
Benefit obligation at beginning of year	\$105,122	\$ 79,411
Service cost	7,108	5,794
Interest cost	5,690	4,680
Settlement	(500)	—
Special termination benefits	633	—
Participant contributions	2,132	1,916
Actuarial loss	4,726	3,143
Benefits paid	(2,287)	(1,915)
Exchange rate adjustment	9,468	12,093
Benefit obligation at end of year	<u>\$132,092</u>	<u>\$105,122</u>
<b>Change in Plan Assets</b>		
Fair value of plan assets at beginning of year	\$ 71,871	\$ 55,043
Actual return on plan assets	6,141	5,050
Employer contributions	5,477	3,559
Participant contributions	2,132	1,916
Settlements	(500)	—
Benefits paid	(2,287)	(1,915)
Exchange rate adjustment	6,443	8,218
Fair value of plan assets at end of year	<u>\$ 89,277</u>	<u>\$ 71,871</u>
<b>Reconciliation of Funded Status</b>		
Funded status	\$ (42,815)	\$ (33,251)
Contribution between September 30 and fiscal year end	780	544
Unrecognized transition obligation	81	79
Unrecognized actuarial loss	29,480	22,838
Unrecognized prior service cost	329	470
Net amount recognized	<u>\$ (12,145)</u>	<u>\$ (9,320)</u>

ANALOG DEVICES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

	2004	2003
<b>Amounts Recognized in the Balance Sheet Consist of</b>		
Accrued benefit liability	\$(17,963)	\$(13,576)
Intangible asset	269	377
Accumulated other comprehensive income	5,549	3,879
<b>Net amount recognized</b>	<b>\$(12,145)</b>	<b>\$ (9,320)</b>
Other comprehensive income attributable to change in additional minimum liability recognition	\$ 1,670	\$ 622

The projected benefit obligation, accumulated benefit obligation, and fair value of plan assets for non-U.S. pension plans with accumulated benefit obligation in excess of plan assets were \$34.2 million, \$28.8 million, and \$12.8 million respectively, at September 30, 2004 and \$28.7 million, \$24.2 million and \$12.0 million, respectively, at September 30, 2003.

The range of assumptions used for the non-U.S. defined benefit plans reflects the different economic environments within the various countries. The projected benefit obligation was determined using the following weighted average assumptions:

	2004	2003
Discount rate	4.98%	5.21%
Rate of increase in compensation levels	3.57%	3.70%
Expected long-term return on plan assets	7.34%	7.34%

The expected long-term rate of return on assets is a weighted average of the long-term rates of return selected for the various countries where the Company has funded pension plans. The expected long-term rate of return on assets assumption is selected based on the facts and circumstances that exist as of the measurement date, and the specific portfolio mix of plan assets. Management, in conjunction with its actuaries, reviewed anticipated future long-term performance of individual asset categories and considered the asset allocation strategy adopted by the Company and or the trustees of the plans. While the review considered recent fund performance and historical returns, the assumption is primarily a long-term, prospective rate.

Expected fiscal 2005 Company contributions and estimated future benefit payments are as follows:

<b>Expected Company Contributions</b>	
2005	\$ 5,094
<b>Expected Benefit Payments</b>	
2005	\$ 1,891
2006	\$ 1,533
2007	\$ 1,755
2008	\$ 2,207
2009	\$ 2,449
2010-2014	\$17,867

The Company's year-end pension plan weighted average asset allocations by category were:

	2004	Strategic Target
Equities	68.52%	63.46%
Bonds	24.64%	32.52%
Property	6.84%	4.02%
<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>

## ANALOG DEVICES, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The fundamental goal underlying the pension plans' investment policy is to achieve a total rate of return that exceeds inflation over the long-term by using a certain mix of assets depending on the profile of the specific plan. Investment practices must comply with applicable laws and regulations.

The Company's investment strategy is based on an expectation that equity securities will outperform debt securities over the long term. Accordingly, in order to maximize the return on assets, a majority of assets are invested in equities. Investments within each asset class are diversified to reduce the impact of losses in single investments. The use of derivative instruments is permitted where appropriate and necessary to achieve overall investment policy objectives and asset class targets.

The Company establishes strategic asset allocation percentage targets and appropriate benchmarks for each significant asset class to obtain a prudent balance between return and risk. The interaction between plan assets and benefit obligations is periodically studied by the Company and its actuaries to assist in the establishment of strategic asset allocation targets.

**14. Income Taxes**

The reconciliation of income tax computed at the U.S. federal statutory rates to income tax expense is as follows:

	2004	2003	2002
U.S. federal statutory tax rate	35.0%	35.0%	35.0%
<b>Income tax provision reconciliation:</b>			
Tax at statutory rate	\$256,458	\$133,642	\$ 49,123
Irish income subject to lower tax rate	(88,733)	(46,169)	(23,882)
State income taxes, net of federal benefit	1,424	365	260
Research and development tax credits	(8,600)	(7,000)	(3,764)
Amortization of goodwill/intangibles	1,361	1,169	11,746
Net foreign tax in excess of U.S. federal statutory tax rate	72	1,185	960
Other, net	16	363	608
	<hr/>	<hr/>	<hr/>
Total income tax provision	\$161,998	\$ 83,555	\$ 35,051
	<hr/>	<hr/>	<hr/>

For financial reporting purposes, income before income taxes includes the following components:

	2004	2003	2002
<b>Pretax income (loss):</b>			
Domestic	\$184,485	\$ 9,679	\$(123,461)
Foreign	548,251	372,157	263,811
	<hr/>	<hr/>	<hr/>
Total income before income taxes	\$732,736	\$381,836	\$ 140,350
	<hr/>	<hr/>	<hr/>

## ANALOG DEVICES, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The components of the provision for income taxes are as follows:

	2004	2003	2002
<b>Current:</b>			
Federal	\$ 51,934	\$28,136	\$ 27,147
Foreign	80,942	52,700	48,067
State	2,191	562	400
Total current	<u>\$135,067</u>	<u>\$81,398</u>	<u>\$ 75,614</u>
<b>Deferred (prepaid):</b>			
Federal	\$ 29,981	\$ 1,922	\$(41,868)
Foreign	(3,050)	235	1,305
Total deferred (prepaid)	<u>\$ 26,931</u>	<u>\$ 2,157</u>	<u>\$(40,563)</u>

The Company continues to intend to reinvest certain of its foreign earnings indefinitely. Accordingly, no US income taxes have been provided for approximately \$1,675 million of unremitted earnings of international subsidiaries. As of October 30, 2004, the amount of unrecognized deferred tax liability on these earnings was \$351 million.

At October 30, 2004, the Company has provided a full valuation allowance for its state credit carryovers of approximately \$32.8 million due to the expiration of the state credit carryovers beginning in 2007.

On October 22, 2004, the American Jobs Creation Act of 2004 ("AJCA") was signed into law. The AJCA creates a temporary incentive for US multinational corporations to repatriate accumulated income abroad by providing an 85% dividends received deduction for certain dividends from controlled foreign corporations. The US Treasury Department is expected to issue regulations with regards to the AJCA's repatriation provision. The maximum amount of dividend distribution of foreign earnings that could potentially be subject to the provisions of the AJCA would be \$1,055 million, which is the amount reported as indefinitely reinvested earnings on the Company's 2002 Annual Report on Form 10-K.

## ANALOG DEVICES, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The significant components of the Company's deferred tax assets and liabilities for the fiscal years ended October 30, 2004 and November 1, 2003 are as follows:

	2004	2003
<b>Deferred tax assets:</b>		
Inventory reserves	\$ 29,087	\$ 37,955
Deferred income on shipments to distributors	24,407	20,415
Reserves for compensation and benefits	51,013	58,137
Tax credit carryovers	32,838	56,034
FAS 115 mark-to-market adjustment	538	(459)
Accrued liabilities	279	831
Other	6,261	2,770
	<hr/>	<hr/>
Total gross deferred tax assets	144,423	175,683
Valuation allowance	(32,838)	(31,434)
	<hr/>	<hr/>
Total deferred tax assets	111,585	144,249
	<hr/>	<hr/>
<b>Deferred tax liabilities:</b>		
Depreciation	(4,206)	(11,836)
Undistributed earnings of foreign subsidiaries	(5,788)	(4,358)
Other	(722)	(368)
	<hr/>	<hr/>
Total gross deferred tax liabilities	(10,716)	(16,562)
	<hr/>	<hr/>
Net deferred tax assets	\$100,869	\$127,687
	<hr/>	<hr/>

The Company has provided for potential liabilities due in various jurisdictions. Judgment is required in determining the worldwide income tax expense provision. In the ordinary course of global business, there are many transactions and calculations where the ultimate tax outcome is uncertain. Some of these uncertainties arise as a consequence of cost reimbursement arrangements among related entities. Although the Company believes its estimates are reasonable, no assurance can be given that the final tax outcome of these matters will not be different than that which is reflected in the historical income tax provisions and accruals. Such differences could have a material impact on the Company's income tax provision and operating results in the period in which such determination is made.

The Company is currently under audit by the United States Internal Revenue Service (the "IRS") for fiscal years 2001, 2002 and 2003. The audit has not been completed and the IRS has not issued a report on its audit.

## 15. Related Party Transactions

Certain of the Company's directors are affiliated with companies that sell products to the Company. Management believes the terms and prices for the purchases of these products are no less favorable than those that could be obtained from unaffiliated parties. One of the Company's directors became a director of Taiwan Semiconductor Manufacturing Company (TSMC) during fiscal 2002. The Company purchased approximately \$337 million, \$232 million and \$206 million of product from TSMC in fiscal year 2004, 2003 and 2002, respectively, and approximately \$15 million and \$14 million was payable to TSMC as of October 30, 2004 and November 1, 2003, respectively. Management anticipates that the Company will make significant purchases from TSMC in fiscal year 2005.

ANALOG DEVICES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

**16. Subsequent Event**

On November 22, 2004, the Board of Directors of the Company declared a cash dividend of \$0.06 per outstanding share of common stock. The dividend will be paid on December 22, 2004 to all stockholders of record at the close of business on December 3, 2004.

**REPORT OF ERNST & YOUNG LLP, INDEPENDENT REGISTERED**

**PUBLIC ACCOUNTING FIRM**

The Board of Directors and Stockholders

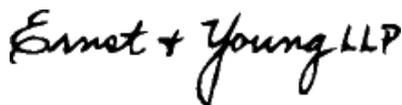
Analog Devices, Inc.

We have audited the accompanying consolidated balance sheets of Analog Devices, Inc. as of October 30, 2004 and November 1, 2003, and the related consolidated statements of income, stockholders' equity, comprehensive income and cash flows for each of the three years in the period ended October 30, 2004. Our audits also included the financial statement schedule listed in the Index at Item 15(c). These financial statements and schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the 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. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Analog Devices, Inc. at October 30, 2004 and November 1, 2003, and the consolidated results of its operations and its cash flows for each of the three years in the period ended October 30, 2004, in conformity with U.S. generally accepted accounting principles. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

As discussed in Note 2f to the consolidated financial statements, effective November 3, 2002, the Company adopted Statement of Financial Accounting Standards No. 142, *Goodwill and Other Intangible Assets*.

The image shows the handwritten signature of Ernst & Young LLP in black ink. The signature is written in a cursive, flowing style, with the words "Ernst + Young" followed by "LLP".

Boston, Massachusetts

November 15, 2004, except for Note 16, as to which  
the date is November 22, 2004

## ANALOG DEVICES, INC.

SUPPLEMENTARY FINANCIAL INFORMATION  
(Unaudited)

Quarterly financial information for fiscal 2004 and fiscal 2003 (thousands, except per share amounts and as noted):

	4Q04	3Q04	2Q04	1Q04	4Q03	3Q03	2Q03	1Q03
Net sales	632,124	717,793	678,530	605,353	557,517	520,445	501,883	467,423
Cost of sales	255,832	287,271	277,008	259,888	246,605	233,846	228,423	214,286
Gross margin	376,292	430,522	401,522	345,465	310,912	286,599	273,460	253,137
% of sales	60%	60%	59%	57%	56%	55%	55%	54%
<b>Operating expenses:</b>								
Research and development	131,121	132,856	127,802	119,953	114,422	113,672	112,829	109,309
Selling, marketing, general and administrative	86,354	89,162	85,282	79,238	75,007	72,178	71,509	69,315
Amortization of intangibles	677	680	676	677	660	656	656	652
Special charges	—	—	—	—	9,193	341	—	—
Total operating expenses	218,152	222,698	213,760	199,868	199,282	186,847	184,994	179,276
% of sales	35%	31%	32%	33%	36%	36%	37%	38%
Operating income	158,140	207,824	187,762	145,597	111,630	99,752	88,466	73,861
% of sales	25%	29%	28%	24%	20%	19%	18%	16%
<b>Nonoperating (income) expenses:</b>								
Interest expense	44	146	22	12	7,669	7,763	8,005	8,793
Interest income	(12,739)	(9,576)	(7,311)	(6,421)	(8,679)	(9,999)	(10,554)	(11,963)
Other, net	(382)	523	57	2,212	361	762	(403)	118
Total nonoperating (income) expense	(13,077)	(8,907)	(7,232)	(4,197)	(649)	(1,474)	(2,952)	(3,052)
Income before income taxes	171,217	216,731	194,994	149,794	112,279	101,226	91,418	76,913
% of sales	27%	30%	29%	25%	20%	19%	18%	16%
Provision for income taxes	38,951	47,681	42,411	32,955	24,252	22,270	20,112	16,921
Net income	132,266	169,050	152,583	116,839	88,027	78,956	71,306	59,992
% of sales	21%	24%	22%	19%	16%	15%	14%	13%
Per share — basic	.35	.45	.41	.31	.24	.22	.20	.17
Per share — diluted	.34	.43	.39	.30	.23	.21	.19	.16
<b>Shares used to compute earnings per share (in thousands):</b>								
Basic	376,064	377,144	374,864	372,052	368,511	366,025	364,267	363,138
Diluted	389,257	394,203	395,052	392,904	387,381	384,166	379,163	378,197
Dividends declared per share	.06	.06	.04	.04	—	—	—	—

**ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE**

Not applicable.

**ITEM 9A. CONTROLS AND PROCEDURES**

(a) *Evaluation of Disclosure Controls and Procedures.* Our management, with the participation of our Chief Executive Officer, or CEO, and Chief Financial Officer, or CFO, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act) as of October 30, 2004. In designing and evaluating our disclosure controls and procedures, our management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives, and our management necessarily applied its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on this evaluation, our CEO and CFO concluded that, as of October 30, 2004, our disclosure controls and procedures were (1) designed to ensure that material information relating to us, including our consolidated subsidiaries, is made known to our CEO and CFO by others within those entities, particularly during the period in which this report was being prepared and (2) effective, in that they provide reasonable assurance that information required to be disclosed by us in the reports that we file or submit under the Securities Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms.

(b) *Changes in Internal Controls.* No change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act) occurred during the fiscal quarter ended October 30, 2004 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

**ITEM 9B. OTHER INFORMATION**

Not applicable.

**PART III**

**ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT**

The response to this item is contained in part under the caption “EXECUTIVE OFFICERS OF THE COMPANY” in Part I of this Annual Report on Form 10-K, and the remainder is contained in our Proxy Statement for the Annual Meeting of Stockholders to be held on March 8, 2005 under the caption “Proposal 1 — Election of Directors,” and is incorporated herein by reference. Information relating to certain filings on Forms 3, 4, and 5 is contained in our 2005 proxy statement under the caption “Section 16(a) Beneficial Ownership Reporting Compliance,” and is incorporated herein by reference. Information required by this item pursuant to Item 401(h) and (i) of Regulation S-K relating to an audit committee financial expert and identification of the audit committee of our board of directors is contained in our 2005 proxy statement under the caption “Corporate Governance” and is incorporated herein by reference.

We have adopted a written code of business conduct and ethics that applies to our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. We intend to disclose any amendments to, or waivers from, our code of business conduct and ethics on our website which is located at [www.analog.com](http://www.analog.com).

**ITEM 11. EXECUTIVE COMPENSATION**

The response to this item is contained in our 2005 proxy statement under the captions “Directors’ Compensation,” “Information About Executive Compensation,” “Severance and Other Agreements” and “Compensation Committee Interlocks and Insider Participation,” and is incorporated herein by reference.

The sections entitled “Report of the Compensation Committee” and “Comparative Stock Performance Graph” in our 2005 proxy statement are not incorporated herein by reference.

**ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS**

The response to this item is contained in our 2005 proxy statement under the caption “Security Ownership of Certain Beneficial Owners and Management,” and “Securities Authorized for Issuance Under Equity Compensation Plans,” and is incorporated herein by reference.

**ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS**

The response to this item is contained in our 2005 proxy statement under the caption “Certain Relationships and Related Transactions,” and is incorporated herein by reference.

**ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES**

The response to this item is contained in our 2005 proxy statement under the caption “Independent Registered Public Accounting Firm Fees and Other Matters,” and is incorporated herein by reference.

**PART IV**

**ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES**

**(a)** The following are filed as part of this Annual Report on Form 10-K:

**1. Financial Statements**

The following consolidated financial statements are included in Item 8:

- Consolidated Statements of Income for the years ended October 30, 2004, November 1, 2003 and November 2, 2002
- Consolidated Balance Sheets as of October 30, 2004 and November 1, 2003
- Consolidated Statements of Stockholders' Equity for the years ended October 30, 2004, November 1, 2003 and November 2, 2002
- Consolidated Statements of Comprehensive Income for the years ended October 30, 2004, November 1, 2003 and November 2, 2002
- Consolidated Statements of Cash Flows for the years ended October 30, 2004, November 1, 2003 and November 2, 2002

**(b) Exhibits**

The exhibits listed in the Exhibit Index immediately preceding the exhibits are filed as part of this Annual Report on Form 10-K.

**(c) Financial Statement Schedules**

The following consolidated financial statement schedule is included in Item 15(c):

Schedule II — Valuation and Qualifying Accounts

All other schedules have been omitted since the required information is not present, or not present in amounts sufficient to require submission of the schedule, or because the information required is included in the consolidated financial statements or the Notes thereto.

**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 to be signed on its behalf by the undersigned, thereunto duly authorized.

ANALOG DEVICES, INC.

By: /s/ JERALD G. FISHMAN

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Jerald G. Fishman  
President, Chief Executive Officer and Director  
(Principal Executive Officer)

Date: November 30, 2004

Pursuant to the requirements of the Securities and Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

<u>Name</u>	<u>Title</u>	<u>Date</u>
<hr/> <p>/s/ RAY STATA</p> <hr/> <p>Ray Stata</p>	Chairman of the Board	November 30, 2004
<hr/> <p>/s/ JERALD G. FISHMAN</p> <hr/> <p>Jerald G. Fishman</p>	President, Chief Executive Officer and Director (Principal Executive Officer)	November 30, 2004
<hr/> <p>/s/ JOSEPH E. MCDONOUGH</p> <hr/> <p>Joseph E. McDonough</p>	Vice President-Finance and Chief Financial Officer (Principal Financial and Accounting Officer)	November 30, 2004
<hr/> <p>/s/ JAMES A. CHAMPY</p> <hr/> <p>James A. Champy</p>	Director	November 30, 2004
<hr/> <p>/s/ JOHN L. DOYLE</p> <hr/> <p>John L. Doyle</p>	Director	November 30, 2004
<hr/> <p>/s/ CHRISTINE KING</p> <hr/> <p>Christine King</p>	Director	November 30, 2004
<hr/> <p>/s/ F. GRANT SAVIERS</p> <hr/> <p>F. Grant Saviers</p>	Director	November 30, 2004
<hr/> <p>/s/ KENTON J. SICCHITANO</p> <hr/> <p>Kenton J. Sicchitano</p>	Director	November 30, 2004
<hr/> <p>/s/ LESTER C. THUROW</p> <hr/> <p>Lester C. Thurow</p>	Director	November 30, 2004

**ANALOG DEVICES, INC.**  
**ANNUAL REPORT ON FORM 10-K**  
**YEAR ENDED OCTOBER 30, 2004**  
**ITEM 15(c)**  
**FINANCIAL STATEMENT SCHEDULE**

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## ANALOG DEVICES, INC.

## SCHEDULE II — VALUATION AND QUALIFYING ACCOUNTS

Years ended October 30, 2004, November 1, 2003 and November 2, 2002

*(Thousands)*

Description	Balance at Beginning of Period	Additions Charged to Income Statement	Deductions	Balance at End of Period
<b>Accounts Receivable Reserves and Allowances:</b>				
Year ended November 2, 2002	\$15,398	\$6,285	\$6,177	\$15,506
Year ended November 1, 2003	\$15,506	\$2,835	\$8,282	\$10,059
Year ended October 30, 2004	\$10,059	\$9,578	\$7,334	\$12,303

**Exhibit Index**

<b>Exhibit No.</b>	<b>Description</b>
3.1	Restated Articles of Organization of Analog Devices, Inc., as amended, filed as an exhibit to the Company's Quarterly Report on Form 10-Q (File No. 1-7819) for the quarterly period ended May 1, 2004 as filed with the Commission on May 18, 2004 and incorporated herein by reference.
3.2	By-Laws of Analog Devices, Inc., as amended, filed as an exhibit to the Company's Quarterly Report on Form 10-Q (File No. 1-7819) for the quarterly period ended July 31, 2004, as filed with the Commission on August 17, 2004 and incorporated herein by reference.
4.1	Rights Agreement, dated as of March 18, 1998 between Analog Devices Inc. and BankBoston, N.A., as Rights Agent, filed as an exhibit to Analog Devices Inc.'s Current Report on Form 8-K (File No. 1-7819) as filed with the Commission on March 19, 1998, as amended by Amendment No. 1 filed as an exhibit to the Company's Form 8-K/ A (File No. 1-7819) as filed with the Commission on November 11, 1999 and incorporated herein by reference.
*10.1	Analog Devices, Inc. Deferred Compensation Plan, as amended by Amendment No. 1 dated December 3, 1996, Amendment No. 2 dated March 11, 1997, Amendment No. 3 dated November 5, 1997 and Amendment No. 4 dated September 10, 2003, filed as an exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended November 1, 2003 (File No. 1-7819) as filed with the Commission on December 23, 2003 and incorporated herein by reference.
*10.2	1998 Stock Option Plan of Analog Devices Inc., as amended, filed as an exhibit to the Company's Form 10-K for the fiscal year ended November 2, 2002 (File No. 1-7819) as filed with the Commission on January 29, 2003 and incorporated herein by reference.
*10.3	Analog Devices BV (Ireland) Employee Stock Option Program, as amended, filed as an exhibit to the Company's Form 10-K for the fiscal year ended November 2, 2002 (File No. 1-7819) as filed with the Commission on January 29, 2003 and incorporated herein by reference.
*10.4	Restated 1988 Stock Option Plan of Analog Devices, Inc., filed as an exhibit to the Company's Quarterly Report on Form 10-Q for the fiscal quarter ended May 3, 1997 (File No. 1-7819) as filed with the Commission on June 17, 1997 and incorporated herein by reference.
*10.5	1991 Restricted Stock Plan of Analog Devices, Inc., filed as an exhibit to the Company's Form 10-K for the fiscal year ended November 1, 1997 (File No. 1-7819) as filed with the Commission on January 28, 1998 and incorporated herein by reference.
*10.6	1994 Director Option Plan of Analog Devices, Inc., as amended, filed as an exhibit to the Company's Form 10-K for the fiscal year ended November 2, 2002 (File No. 1-7819) as filed with the Commission on January 29, 2003 and incorporated herein by reference.
10.7	BCO Technologies plc Unapproved Share Option Scheme, filed as an exhibit to the Company's Registration Statement on Form S-8 (File No. 333-50092) as filed with the Commission on November 16, 2000 and incorporated herein by reference.
10.8	BCO Technologies plc Approved Share Option Scheme, filed as an exhibit to the Company's Registration Statement on Form S-8 (File No. 333-50092) as filed with the Commission on November 16, 2000 and incorporated herein by reference.
10.9	ChipLogic, Inc. Amended and Restated 1998 Stock Plan, filed as an exhibit to the Company's Registration Statement on Form S-8 (File No. 333-53314) as filed with the Commission on January 5, 2001 and incorporated herein by reference.
10.10	Staccato Systems, Inc. 1998 Stock Plan, filed as an exhibit to the Company's Registration Statement on Form S-8 (File No. 333-53828) as filed with the Commission on January 17, 2001 and incorporated herein by reference.
10.11	Various individual stock restriction and similar agreements between the registrant and employees thereof relating to ChipLogic, Inc., filed as an exhibit to the Company's Registration Statement on Form S-8 (File No. 333-57444) as filed with the Commission on March 22, 2001, as amended by Amendment No. 1 filed as an exhibit to the Company's Post-Effective Amendment to Registration Statement on Form S-8 (File No. 333-57444) as filed with the Commission on March 23, 2001 and incorporated herein by reference.

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<b>Exhibit No.</b>	<b>Description</b>
10.12	Analog Devices, Inc. 2001 Broad-Based Stock Option Plan, as amended, filed as an exhibit to the Company's Form 10-K for the fiscal year ended November 1, 2003 (File No. 1-7819) as filed with the Commission on January 29, 2003 and incorporated herein by reference.
10.13	Amended and restated lease agreement dated May 1, 1992 between Analog Devices, Inc. and the trustees of Everett Street Trust relating to the premises at 3 Technology Way, Norwood, Massachusetts, filed as an exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended November 1, 1997 (File No. 1-7819) as filed with the Commission on January 28, 1998 and incorporated herein by reference.
10.14	Guaranty dated as of May 1, 1994 between Analog Devices, Inc. and Metropolitan Life Insurance Company relating to the premises at 3 Technology Way, Norwood, Massachusetts, filed as an exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended October 28, 2000 (File No. 1-7819) as filed with the Commission on January 28, 2000 and incorporated herein by reference.
10.15	Letter Agreement dated as of May 18, 1994 between Analog Devices, Inc. and Metropolitan Life Insurance Company relating to the premises at 3 Technology Way, Norwood, Massachusetts, filed as an exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended October 28, 2000 (File No. 1-7819) as filed with the Commission on January 28, 2000 and incorporated herein by reference.
10.16	Reimbursement Agreement dated May 18, 1992 between Analog Devices, Inc. and the trustees of Everett Street Trust, filed as an exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended November 1, 1997 (File No. 1-7819) as filed with the Commission on January 28, 2002 and incorporated herein by reference.
10.17	Lease agreement dated August 8, 1990 between Precision Monolithics, Inc. and Bourns, Inc. relating to the premises at 1525 Comstock Road, Santa Clara, California, filed as an exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended November 2, 2002 (File No. 1-7819) as filed with the Commission on January 28, 2002 and incorporated herein by reference.
10.18	Lease amendment dated May 1, 1996 to the Lease Agreement dated August 8, 1990 between Analog Devices, Inc. and Bourns, Inc., relating to premises located at 1525 Comstock Road, Santa Clara, California, filed as an exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended November 2, 2002 (File No. 1-7819) as filed with the Commission on January 28, 2002 and incorporated herein by reference.
*10.19	Form of Employee Retention Agreement, as amended, filed as an exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended November 1, 1997 (File No. 1-7819) as filed with the Commission on January 28, 1998 and incorporated herein by reference.
*10.20	Employee Change in Control Severance Policy of Analog Devices, Inc., as amended, filed as an exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended October 30, 1999 (File No. 1-7819) as filed with the Commission on January 28, 2000 and incorporated herein by reference.
*10.21	Senior Management Change in Control Severance Policy of Analog Devices, Inc., as amended, filed as an exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended October 30, 1999 (File No. 1-7819) as filed with the Commission on January 28, 2000 and incorporated herein by reference.
*10.22	Letter agreement between Analog Devices Inc. and Jerald G. Fishman dated June 21, 2000 relating to acceleration of stock options upon the occurrence of certain events, filed as an exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended November 2, 2002 (File No. 1-7819) as filed with the Commission on January 28, 2002 and incorporated herein by reference.
10.23	Lease Agreement dated June 16, 1995 between Analog Devices, Inc. and Ferrari Brothers, relating to the premises at 610 Weddell Drive, Sunnyvale, California, filed as an exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended November 2, 2002 (File No. 1-7819) as filed with the Commission on January 28, 2002 and incorporated herein by reference.

## Table of Contents

<b>Exhibit No.</b>	<b>Description</b>
10.24	Lease amendment dated March 1, 1996 to the Lease Agreement dated June 16, 1995 between Analog Devices, Inc. and Ferrari Brothers, relating to premises located at 610 Weddell Drive, Sunnyvale, California, filed as an exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended November 2, 2002 (File No. 1-7819) as filed with the Commission on January 28, 2002 and incorporated herein by reference.
10.25	Lease amendment dated March 21, 2000 to the Lease Agreement dated June 16, 1995 between Analog Devices, Inc. and Ferrari Brothers, relating to premises located at 610 Weddell Drive, Sunnyvale, California, filed as an exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended November 2, 2002 (File No. 1-7819) as filed with the Commission on January 28, 2002 and incorporated herein by reference.
10.26	Lease Agreement dated February 8, 1996 between Analog Devices, Inc. and Massachusetts Institute of Technology, relating to premises located at 21 Osborn Street, Cambridge, Massachusetts, filed as an exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended November 3, 2001 (File No. 1-7819) as filed with the Commission on January 28, 2002 and incorporated herein by reference.
*10.27	Trust Agreement for Deferred Compensation Plan dated as of October 1, 2003 between Analog Devices, Inc. and Fidelity Management Trust Company, filed as an exhibit to the Company's Annual Report on Form 10-K for the fiscal year ended November 1, 2003 (File No. 1-7819) as filed with the Commission on December 23, 2003 and incorporated herein by reference.
*10.28	Fiscal 2004 Bonus Plan for U.S.-Based Employees filed as an exhibit to the Company's 10-Q for the quarter ended May 1, 2004, (File No. 1-7819) as filed with the Commission on May 18, 2004 and incorporated herein by reference.
*10.29	Fiscal 2004 Bonus Plan for Europe-Based Employees filed as an exhibit to the Company's 10-Q for the quarter ended May 1, 2004, (File No. 1-7819) as filed with the Commission on May 18, 2004 and incorporated herein by reference.
*10.30	Form of Stock Option Confirming Memorandum Grant of Non-Qualified Stock Option for executive officers, including Named Executive Officers, pursuant to the Analog Devices, Inc. 1998 Stock Option Plan, as amended, filed as an exhibit to the Company's Current Report on Form 8-K (File No. 1-7819) as filed with the Commission on October 20, 2004 and incorporated herein by reference.
*10.31	Form of Stock Option Confirming Memorandum Grant of Non-Qualified Stock Option for directors pursuant to the Analog Devices, Inc. 1998 Stock Option Plan, as amended, filed as an exhibit to the Company's Current Report on Form 8-K (File No. 1-7819) as filed with the Commission on October 20, 2004 and incorporated herein by reference.
14	Analog Devices, Inc. Code of Business Conduct and Ethics, filed as an exhibit to the Company's Form 10-K for the fiscal year ended November 1, 2003 (File No. 1-7819) as filed with the Commission on January 29, 2003 and incorporated herein by reference.
†21	Subsidiaries of the Company.
†23	Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm.
†31.1	Certification Pursuant to Rule 13a-14(a) and 15d-14(a) of the Exchange Act, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (Chief Executive Officer).
†31.2	Certification Pursuant to Rule 13a-14(a) and 15d-14(a) of the Exchange Act, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (Chief Financial Officer).
†32.1	Certification Pursuant to 18 U.S.C. Section 1350 (Chief Executive Officer).
†32.2	Certification Pursuant to 18 U.S.C. Section 1350 (Chief Financial Officer).

† Filed Herewith.

\* Management contracts and compensatory plan or arrangements required to be filed as an Exhibit pursuant to Item 15(b) of Form 10-K.

## SUBSIDIARIES

The following is a list of the Company's subsidiaries:

	Organized Under Law of	Percentage of Voting Securities Owned by Registrant as of October 30, 2004
Analog Devices Limited	United Kingdom	100%
Analog Devices, GmbH	Germany	100%
Analog Devices, SAS	France	100%
Analog Devices, K.K.	Japan	100%
Analog Devices APS	Denmark	100%
Analog Devices Nederland, B.V.	The Netherlands	100%
Analog Devices International, Inc.	Massachusetts	100%
Analog Devices Israel, Ltd.	Israel	100%
* Analog Devices A.B.	Sweden	100%
Analog Devices SRL	Italy	100%
Analog Devices, GMBH	Austria	100%
Analog Devices Korea, Ltd.	Korea	100%
Analog Devices, B.V.	The Netherlands	100%
Analog Devices Holdings, B.V.	The Netherlands	100%
Analog Devices Research & Development Ltd.	Ireland	100%
Analog Devices (Philippines), Inc.	The Philippines	100%
Analog Devices Foundry Services, Inc.	Delaware	100%
Analog Devices Asian Sales, Inc.	Delaware	100%
Analog Devices Taiwan, Ltd.	Taiwan	100%
Analog Devices Ireland, Ltd.	Ireland	100%
Analog Devices Hong Kong, Ltd.	Hong Kong	100%
Analog Devices Pty, Ltd.	Australia	100%
Analog Devices India Private Limited	India	100%
Analog Devices Gen. Trias, Inc.	The Philippines	100%
Analog Devices International Financial Services Limited	Ireland	100%
Analog Development (Israel) 1996 Ltd.	Israel	100%
Analog Devices (China) Co. Ltd.	China	100%
Analog Devices Canada, Ltd.	Canada	100%
Edinburgh Portable Compilers Limited	Scotland	100%
ADI Micromachines, Inc.	Delaware	100%
Analog Devices IMI, Inc.	California	100%
Analog Devices ChipLogic, Inc.	California	100%
Staccato Systems, Inc.	California	100%
Analog Devices Australia Pty. Ltd.	Australia	100%
ChipLogic India Private Limited	India	100%
Analog Nominees Limited	Ireland	100%
Analog/NCT Supply Ltd.	Delaware	50%
Analog Devices Realty Holdings, Inc.	The Philippines	40%
Analyzed Investments, Ltd.	Ireland	7.4%

\* Also doing business as Analog Devices Aktiebolag, Suomen sivuliike

**CONSENT OF ERNST & YOUNG LLP, INDEPENDENT REGISTERED**

**PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in the Registration Statements (Form S-8 Nos. 2-63561, 2-90023, 2-95495, 33-2502, 33-4067, 33-22604, 33-22605, 33-29484, 33-39851, 33-39852, 33-43128, 33-46520, 33-46521, 33-60642, 33-60696, 33-61427, 33-64849, 333-04771, 333-04819, 333-04821, 333-08493, 333-40222, 333-40224, 333-47787, 333-47789, 333-48243, 333-56529, 333-57444, 333-69359, 333-79551, 333-87055, 333-50092, 333-53314, 333-53828, 333-75170 and 333-113510, and Form S-3 Nos. 333-08505, 333-08509, 333-17651, 333-87053, 333-48928, 333-51530, 333-53660 and 333-113510) of Analog Devices, Inc. and in the related Prospectuses of our report dated November 15, 2004 (except for Note 16, as to which the date is November 22, 2004), with respect to the consolidated financial statements and schedule of Analog Devices, Inc. included in this Annual Report (Form 10-K) for the year ended October 30, 2004.

*Ernst + Young LLP*

Boston, Massachusetts

November 29, 2004

**CERTIFICATION**

I, Jerald G. Fishman, certify that:

1. I have reviewed this Annual Report on Form 10-K of Analog Devices, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:
  - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b) [Not Applicable];
  - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: November 30, 2004

/s/ JERALD G. FISHMAN

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Jerald G. Fishman  
President and Chief Executive Officer  
(Principal Executive Officer)

**CERTIFICATION**

I, Joseph E. McDonough, certify that:

1. I have reviewed this Annual Report on Form 10-K of Analog Devices, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:
  - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b) [Not Applicable]
  - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: November 30, 2004

/s/ JOSEPH E. MCDONOUGH

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Joseph E. McDonough  
Vice President-Finance  
and Chief Financial Officer  
(Principal Financial and Accounting Officer)

**Certification Pursuant to 18 U.S.C. Section 1350,**

**As Adopted Pursuant to  
Section 906 of the Sarbanes-Oxley Act of 2002**

In connection with the Annual Report on Form 10-K of Analog Devices, Inc. (the "Company") for the period ended October 30, 2004 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Jerald G. Fishman, Chief Executive Officer of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ JERALD G. FISHMAN

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Jerald G. Fishman  
Chief Executive Officer

Dated: November 30, 2004

**Certification Pursuant to 18 U.S.C. Section 1350,**

**As Adopted Pursuant to  
Section 906 of the Sarbanes-Oxley Act of 2002**

In connection with the Annual Report on Form 10-K of Analog Devices, Inc. (the "Company") for the period ended October 30, 2004 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Joseph E. McDonough, Chief Financial Officer of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ JOSEPH E. MCDONOUGH

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Joseph E. McDonough  
Chief Financial Officer

Dated: November 30, 2004