
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 November 2, 2002
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 stock held by non-affiliates of the registrant was approximately \$12,588,076,971 based on the last reported sale of the Common Stock on the New York Stock Exchange Composite Tape reporting system on May 3, 2002.

As of December 31, 2002 there were 363,754,360 shares of Common Stock, \$0.16 2/3 par value per share, outstanding.

Documents Incorporated by Reference

Document Description	Form 10-K Part
Portions of the Registrant's Proxy Statement for the Annual Meeting of Stockholders to be held March 11, 2003	III

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PART I

ITEM 1. BUSINESS

Company Overview

We are a leader in the design, manufacture and marketing of high-performance analog, mixed-signal and digital signal processing integrated circuits. Since our inception in 1965, we have focused on solving the engineering challenges associated with signal processing in electronic equipment. 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, smart munitions, base stations, central office equipment, wireless telephones, computers, cars, 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. Signal processing is where the analog and digital worlds meet to provide the advantages of digital technology to the real world.

We produce a wide range of products that are designed to meet the technology needs of a broad base of customers. Markets for our products include communications, computers and computer peripherals, consumer electronics and industrial instrumentation.

During fiscal 2002, approximately 40% of our revenue came from the industrial market, which includes factory automation, medical equipment, scientific instrumentation, automatic test equipment and aerospace and defense systems.

Revenues from the communications market represented approximately one-third of our fiscal 2002 revenues. 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 2002, the computer market accounted for approximately 15% of our revenue.

The demand for our products in high-performance consumer electronics has been increasing and reached approximately 10% of our revenue during fiscal 2002. Applications in this market include digital cameras and camcorders, DVD players, 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 18 countries, including the United States.

We are headquartered near Boston, in Norwood, Massachusetts, and have manufacturing facilities in Massachusetts, California, North Carolina, Ireland, the United Kingdom, the Philippines and Taiwan. We were founded in 1965 and are incorporated in Massachusetts. As of November 2, 2002, we employed approximately 8,600 people 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. 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. 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.

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 acceleration. 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 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 as well as custom products designed for specific applications and customers. 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 many emerging markets, including 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, DSP and mixed-signal, 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 highest revenue product accounted for approximately 2% of our revenue for fiscal 2002. Approximately 80% of our products are proprietary and equivalent products are not available. Only a limited number of other companies may provide products with similar function.

Analog Products

Our analog IC technology has been the foundation of our business for more than 30 years, and we believe we are one of the world’s largest suppliers of analog ICs. Our analog ICs are primarily high-performance, single-function devices. The majority of our analog IC product revenue is attributable to sales of data converters and amplifiers. The data converters and amplifiers product categories accounted for 55% of our fiscal 2002 revenues. Other analog IC products include analog signal processing devices such as analog multipliers, voltage references and comparators. Over the past few years we have been expanding our 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 and thermal monitoring ICs. We are also expanding our analog IC product line to better meet the needs of customers designing portable battery-operated equipment.

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Our analog IC products tend to be 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. Most of our analog ICs have been purchased by OEMs to serve the industrial, instrumentation, defense/ aerospace and automotive markets, but during the past few years they have been increasingly used for applications in communications, computers and other consumer applications requiring high-performance real-world signal processing. The principal requirements these applications have in common include higher accuracy, lower cost per function, smaller size, lower weight and fewer components for improved reliability.

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 structures 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. Our MEMS products are known as accelerometers and are used to monitor acceleration in a wide variety of applications. The majority of our current revenue from micromachined products is derived from accelerometers used by automotive manufacturers in airbag applications. Recently, we have combined our MEMS technology with silicon-on-insulator, or SOI, technology we obtained through the acquisition of BCO Technologies plc in fiscal 2000. SOI technology creates multiple layers of silicon as a single substrate. Our next generation of inertial sensors for the airbag market will incorporate both SOI and MEMS technology. SOI MEMS is a process where one layer is used for the MEMS device and the other layer is used for the circuitry. Emerging applications include global positioning satellite automobile navigation systems, earthquake detectors and high-end computer joysticks. We have recently introduced a MEMS gyroscope that could have applications in automobiles, industrial robotics and various navigation applications.

DSP Products

DSPs are processors or microcomputers that are optimized for high-speed numeric processing, which is essential for real-time processing of digital data representing analog signals. 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 product development costs and time-to-market.

Mixed-Signal Products

Our products also include multi-function mixed-signal devices and chipsets that incorporate combinations of analog and DSP technology. 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, 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 products supplied to, our major markets:

Industrial — Our industrial market includes the following areas:

Industrial Process Automation — Our industrial process automation market includes data acquisition 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 application-specific ICs. Combinations of analog and mixed-signal 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.

Military/ Aerospace — The military, 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 appropriate military 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.

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 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, which serves as an alternative to an electromechanical sensor. 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 and non-automotive applications including earthquake detectors and high-end computer joysticks.

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 as they are processed and transmitted. Our expertise in combining analog and digital functionality on a single chip or chip set has enabled us to develop products that address the technological challenges of this complex and rapidly expanding market space. The need for higher speed and reduced power consumption, coupled with more reliable, bandwidth-efficient communications, has been creating demand for our products, which are used in systems that include digital, analog and mixed-signal processing capability. Our products are used in the full spectrum of signal processing for audio, data, image or video communication. In broadband and wireless communication applications, our products are incorporated into data and digital subscriber line, or DSL, modems, cellular telephones, base station equipment 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. Our ability to integrate analog, DSP and mixed-signal functionality on ICs has enabled us to supply many high-performance critical components required by PC manufacturers. The computer industry seeks to develop and market ever smaller and lighter personal computers. This need increases demand for high-performance ICs to monitor power usage to enable manufacturers to use smaller batteries and extend battery life between charges. We currently supply a variety of ICs used in this market for functions such as graphic displays, interfaces between PCs and peripherals such as modems and printers, power and battery management, and enhanced audio input and output capability for business and entertainment applications.

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Consumer Electronics — Increased market demand from 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 home theater systems, video projectors, DVD players and digital camcorders and cameras, 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 for improving existing products and processes. We spent approximately \$424 million during fiscal 2002 on the design, development and improvement of new and existing products and processes, compared to approximately \$465 million during fiscal 2001 and approximately \$390 million during fiscal 2000.

Our R&D 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 30 design centers and manufacturing sites located throughout the world.

Patents and Other Intellectual Property Rights

As of November 2, 2002, we held 704 United States patents and had 446 patent applications pending with the United States Patent and Trademark Office with expiration dates ranging from 2002 through 2022. 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. These trademarks are valuable assets. 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 and independent sales representatives. Approximately 30% of our fiscal 2002 net sales were to customers in North America. As of December 1, 2002, we had 13 sales offices in the United States, and our third-party distribution channel consisted of six national and regional third-party distributors and several independent sales representatives in numerous locations throughout the United States and Canada.

Approximately 21% of our fiscal 2002 net sales were to customers in Europe, 17% to customers in Japan, and 32% to customers in other international markets. As of December 1, 2002, we had direct sales offices in Austria, Canada, China, Denmark, France, Germany, Hong Kong, India, Israel, Italy, Japan, Korea, the Netherlands, Singapore, Sweden, Taiwan and the United Kingdom. We also had sales representatives and/or distributors in approximately 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 4 in the Notes to our Consolidated Financial Statements contained in Item 8 of this Annual Report on Form 10-K.

A significant portion of our fiscal 2002 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, short-form 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 during their product development cycles.

We have thousands of customers worldwide. Our largest single customer represented approximately 3% of net sales for fiscal 2002, and our 20 largest customers accounted for approximately 27% of our net sales in fiscal 2002.

See Note 4 "Industry and Geographic Segment Information" of the Notes to our Consolidated Financial Statements contained in Item 8 of this Annual Report on Form 10-K.

Foreign Operations

Through subsidiaries and affiliates, we conduct business in numerous countries outside the United States. 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.

During fiscal 2002, approximately 70% of our revenues were derived from customers in international markets. We have manufacturing facilities outside the United States in Ireland, the United Kingdom, the Philippines and Taiwan. 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, particularly in the aftermath of the terrorist attacks of September 11, 2001 and the response to them by the United States and its allies. These risks include air transportation disruptions, expropriation, currency controls and changes in currency exchange rates, tax and tariff rates and freight rates, and social and political unrest. Although we engage in hedging transactions to reduce our exposure to currency exchange rate

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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 manufacture these devices include silicon wafers, processing chemicals (including liquefied gases), precious metals, ceramic packages 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 micromachined ICs. We also use industry-standard 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 foundries using sub-micron digital CMOS processes. We operate wafer fabrication facilities in Wilmington and Cambridge, Massachusetts; Santa Clara and Sunnyvale, California; Belfast, Northern Ireland and Limerick, Ireland. We also operate assembly and test facilities located in the Philippines and Taiwan and use third-party subcontractors.

Some of our assembled products are assembled and tested within our U.S. manufacturing facilities, while others are assembled and tested at our facilities outside the United States or by subcontractors, principally in the Far East.

To respond to production capacity requirements, we significantly expanded our analog manufacturing capacity over the past several years. Much of the capacity expansion was completed by the end of fiscal 2001 when we incurred \$297 million of capital spending. In the two years prior to fiscal 2002, major wafer fabrication expansions were completed in Wilmington, Massachusetts, Sunnyvale, California, and Limerick, Ireland. In fiscal 2001, we completed construction of an additional assembly and test facility in Cavite, Philippines and have transferred substantially all of our test operations to that location. In the second quarter of fiscal 2002, we announced that we would transition products from our three older four-inch wafer fabrication facilities to our three six-inch and one eight-inch wafer fabrication facilities. The transition of products from and closure of our four-inch wafer fabrication facilities is expected to be completed by mid-fiscal 2003. Capital spending in fiscal 2002 was \$57 million, down substantially from the \$297 million incurred in fiscal 2001 because of the slowdown in our served markets. We currently plan to make capital expenditures of approximately \$80 million in fiscal 2003, and capital expenditures are expected to remain low, as we believe we currently have ample installed capacity to significantly increase internal production levels.

Our products require a wide variety of components, 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 these components from sole-source suppliers, such as with components we purchase from 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 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. 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 2002 was approximately \$262 million, up from approximately \$210 million at the end of fiscal 2001. 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

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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 orders to be canceled or deliveries delayed by customers without penalty. Accordingly, we believe that our backlog at any time should not be used as an indication of our future revenues.

Government Contracts

We estimate that approximately 5% of our fiscal 2002 total worldwide 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 mixed-signal and linear signal processing components. Competitors for our analog, mixed-signal 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 comprised of acceleration sensors, and our main competitors in that market are Bosch, Motorola and Denso, all of whom use a multichip solution. We use a single chip solution that we believe provides cost, reliability and functional advantages in the marketplace.

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. Some also offer other electronic 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 November 2, 2002, we employed approximately 8,600 persons. 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 and test engineers involved in the manufacture of existing products and the development of new products and processes. The competition for such personnel is intense, and the loss of key employees could have a material adverse effect on us. We believe that relations with our employees are good.

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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:

Plant Locations Owned:	Use	Floor Space
Wilmington, MA	Wafer fabrication, testing, engineering and administrative offices	265,200 sq. ft.
Wilmington, MA	Engineering, marketing and administrative offices	108,000 sq. ft.
Wilmington, MA	Engineering, marketing and administrative offices	65,500 sq. ft.
Wilmington, MA	Engineering, marketing and administrative offices	150,000 sq. ft.
Westwood, MA	Engineering and administrative offices	100,500 sq. ft.
Limerick, Ireland	Wafer fabrication, wafer probe and testing, engineering and administrative offices	375,000 sq. ft.
Greensboro, NC	Components and board assembly and testing, engineering and administrative offices	98,700 sq. ft.
Cavite, Philippines	Components assembly and testing, engineering and administrative offices	400,000 sq. ft.
Manila, Philippines	Components assembly and testing, engineering and administrative offices	74,000 sq. ft.

Principal Properties Leased:	Use	Floor Space	Lease Expiration	Renewals
Norwood, MA	Corporate headquarters, engineering, components testing, sales and marketing offices	135,000 sq. ft.	(fiscal year) 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
Santa Clara, CA	Wafer fabrication, components assembly and testing, engineering and administrative offices	72,800 sq. ft.	2007	2, five-yr. periods
Santa Clara, CA	Engineering and administrative offices	43,500 sq. ft.	2007	2, five-yr. periods
Sunnyvale, CA	Wafer fabrication	63,100 sq. ft.	2010	1, five-yr. period
Taipei, Taiwan	Components testing, engineering and administrative offices	45,700 sq. ft.	2003	None
Austin, TX	Engineering and administrative offices	40,000 sq. ft.	2006	1, five-yr. period
Greensboro, NC	Engineering and administrative offices	41,900 sq. ft.	2006	2, one two-yr. period and one three-yr. period

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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 48 locations overseas under operating lease agreements. These leases expire at various dates through the year 2020. 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

We are a defendant in a federal lawsuit brought in the United States District Court for the Northern District of California by Linear Technology Corporation, or LTC. On June 26, 1997, LTC filed suit against us, Impala Linear Corporation, Toyoda Automatic Loom Works, Ltd., Maxim Integrated Products, Inc. and Unitrode Corporation alleging patent infringement and seeking injunctive relief and unspecified damages. The case was originally scheduled for trial on liability issues beginning on September 7, 1999. The original district judge recused himself and the case was reassigned three times before the court granted several motions for summary judgment of non-infringement in favor of the defendants in September 2001. The court also denied LTC's motion for summary judgment of infringement and willful infringement against us. On October 4, 2001, the court indicated that it would stay the matter and certify similar issues as to us to allow all parties to take appeals to the United States Court of Appeals for the Federal Circuit, or Federal Circuit. LTC, Maxim and Unitrode filed cross appeals with the Federal Circuit. On November 1, 2001, LTC and we jointly petitioned the Federal Circuit to permit them to address the issues certified for appeal. On February 15, 2002, the Federal Circuit dismissed all of the appeals due to improper certification and denied the petition of LTC and us for permission to appeal. On June 4, 2002, LTC and we filed a stipulation of dismissal and proposed order dismissing all of LTC's claims against us without prejudice. The judge issued an order on June 6, 2002, dismissing the case against us without prejudice. While the renewed appeals of the other defendants include a challenge to the propriety of the dismissal of us being without prejudice, this matter is formally concluded as to us.

On June 17, 2002, we received a letter from Plasma Physics Corporation, or Plasma Physics, attaching a courtesy copy of a complaint they 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 they 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. We met with Plasma Physics, and those negotiations are ongoing. On October 17, 2002, Plasma Physics served the complaint. We have answered the complaint denying the allegations, and the litigation is in its early stages.

On October 7, 2002, Townshend Intellectual Property, L.L.C., or Townshend, commenced an action in the United States District Court for the Northern District of California against us, alleging that we infringed eight patents alleged to be owned by Townshend. Townshend's complaint alleges that our standalone embedded modems and single chip internet modems infringe those patents. The complaint seeks injunctive relief and unspecified damages. By letter dated October 16, 2002, we sought indemnification from Lucent Technologies, Inc. Lucent has denied that it has any indemnification obligations to us. We filed an answer to the complaint with the court, on or about December 12, 2002, denying infringement and liability. We continue to evaluate issues with regard to defenses and counterclaims, as well as indemnification issues with respect to Lucent.

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

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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 November 2, 2002.

EXECUTIVE OFFICERS OF THE COMPANY

The following table sets forth (i) the name, age and position of each of our executive officers as of January 15, 2003, 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.

Executive Officer	Age	Position(s)	Business Experience
Ray Stata	68	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	57	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.
Ross Brown	58	Vice President, Human Resources	Vice President, Human Resources since May 1993; U.S. Personnel Manager for Digital Equipment Corp. from 1990 to 1993; Senior Group Personnel Manager at Digital Equipment Corp., a provider of computer systems and components, software and services, from 1986 to 1990.
Samuel H. Fuller	56	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.
Robert R. Marshall	48	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	43	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.

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<u>Executive Officer</u>	<u>Age</u>	<u>Position(s)</u>	<u>Business Experience</u>
Robert McAdam	52	Group Vice President, 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	52	Group Vice President, DSP, Media and Communications 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	55	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	42	Vice President, Worldwide Sales and Marketing	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.
Franklin Weigold	63	Vice President and General Manager, Micromachined Products	Vice President and General Manager, Micromachined Products since November 1999; Vice President and General Manager, Transportation and Industrial Products Division from March 1992 to November 1999; President and Chief Operating Officer of Unitrode from June 1990 to March 1992.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON STOCK AND RELATED STOCKHOLDER MATTERS

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

Period	Fiscal 2002		Fiscal 2001	
	High	Low	High	Low
First Quarter	\$48.84	\$39.90	\$68.00	\$42.63
Second Quarter	\$47.95	\$34.25	\$55.01	\$30.50
Third Quarter	\$40.50	\$19.70	\$53.30	\$38.41
Fourth Quarter	\$28.39	\$17.88	\$52.74	\$29.00

We have never paid any cash dividends on our common stock and currently have no intention to do so.

The approximate number of holders of record of our common stock at December 31, 2002 was 5,281. This number does not include stockholders for whom shares are held in a "nominee" or "street" name. On December 31, 2002, the last reported sales price of our common stock as reported on the New York Stock Exchange was \$23.87 per share.

On December 15, 2001, 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, 2002, 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.

On December 15, 2002, 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.

ITEM 6. SELECTED FINANCIAL DATA

(thousands except per share amounts)	2002	2001	2000	1999	1998
Statement of Operations data:					
Net sales	\$1,707,508	\$2,276,915	\$2,577,547	\$1,450,379	\$1,230,571
Net income before cumulative effect of change in accounting principle	\$ 105,299	\$ 356,377	\$ 607,132	\$ 196,819	\$ 119,488
Cumulative effect of change in accounting principle	—	—	—	—	37,080
Net income after cumulative effect of change in accounting principle	\$ 105,299	\$ 356,377	\$ 607,132	\$ 196,819	\$ 82,408
Net income per share:					
Basic	0.29	1.00	1.71	0.58	0.26
Diluted	0.28	0.93	1.59	0.55	0.25
Balance Sheet data:					
Total assets	\$4,980,191	\$4,884,863	\$4,411,337	\$2,218,354	\$1,861,730
Long-term debt and non-current obligations under capital leases	1,274,487	1,206,038	1,212,960	16,214	340,758

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS**Results of Operations***Fiscal Year 2002 Overview*

Fiscal 2002 was a challenging year for us. We recorded quarterly revenues of \$806 million in the fourth quarter of fiscal 2000, which represented the peak of the current cycle. Our revenues then declined significantly to \$393 million in the first quarter of fiscal 2002. We then experienced a gradual sequential recovery for the last three quarters of fiscal 2002, with our fiscal 2002 fourth quarter revenue reaching \$456 million. Our gross margins remained strong at 53% for fiscal 2002. Operating expenses declined by almost 9% as a result of cost containment measures throughout our company. Our cash flow continued to be strong, with cash increasing by over \$100 million during fiscal 2002 to \$2,900 million after purchasing approximately \$100 million of our common stock.

Sales

Net sales were \$1,708 million in fiscal 2002, a decrease of 25% from net sales of \$2,277 million in fiscal 2001. Approximately 80% of our net sales in both fiscal 2002 and fiscal 2001 were from analog products, which decreased 26% from fiscal 2001 to fiscal 2002 and decreased 4% from fiscal 2000 to fiscal 2001. DSP product sales represented the remaining 20% of our net sales in both fiscal 2002 and fiscal 2001 and decreased 22% in fiscal 2002 after declining 33% in fiscal 2001. The decreases in net sales in fiscal 2002 and fiscal 2001 were attributable to declining demand in several markets that we serve, particularly the communications market, as well as an overall decline in the general economy. Sales of new products, which we define as sales of products introduced in the prior six quarters, were 21% of net sales in fiscal 2002 as compared to 19% in fiscal 2001. The year-over-year increase in new products as a percentage of sales was primarily due to the introduction of record numbers of new analog IC products throughout the economic downturn experienced over the past two years.

Net sales were \$2,277 million in fiscal 2001, a decrease of 12% from net sales of \$2,578 million in fiscal 2000. This decrease in net sales was attributable to declining demand in the markets we serve, particularly the communications market, as well as an overall decline in the general economy. Sales of new products were 19% of net sales in fiscal 2001 as compared to 25% in fiscal 2000. The year over year decrease in new products as a percentage of sales was primarily due to the sharp downturn in sales of our communications products.

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

Region	Fiscal 2002	Fiscal 2001	Fiscal 2000
North America	30%	39%	45%
Europe	21%	24%	19%
Japan	17%	15%	14%
Southeast Asia	32%	22%	22%

The fiscal 2002 decline in North American sales as a percentage of total net sales was principally attributable to an overall decline in the communications market, a cyclical downturn in the semiconductor industry as well as the ongoing transfer of customer manufacturing activity to lower cost locations, primarily Southeast Asia. Sales in fiscal 2002 to Japan increased slightly from fiscal 2001 as a percentage of net sales but declined by 15% in dollars. Fiscal 2002 sales to Southeast Asia increased as a percentage of net sales by 10% as compared to fiscal 2001 while increasing approximately 9% in dollars. In dollars, fiscal 2001 net sales decreased over fiscal 2000 by 23% in North America, 3% in Japan and 13% in Southeast Asia and increased over fiscal 2000 by 10% in Europe.

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Gross Margin

Fiscal 2002 gross margin was \$905 million, or 53% of net sales, down 270 basis points from fiscal 2001 gross margin of \$1,269 million, or 55.7% of net sales. Gross margin decreased to 55.7% in fiscal 2001 from the 56.7% achieved in fiscal 2000. The decline in year-over-year gross margin for both fiscal 2002 and fiscal 2001 was primarily due to reduced revenue levels and lower utilization of our internal wafer fabrication facilities. Gross margin increased to 53.2% in the fourth quarter of fiscal 2002 from 51.9% in the fourth quarter of fiscal 2001. The gross margin improvement through fiscal 2002 was caused by a steady quarterly sales increase from the second quarter of fiscal 2002, combined with tight spending controls and the impact of manufacturing restructuring actions. We decided that we had the opportunity to use this downturn to fundamentally and permanently reduce our manufacturing infrastructure costs worldwide. In the second quarter of fiscal 2002, we announced that we would transition products from our older four-inch wafer fabrication facilities to our six-inch and eight-inch wafer fabrication facilities that were then operating well below capacity. As a result, the remaining service lives of certain assets within our wafer fabrication facilities were shortened. Depreciation expense included in cost of sales included additional depreciation of approximately \$8.7 million in fiscal 2002 associated with the shortened lives of some equipment in our older four-inch wafer fabrication facilities.

Research and Development

Research and development, or R&D, expenses amounted to \$424 million in fiscal 2002, a decrease of \$41 million from the \$465 million recorded in fiscal 2001. Included in fiscal 2002 expense is approximately \$13.8 million of acquisition-related expenses compared to approximately \$8.2 million in fiscal 2001. The increase in acquisition-related expense in fiscal 2002 was attributable to a full year of expense related to fixed-value contingent compensation and the achievement of final performance-based criteria. R&D spending in dollars declined by 9% in fiscal 2002 as compared to fiscal 2001. The decline in R&D expenses in dollars was primarily due to the elimination of bonuses and the temporary reduction of salaries of our most highly compensated employees partially offset by selective hiring of engineers. As a result of the decline in year-over-year revenue, R&D spending as a percentage of sales for fiscal 2002 increased to 24.8% in fiscal 2002 from 20.4% in fiscal 2001. Despite the significant decline in sales in fiscal 2002, in view of our long-term business strategy, we continued to invest in R&D at levels commensurate with significantly higher revenue levels than we were achieving in the short term. 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. In fiscal 2001, R&D expense increased to \$465 million from \$390 million in fiscal 2000 as a result of additional expenses associated with increased engineering headcount.

Selling, Marketing, General and Administrative

Selling, marketing, general and administrative, or SMG&A, expenses were \$257 million in fiscal 2002, a decrease of \$30 million, or 10.5%, from the \$287 million recorded in fiscal 2001. The decrease in SMG&A expenses in dollars was the result of cost reduction programs including the elimination of bonuses and temporary salary reductions for our most highly compensated employees along with continued tight control over discretionary expenses. As a percentage of sales, SMG&A increased to 15% for fiscal 2002 from 12.6% in fiscal 2001 as a result of reduced revenue levels in fiscal 2002. The industry downturn offered us the opportunity to hire experienced, technically-savvy personnel, many of whom were already familiar with our products and, as a result, we significantly increased our field application engineers during fiscal 2002. Despite the decline in net sales, we decided to significantly increase our field applications engineers in order to help our customers design in our newest products. In fiscal 2001, SMG&A expenses decreased by \$6 million to \$287 million from \$293 million in fiscal 2000. As a percentage of sales, SMG&A increased to 12.6% in fiscal 2001 from 11.4% in fiscal 2000 as a result of reduced revenue levels.

Amortization of Intangibles

Amortization of intangibles was \$57 million for fiscal 2002 compared with \$53 million for fiscal 2001 and \$11 million in fiscal 2000. In fiscal 2003, we anticipate amortization expense to decrease to approximately \$3 million as a result of our adoption of Statement of Financial Accounting Standards No. 142, "Goodwill and Other Intangible Assets." The increase in amortization expense in fiscal 2002 as compared to fiscal 2001 was primarily due to amortization of goodwill associated with acquisitions completed in fiscal 2001 where amortization commenced during fiscal 2001. The increase in amortization expense in fiscal 2001 as compared to fiscal 2000 was attributable to the amortization of goodwill associated with the acquisition of BCO Technologies plc. in the third quarter of fiscal 2000, and the acquisitions of Thomas Neuroth AG, Signal Processing Associates Pty. Ltd., Integrated Micro Instruments, Inc., ChipLogic, Inc. and Staccato Systems, Inc. completed in the first quarter of fiscal 2001.

Special Charges

During fiscal 2002, we recorded special charges totaling \$48.5 million and, during fiscal 2001, we recorded special charges of \$47 million.

In the second quarter of fiscal 2002, we recorded special charges of approximately \$27.2 million. The second quarter charge included \$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 offset by a \$1.5 million adjustment to estimated 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 component of the special charge are severance and fringe benefit costs of \$15.3 million for 509 manufacturing employees in the United States and Ireland, of which 182 of these employees had been terminated as of November 2, 2002, \$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. In addition, the remaining service lives of certain assets within the older four-inch wafer fabrication facilities have been shortened. Depreciation expense included in cost of sales in fiscal 2002 included additional depreciation of approximately \$8.7 million associated with the shortened lives of these assets. The write-down of equipment was principally due to our decision to discontinue various product development strategies. As of November 2, 2002, there was \$25 million related to these charges remaining to be paid. This program is proceeding in accordance with our original plan and we expect to substantially complete these actions by mid-fiscal 2003. Once fully complete, we anticipate annual savings from the above actions of approximately \$60 million, primarily in cost of sales, and the first full year's impact will be fiscal 2004.

During the third quarter of fiscal 2002, we recorded special charges of \$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 impairment of goodwill related to the closure of an Austrian design center we 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, Europe and Canada, and approximately 30 manufacturing employees in the United States. All of the manufacturing employees and approximately 32 of the engineering employees had been terminated as of November 2, 2002. As of November 2, 2002, there was \$4.3 million related to these charges remaining to be paid. We expect to substantially complete these actions in the first quarter of fiscal 2003. Once fully complete, we anticipate the workforce reductions will result in annual savings of approximately \$10 million, primarily in operating expenses.

During the fourth quarter of fiscal 2002, we recorded special charges of \$8.4 million. The charges included severance and fringe benefit costs of \$2.5 million related to cost reduction actions taken in our sales

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group, several product groups and in manufacturing for approximately 65 employees in the United States and Europe, of which 40 had been terminated as of November 2, 2002. 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 million related to previously recorded cleanup costs. The investment impairment charges were related to the decline in fair value of a publicly-traded equity investment below cost basis that was determined to be other-than-temporary and of an equity investment in a private company. The private company equity investment was part of a product strategy we decided to abandon. As of November 2, 2002, there was \$3.1 million related to these charges remaining to be paid. We expect to substantially complete these actions by the third quarter of fiscal 2003. Once fully complete, we anticipate the workforce reductions will result in annual savings of approximately \$4 million, primarily in operating expenses.

The restructuring actions underlying the special charges accrued in fiscal 2002 are proceeding as planned. The cost savings impact in fiscal 2002 of the special charges related to severance and benefits was approximately \$2 million. Most of the remaining accrued special charge is attributable to actions planned and accrued in the second quarter of fiscal 2002 that involved the transfer of production from three separate four-inch wafer fabrication facilities to our six-inch and eight-inch wafer fabrication facilities, which are located in Massachusetts, California and Ireland. Our plan is for this transfer to be completed by mid-fiscal 2003.

During fiscal 2001, we recorded special charges of \$47 million related to cost reduction actions taken in response to the then current economic climate. The actions consisted of workforce reductions in manufacturing and, to a lesser extent, in selling, marketing and administrative areas. In addition, we made 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, of which approximately 1,010 of these employees had been terminated as of November 2, 2002. The remaining 190 employees are expected to be terminated during the first quarter of fiscal 2003. As of November 2, 2002, \$23 million of the \$29.6 million aggregate severance cost obligations underlying the fiscal 2001 worldwide cost reduction actions had been paid. The special charge 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 approximately \$1.5 million less than the amount recorded for such charges and accordingly, in the second quarter of fiscal 2002 we adjusted the provision for purchase order cancellation fees by \$1.5 million to reflect this change in estimate. As of November 2, 2002, there was \$7.6 million related to these charges remaining to be paid. We believe that the workforce reductions will result in annual salary savings of approximately \$40 million, consisting of a \$27 million reduction in cost of sales and a \$13 million reduction in operating expenses. The impact in fiscal 2002 of these cost savings was approximately \$30 million, consisting of a \$20 million reduction in cost of sales and a \$10 million reduction in operating expenses.

The restructuring actions included in the special charges recorded during fiscal 2001 are proceeding as planned. Of the \$47 million of special charges recorded in fiscal 2001, \$7.6 million remained accrued as of November 2, 2002. The amount covers termination payments being paid as income continuance to 1,010 terminated employees as a result of the fiscal 2001 actions as well as accrued termination payments for the remaining 190 employees expected to be terminated in the first quarter of fiscal 2003.

Operating Income

Our operating income was \$118 million, or 6.9% of sales, in fiscal 2002, compared to \$408 million, or 17.9% of sales, in fiscal 2001 and \$767 million, or 29.8% of net sales, for fiscal 2000.

Nonoperating Income and Expense

Interest expense was \$44 million in fiscal 2002 compared to \$62 million in fiscal 2001. The decrease in interest expense was the result of an interest rate swap agreement we entered into in January 2002 that has the effect of swapping the 4.75% fixed rate of our \$1,200 million convertible subordinated notes into a LIBOR-

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based floating rate (1.61% as of November 6, 2002). Interest expense was \$62 million in fiscal 2001 compared to \$6 million in fiscal 2000. The increase in interest expense was the result of a full year of interest expense on our \$1,200 million of 4.75% convertible subordinated notes, which were issued in the fourth quarter of fiscal 2000.

Interest income was \$65 million in fiscal 2002 compared to \$133 million in fiscal 2001. The decrease in interest income was attributable to less income earned on our invested cash balances due to the decline in interest rates during fiscal 2002 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. Interest income was \$133 million in fiscal 2001 compared to \$63 million in fiscal 2000. The increase in interest income was due to higher cash balances from increased cash flow as well as the unused portion of the funds obtained from the issuance of our 4.75% convertible subordinated notes.

Other income decreased approximately \$28 million in fiscal 2002 from fiscal 2001 due to a one-time gain on the sale of our investment in WaferTech recorded in the first quarter of fiscal 2001. Other income decreased approximately \$12 million in fiscal 2001 from fiscal 2000 primarily due to a one-time gain of \$44 million on the sale of our investment in Chartered Semiconductor Manufacturing Pte. Ltd. recorded in the third quarter of fiscal 2000, offset by the sale of WaferTech described above.

Provision for Income Taxes

Our effective income tax rate decreased to 25.0% for fiscal 2002 as compared to 29.7% for fiscal 2001 due to a shift in the mix of worldwide profits. Our effective income tax rate remained relatively flat at 29.7% for fiscal 2001 as compared to 29.9% for fiscal 2000. The effective income tax rate for fiscal 2003 is expected to be approximately 22.0%. The expected decrease is the result of the discontinuance of goodwill amortization in the first quarter of fiscal 2003 as a result of our adoption of Financial Accounting Standards Board Statement of Financial Accounting Standards No. 142, "Goodwill and Other Intangible Assets."

Net Income

Fiscal 2002 net income was \$105 million, or 6.2% of sales, and diluted earnings per share was \$0.28 compared to net income in fiscal 2001 of \$356 million, or 15.7% of sales, and diluted earnings per share of \$0.93. The fiscal 2002 decrease in net income from fiscal 2001 was primarily due to reduced revenue levels. Net income decreased to \$356 million in fiscal 2001 from \$607 million, or 23.6% of sales, in fiscal 2000.

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

Acquisitions

During the first quarter of fiscal 2001, we completed the following acquisitions:

- In the first quarter of fiscal 2001, we completed the acquisitions of Thomas Neuroth AG, Signal Processing Associates Pty. Ltd. and Integrated Micro Instruments, Inc. The total amount paid for these acquisitions, as of November 2, 2002, was \$10.2 million. As of November 2, 2002, the remaining contingent consideration of \$2.7 million will be paid if certain operational objectives are met and will be accounted for as compensation expense.
- On January 4, 2001, we acquired ChipLogic, Inc. of Santa Clara, California. ChipLogic is a developer of high-performance integrated circuits and software focused on the convergence of voice, broadband access and network protocol processing. The total purchase price of \$68.3 million consisted of approximately \$4 million in cash, approximately 1 million shares of our common stock valued at \$60.2 million and the assumption of \$4.1 million of outstanding ChipLogic vested stock options. Approximately \$9.5 million represented the purchase price of in-process technology that had not yet reached technological feasibility, had no alternative future use and was charged to operations during fiscal 2001. An additional \$8 million of cash consideration and 489,375 shares of common stock is due if certain operational objectives are achieved and will, if paid, be accounted for as compensation expense. Of these shares, 249,375 contingent shares have a fixed value of approximately \$13 million and are being charged to operations over a five-year period as

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their restrictions lapse. The remaining 240,000 shares are subject to performance-based criteria and during fiscal 2001, approximately \$4.2 million of expense was recorded related to the issuance of 117,592 shares of common stock associated with the achievement of certain of these objectives. During fiscal 2002, approximately \$5 million was recorded related to the issuance of the remaining shares. As of November 2, 2002, there was \$8 million of remaining contingent consideration. We expect to pay approximately \$2.7 million of this contingent consideration in the first quarter of fiscal 2003. An additional \$2.8 million of compensation expense is being recorded annually through fiscal 2005 related to our assumption of unvested stock options.

- On January 16, 2001, we acquired Staccato Systems, Inc. of Mountain View, California. Staccato is in the field of audio synthesis technology. The total purchase price of \$23.8 million consisted of \$23 million in cash and the assumption of \$0.8 million of outstanding Staccato vested stock options. We paid an additional \$7 million related to the achievement of operational objectives that was accounted for as additional goodwill, of which approximately \$5 million was recorded in fiscal 2002. All of the contingent consideration had been paid as of November 2, 2002. An additional \$0.2 million of compensation expense is being recorded annually through fiscal 2005 related to the assumption of unvested stock options.

During the third quarter of fiscal 2000, we acquired BCO Technologies plc, or BCO, a company with operations in Belfast, Northern Ireland, in a cash-for-stock transaction valued at approximately \$163 million. BCO is a leading supplier of silicon-on-insulator, or SOI, wafers used for fabricating micromechanical devices. As a result of our acquisition of BCO, we are incorporating SOI technology into our next generation of inertial sensors. In connection with this acquisition, we recorded approximately \$158 million of goodwill. There was no in-process research and development write-off related to this acquisition.

New Accounting Pronouncements

In June 2001, the Financial Accounting Standards Board issued Statements of Financial Accounting Standards No. 141, or FAS 141, "Business Combinations" and No. 142, or FAS 142, "Goodwill and Other Intangible Assets." FAS 141 requires that all business combinations initiated after June 30, 2001 be accounted for using the purchase method of accounting. Under FAS 142, which is effective for fiscal years beginning after December 15, 2001, goodwill and intangible assets deemed to have indefinite lives will no longer be amortized but will be subject to annual impairment tests in accordance with the statement. Other intangible assets will continue to be amortized over their estimated useful lives. As of November 2002, we have adopted these new pronouncements. Application of the non-amortization provisions of FAS 142 is expected to result in an increase in annual net income of approximately \$54 million, beginning in fiscal 2003. During fiscal 2003, we will perform the first of the required impairment tests of goodwill as of November 3, 2002.

In June 2001, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 143, or FAS 143, "Accounting for Asset Retirement Obligations," which addresses financial accounting and reporting for legal obligations associated with the retirement of tangible long-lived assets that result from the acquisition, construction, development and (or) the normal operation of a long-lived asset, except for certain obligations of lessees. We are required to adopt FAS 143 in the first quarter of fiscal 2003 and do not believe that the adoption of FAS 143 will have a material effect on our financial position or results of operations.

In August 2001, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 144, or FAS 144, "Accounting for the Impairment or Disposal of Long-Lived Assets," which addresses the financial accounting and reporting for the impairment of long-lived assets. This statement supersedes Statement of Financial Accounting Standards No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of," and the accounting and reporting provisions for the disposal of a segment of a business set forth in APB Opinion No. 30, "Reporting the Results of Operations-Reporting the Effects of Disposal of a Segment of a Business, and Extraordinary, Unusual and Infrequently Occurring Events and Transactions." We are required to adopt FAS 144 in the first quarter of

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fiscal 2003 and do not believe that the adoption of FAS 144 will have a material effect on our financial position or results of operations.

In April 2002, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 145, or FAS 145, "Rescission of FASB Statements No. 4, 44 and 64, Amendment of FASB Statement No. 13, and Technical Corrections." Under FAS 145, gains and losses on extinguishments of debt are to be classified as income or loss from continuing operations rather than extraordinary items. We are required to adopt FAS 145 in the first quarter of fiscal 2003 and do not expect the adoption of this statement to have a material impact on our financial condition or results of operations.

In July 2002, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 146, or FAS 146, "Accounting for Costs Associated with Exit or Disposal Activities." The statement requires companies to recognize costs associated with exit or disposal activities when they are incurred rather than at the date of a commitment to an exit or disposal plan. Costs covered by the statement include lease termination costs and certain employee severance costs that are associated with a restructuring, plant closing, or other exit or disposal activity. This statement is effective for exit or disposal activities initiated after December 31, 2002. FAS 146 may affect the timing of our recognition of future exit or disposal costs, if any.

Liquidity and Capital Resources

At November 2, 2002, we had \$2,898 million of cash, cash equivalents and short-term investments compared to \$2,793 million at November 3, 2001. The \$105 million increase in cash, cash equivalents and short-term investments was primarily due to operating cash inflows of \$226 million, or 13% of sales in fiscal 2002, and \$37 million of proceeds from employee stock plans, offset by a \$98 million repurchase of shares of our common stock and \$57 million of capital spending. In fiscal 2001, our cash, cash equivalents and short-term investments increased by \$558 million to \$2,793 million from \$2,235 million in fiscal 2000 primarily due to operating cash inflows of \$844 million, or 37% of sales in fiscal 2001, offset by \$297 million of capital spending. Investing activities provided \$90 million in fiscal 2002 and used \$1,220 million in fiscal 2001, while financing activities used \$69 million in fiscal 2002 and provided \$2 million in fiscal 2001.

Accounts receivable of \$228 million at the end of fiscal 2002 increased \$10 million, or 4.7%, from \$218 million at the end of fiscal 2001. This increase resulted principally from a \$32 million increase in sales during the fourth quarter of fiscal 2002 as compared to the fourth quarter of fiscal 2001. Days sales outstanding remained at 46 days at the end of the fourth quarter of fiscal 2002 as compared to the fourth quarter of fiscal 2001. As a percentage of annualized fourth quarter sales, accounts receivable was 12.5% at the end of fiscal 2002, down from 12.9% at the end of fiscal 2001.

Inventories increased \$60 million, or 24%, from the end of fiscal 2001 to \$306 million at the end of fiscal 2002. Days cost of sales in inventory increased by 24 days to 135 days as of the end of the fourth quarter of fiscal 2002. The increase in inventory in dollars was attributable to the combination of internal die bank builds and external wafer purchases. The build in die bank inventory was in preparation for the transfer of production from our four-inch wafer fabrication facilities to our six- and eight-inch wafer fabrication facilities. The external wafer purchases were in support of expected demand in our handset and consumer analog business. We are nearing the completion of the die bank build and have cut back on external wafer purchases. Therefore, we expect that inventory will remain relatively flat in dollars during the first quarter of fiscal 2003 and our days cost of sales in inventory will start to decline towards our long-term model of 100 to 110 days during fiscal 2003.

Net additions to property, plant and equipment of \$57 million in fiscal 2002 were funded with a combination of cash on hand and cash generated from operations. Capital spending in fiscal 2002 was down substantially from the \$297 million incurred in fiscal 2001. In response to the slowdown in our served markets, we have substantially reduced our capital spending. We currently plan to make capital expenditures of approximately \$80 million in fiscal 2003. Capital expenditures are expected to remain low, as we believe we currently have ample installed capacity to significantly increase internal production levels. Depreciation expense is expected to decrease slightly in fiscal 2003 from \$181 million in fiscal 2002.

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We acquired five companies during fiscal 2001, as more fully described in "Acquisitions." Total cash used to purchase these companies was approximately \$38.5 million in 2001 and another \$5.2 million was paid in fiscal 2002 as certain operational objectives were achieved, and these additional payments were accounted for as additional goodwill.

During the fourth quarter of fiscal 2000, we issued \$1,200 million of 4.75% convertible subordinated notes due 2005, or 2005 notes, with semiannual interest payments on April 1 and October 1 of each year. The 2005 notes are convertible, at the option of the holder, into shares of our common stock at any time unless previously redeemed or repurchased, at a conversion price of \$129.78 per share, subject to adjustment in certain events. The net proceeds of the offering were \$1,172 million after payment of the underwriting discount and expenses of the offering, which are being amortized over the term of the 2005 notes.

The table below summarizes our contractual cash obligations as of November 2, 2002:

(thousands)	2003	2004	2005	2006	2007+	Total
Contractual obligations:						
Long-term debt	\$ 7,773	\$ 9,173	\$1,210,498	\$ —	\$ —	\$1,227,444
Capital lease obligations	3,828	467	—	—	—	4,295
Operating leases	15,793	13,358	11,889	8,522	11,421	60,983
Total	\$27,394	\$22,998	\$1,222,387	\$8,522	\$11,421	\$1,292,722

At November 2, 2002, our principal source of liquidity was \$2,898 million of cash and 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 current and 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.

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.

Inventories

Inventories are valued at the lower of cost (first-in, first-out method) or market. Because of the cyclical nature of the semiconductor industry, inventory levels, obsolescence of technology, and product life cycles, we write down inventories to net realizable value. We employ a variety of consistent 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 by us about future demand for our inventory. Additionally, we have built inventory in preparation for the transfer of production from our four-inch wafer fabrication facilities to our six- and eight-inch wafer fabrication facilities for both lifetime supply and transition inventory. We have recorded certain levels of reserves related to these inventory builds. Although we believe that we have used our best efforts and information to estimate future demand, due to the uncertain economic times and the difficulty inherent in predicting future results, it is possible that actual demand for our products will differ from our estimates. If actual demand for products is less than our estimates, additional reserves for existing inventories may need to be recorded in future periods.

Long-Lived Assets

We review property, plant, and equipment for impairment whenever events or changes in circumstances indicate that the carrying amount of such an asset may not be recoverable. Recoverability of these assets is measured by comparison of their carrying amount to future undiscounted cash flows the assets are expected to generate. 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 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.

In June 2001, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 142, or FAS 142, "Goodwill and Other Intangible Assets." In the first quarter of fiscal 2003, we will adopt the new rules of FAS 142 for measuring the impairment of goodwill, which prescribe a fair value-based approach. The estimates and assumptions described above along with other factors such as discount rates will affect the amount of an impairment loss, if any, we recognize under FAS 142. Upon adoption of FAS 142, we will be required to make a transition test of our goodwill for impairment, which may result in a significant transition impairment loss. Any transition impairment loss will be recorded as a change in accounting principle. At least annually thereafter, we will be required to test goodwill for impairment, which may result in additional 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 by assessing our valuation allowance and by adjusting the amount of such allowance, if necessary. At November 2, 2002, we had deferred tax assets of \$159 million primarily resulting from temporary differences between the book and tax bases of assets and liabilities. While these assets are not assured of realization, we have conducted an assessment of the likelihood of realization and concluded that no significant valuation allowance is required. 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 foreign 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 in order to determine if a contingent liability in accordance with Statement of Financial Accounting Standards No. 5, or FAS 5, "Accounting for Contingencies," should be recorded. 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 estimated. Should a loss be probable and estimable, we record a contingent loss in accordance with 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.

Stock Options

We have voluntarily provided the following disclosure in order to provide our stockholders with a single source for information about our stock options. We believe that this disclosure, combined with the disclosure provided in Note 12 to our Consolidated Financial Statements contained in Item 8 of this Annual Report on Form 10-K and in our 2003 proxy statement, provides detailed information about our stock option programs.

Option Program Description

Our stock option program is a broad-based, long-term employee retention program that is intended to attract, retain and motivate our employees, officers and directors and to align their interests with those of our stockholders. We have two plans under which we currently grant stock options:

1) The 1998 Stock Option Plan, as amended, under which officers, directors and employees of Analog are granted options to purchase shares of our common stock; and

2) The 2001 Broad-Based Stock Option Plan, as amended, under which options to purchase shares of our common stock may be granted to all employees, consultants and advisors of Analog, other than officers or directors.

Substantially all of our employees participate in these plans. Option vesting periods are generally five years for our grants and all options have a term of ten years. Our option plans do not permit us to grant options at exercise prices that are below the fair market value of our common stock as of the date of grant. These plans are critical to our efforts to create and maintain a competitive advantage in the extremely competitive semiconductor industry.

Options are generally granted once per year between September and January as part of our annual performance appraisal process. Occasionally, as in fiscal year 2002, two sets of option grants can fall within one fiscal year, as the process spans the end of one fiscal year and the beginning of the next fiscal year. Conversely, as in fiscal year 1999, there are fiscal years in which no annual merit options are granted. We have a goal to keep the dilution related to our option program to a long-term average of approximately 4% annually. The dilution percentage is calculated as the total number of shares of our common stock underlying new option grants for the year, net of options forfeited by employees leaving the company, divided by total outstanding shares of our common stock.

All stock option grants to executive officers and directors can be made only from stockholder approved plans and are made after a review by, and with the approval of the compensation committee of our board of directors. All members of the compensation committee are independent directors, as that term is defined in the applicable rules for issuers traded on the New York Stock Exchange. See the "Report of the Compensation Committee" in our 2003 proxy statement for further information regarding the policies and procedures of Analog and the compensation committee regarding our grant of stock options.

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In December 2002, our Board of Directors adopted an amendment to each of our 2001 Broad-Based Stock Option Plan and our 1998 Stock Option Plan to provide that the terms of outstanding options under these plans may not be amended to provide an option exercise price per share which is lower than the original option exercise price per share.

Distribution and Dilutive Effect of Options

Employee and Executive Option Grants

As of November 2, 2002

	5 Yr. Avg.	As of the end of fiscal year				
		2002	2001	2000	1999	1998
Net grants during the period as a percentage of outstanding shares	4.4%	7.1%**	4.3%	4.0%	0%**	6.7%
Grants to named executive officers* during the period as a percentage of total options granted	5.4%	5.1%	5.8%	6.9%	0%	5.1%
Grants to named executive officers* during the period as a percentage outstanding shares	0.32%	0.39%	0.27%	0.31%	0%	0.62%
Cumulative options held by named executive officers* as a percentage of total options outstanding	9.6%	6.9%	7.9%	9.6%	13.1%	13.3%

* See "Options Granted to Named Executive Officers" below for our named executive officers. Named executive officers are defined by the SEC as our chief executive officer and our four other most highly compensated executive officers who were serving as executive officers on November 2, 2002.

** Options are generally granted once per year between September and January as part of our annual performance appraisal process. Occasionally, as in fiscal year 2002, two sets of option grants can fall within one fiscal year, as the process spans the end of one fiscal year and the beginning of the next fiscal year. Conversely, as in fiscal year 1999, there are fiscal years in which no annual merit options are granted.

General Option Information

Summary of Option Activity

Fiscal 2002

(shares in thousands)	Number of Employees Receiving Grants (#)	Shares Available for Options (#)	Options Outstanding	
			Number of Shares (#)	Weighted Average Exercise Price (\$)
November 3, 2001		22,184	63,737	\$22.28
Additional shares reserved-12/2001		50,000		
Shares cancelled upon termination of expired stock plans		(2,196)		
Grants				
Annual retention 1/22/02	4,341	(13,082)	13,082	41.06
Annual retention 9/24/02	4,530	(13,645)	13,645	19.90
Other		(1,400)	1,400	36.45
Total		(28,127)	28,127	30.57
Exercises		—	(3,869)	6.51
Cancellations		2,144	(2,144)	34.24
November 2, 2002		44,005	85,851	\$25.41

In-the-Money and Out-of-the-Money Option Information

As of November 2, 2002

(Shares in thousands)	Exercisable			Unexercisable			Total		
	Shares (#)	%	Wtd. Avg. Exercise Price (\$)	Shares (#)	%	Wtd. Avg. Exercise Price (\$)	Shares (#)	%	Wtd. Avg. Exercise Price (\$)
In-the-Money	18,014	92	7.18	23,876	36	14.78	41,890	49	11.51
Out-of-the-Money(1)	1,611	8	41.32	42,350	64	38.58	43,961	51	38.68
Total Options Outstanding	19,625	100	10.01	66,226	100	30.00	85,851	100	25.41

(1) Out-of-the-money options are those options with an exercise price equal to or above the closing price of \$27.69 at the end of fiscal 2002 (on November 1, 2002).

Executive Options

Options Granted to Named Executive Officers

Fiscal 2002

Name	Individual Grants				Potential Realizable Value at Assumed Annual Rates of Stock Price Appreciation for Option Term (1)(2)	
	Number of Securities Underlying Options Granted (#)	Percent of Total Options Granted to Employees	Exercise Price per Share(\$)	Grant Date(1)	5%	10%
Jerald G. Fishman	530,000	1.88%	41.05	1/22/02	13,682,546	34,674,258
	500,000	1.78%	19.89	9/24/02	6,254,357	15,849,769
		3.66%				
Brian P. McAloon	80,000	0.28%	41.05	1/22/02	2,065,290	5,233,850
	80,000	0.28%	19.89	9/24/02	1,000,697	2,535,963
		0.56%				
Joseph E. McDonough	80,000	0.28%	41.05	1/22/02	2,065,290	5,233,850
	80,000	0.28%	19.89	9/24/02	1,000,697	2,535,963
		0.56%				
Samuel H. Fuller	40,000	0.14%	41.05	1/22/02	1,032,645	2,616,925
	40,000	0.14%	19.89	9/24/02	500,349	1,267,982
		0.28%				
Franklin Weigold	7,500	0.03%	19.89	9/24/02	93,815	237,747
		0.03%				

(1) Options generally expire 10 years after the grant date.

(2) Potential realizable value is based on an assumption that the market price of our common stock will appreciate at the stated rates (5% and 10%), compounded annually, from the date of grant until the end of the 10-year term. These values are calculated based on rules promulgated by the SEC and do not reflect our estimate or projection of future stock prices. Actual gains, if any, on stock option exercises will depend on the future performance of the price of our common stock and the timing of exercises.

Aggregated Option Exercises During Fiscal 2002 and Fiscal Year-End Option Values

Name	Shares Acquired on Exercise (#)	Value Realized (\$)	Number of Securities Underlying Unexercised Options at End of Fiscal 2002 Exercisable/Unexercisable	Value of Unexercised In-the-Money Options at End of Fiscal 2002 (\$) Exercisable/Unexercisable
Jerald G. Fishman	160,000	5,894,725	544,982 / 3,576,982	11,125,970 / 31,272,100
Brian P. McAloon	10,000	398,950	189,362 / 452,895	3,951,076 / 1,955,231
Joseph E. McDonough	28,333	1,071,013	94,025 / 428,239	1,866,144 / 1,955,231
Samuel H. Fuller	7,333	292,550	83,381 / 259,384	1,516,910 / 1,270,061
Franklin Weigold	64,667	1,344,862	2,354 / 256,521	0 / 915,410

Equity Compensation Plan Information

Plan Category	(a) Number of securities to be issued upon exercise of outstanding options, warrants, and rights (#)(1)	(b) Weighted-average exercise price of outstanding options, warrants, and rights (\$)	(c) Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
Equity compensation plans approved by shareholders	69,062,784	25.64	13,128,861(2)
Broad-based stock plans pursuant to New York Stock Exchange rules*(3)	16,569,710	24.76	33,430,290
TOTAL	85,632,494	25.47	46,559,151(2)

* Our officers and directors are ineligible to receive grants under our 2001 broad-based option plan.

- (1) This table excludes an aggregate of 218,074 shares issuable upon exercise of outstanding options assumed by Analog in connection with various acquisition transactions. The weighted average exercise price of the excluded options is \$5.22.
- (2) Includes 2,554,080 shares issuable under our Employee Stock Purchase Plan, of which up to 683,075 are issuable in connection with the current offering period which ends May 30, 2003.
- (3) Issued pursuant to our 2001 Broad-Based Stock Option Plan, which does not require the approval of and has not been approved by our stockholders.

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 largest 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 at various times, including the decline in demand experienced since early in fiscal year 2001. 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, cancellations 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 cancelled 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, cancellations 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 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. 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 also offer other electronic 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 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.

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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 or short-term periods when demand for our products has increased or decreased rapidly. We, and the semiconductor industry, experienced a period of rapid decreases in demand that began early in fiscal 2001. As a result, we have overcapacity due to the expansion of our production facilities and increased access to third-party foundries. However, we cannot be sure that we will not encounter unanticipated production problems at either our own facilities or at third-party foundries, or that our capacity will be sufficient to satisfy demand for our products. We believe that other semiconductor manufacturers have expanded their production capacity over the past several years. This expansion by us and our competitors, and the continuation of the decline in the demand for semiconductor products that began early in fiscal 2001, has led to overcapacity in our target markets, which has resulted in a year-over-year decline in our revenue and could lead to price erosion that would adversely affect our operating results.

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 digital 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.

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

Our capacity additions in fiscal 2001 resulted in a significant increase in operating expenses. If revenue levels do not increase enough to offset these additional expense levels, our future operating results could be adversely affected. In addition, asset values could be impaired if the additional capacity is underutilized for an extended period of time. Should we be unsuccessful in completing this expansion on time, or should customer demand fail to increase and we no longer need the additional capacity, our financial position and results of operations could be adversely impacted.

Our transition of products to more modern facilities and related inventory builds may not progress as planned.

We are transitioning products from our older four-inch wafer fabrication facilities to our six-inch and eight-inch wafer fabrication facilities. We have built inventory in preparation for this transfer for both lifetime supply and transition inventory. We have recorded certain levels of reserves related to these inventory builds. Although we believe that we have used our best efforts and information to estimate future demand, due to the uncertain economic times and the difficulty inherent in predicting future results, it is possible that actual demand for our products will differ from our estimates. If we are unable to transition our products as planned or if actual demand for products included in our inventory builds is less than our estimates, our financial position and results of operations could be adversely impacted.

Our manufacturing processes are highly technical and may be interrupted.

We have both generic and proprietary manufacturing processes that utilize a substantial amount of technology as the fabrication of integrated circuits is a highly complex and precise process. Minute impurities,

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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.

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 and Taiwan 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 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 2002, approximately 70% of our revenues were derived from customers in international markets. We have manufacturing facilities outside the United States in Ireland, the United Kingdom, the Philippines and Taiwan. 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, particularly in the aftermath of the terrorist attacks of September 11, 2001 and the response to them by the United States and its allies. These risks include air transportation disruptions, expropriation, currency controls and changes in currency exchange rates, tax and tariff rates, freight rates and social and political unrest. 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.

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

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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.

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.

Leverage and debt service obligations may adversely affect our cash flow.

During the fourth quarter of fiscal 2000, we issued \$1,200,000,000 of 4.75% convertible subordinated notes due 2005 and, as a result, we have a substantial amount of outstanding indebtedness. We may be unable to generate cash sufficient to pay the principal of, interest on, and other amounts due in respect of, this indebtedness when due. Our substantial leverage could have significant negative consequences. This substantial leverage could increase our vulnerability to general adverse economic and industry conditions. It may require the dedication of a substantial portion of our expected cash flow from operations to service the indebtedness, thereby reducing the amount of our expected cash flow available for other purposes, including capital expenditures. It may also limit our flexibility in planning for, or reacting to, changes in our business and the industry in which we operate.

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.

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.

ITEM 7A. QUALITATIVE AND QUANTITATIVE DISCLOSURES ABOUT MARKET RISK

Interest Rate Exposure

In January 2002, we entered into an interest rate swap agreement to hedge the benchmark interest rate of our \$1,200 million convertible subordinated notes. The effect of the swap was to convert our 4.75% fixed rate to a variable rate, currently based on the 3-month London Interbank Offered Rate, or LIBOR. If LIBOR increases or decreases by 100 basis points, our annual interest expense would change by \$12 million for fiscal 2002. Changes in interest rates would affect the fair value of the interest rate swap and the fair value of the debt obligation. For each basis point change in the swap curve, the fair value in fiscal 2002 would change by approximately \$0.3 million. The fair value of the swap, and therefore the related debt obligation, would also be affected by the price and volatility of our common stock. Our annual interest income would change by approximately \$28 million for each 100 basis point increase or decrease in interest rates. Therefore, the effect to our interest income, net of interest expense, would be approximately \$16 million in fiscal year 2002 and \$24 million in fiscal 2001. The fair values of our investment portfolio at November 2, 2002 and November 3, 2001 would not be significantly impacted by either an increase or decrease in interest rates primarily due to the short-term nature of the 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 three months to one year. The short-term nature of these contracts has resulted in these instruments having insignificant fair values at November 2, 2002 and November 3, 2001. 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 November 2, 2002 and November 3, 2001, 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 November 2, 2002, November 3, 2001 and October 28, 2000

(thousands, except per share amounts)	2002	2001	2000
Revenue			
Net sales	\$1,707,508	\$2,276,915	\$2,577,547
Costs and Expenses			
Cost of sales	802,980	1,008,095	1,116,520
Gross margin	904,528	1,268,820	1,461,027
Operating expenses:			
Research and development	423,869	464,686	389,997
Selling, marketing, general and administrative	257,054	287,146	293,364
Purchased in-process research and development	—	9,500	—
Amortization of intangibles	56,873	52,795	10,569
Special charges	48,494	47,007	—
	786,290	861,134	693,930
Operating income	118,238	407,686	767,097
Nonoperating (income) expenses:			
Interest expense	44,458	62,474	5,841
Interest income	(64,893)	(132,647)	(63,430)
Other, net	(1,677)	(29,385)	(41,025)
	(22,112)	(99,558)	(98,614)
Earnings			
Income before income taxes	140,350	507,244	865,711
Provision for income taxes:			
Payable currently	75,614	180,790	271,123
Deferred	(40,563)	(29,923)	(12,544)
	35,051	150,867	258,579
Net income	\$ 105,299	\$ 356,377	\$ 607,132
Shares used to compute earnings per share — Basic	364,194	359,113	353,363
Shares used to compute earnings per share — Diluted	381,245	381,962	381,157
Earnings per share — Basic	\$ 0.29	\$ 1.00	\$ 1.71
Earnings per share — Diluted	\$ 0.28	\$ 0.93	\$ 1.59

See accompanying Notes.

ANALOG DEVICES, INC.

CONSOLIDATED BALANCE SHEETS
November 2, 2002 and November 3, 2001

(thousands, except share amounts)	2002	2001
ASSETS		
Current Assets		
Cash and cash equivalents	\$1,613,753	\$1,364,949
Short-term investments	1,284,270	1,428,278
Accounts receivable less allowances of \$15,506 (\$15,398 in 2001)	228,338	218,151
Inventories	306,391	246,852
Deferred tax assets	152,552	139,418
Prepaid expenses and other current assets	38,921	37,271
Total current assets	3,624,225	3,434,919
Property, Plant and Equipment, at Cost		
Land and buildings	294,037	294,598
Machinery and equipment	1,385,198	1,447,639
Office equipment	95,120	92,792
Leasehold improvements	131,113	130,528
	1,905,468	1,965,557
Less accumulated depreciation and amortization	1,124,564	1,057,615
Net property, plant and equipment	780,904	907,942
Other Assets		
Deferred compensation plan investments	277,595	242,502
Other investments	2,010	4,003
Intangible assets, net	174,637	229,330
Other assets	120,820	66,167
Total other assets	575,062	542,002
	\$4,980,191	\$4,884,863
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current Liabilities		
Short-term borrowings and current portion of obligations under capital leases	\$ 3,745	\$ 6,432
Accounts payable	91,269	79,784
Deferred income on shipments to distributors	110,271	142,011
Income taxes payable	126,471	121,844
Accrued liabilities	151,879	177,877
Total current liabilities	483,635	527,948
Noncurrent Liabilities		
Long-term debt and obligations under capital leases	1,274,487	1,206,038
Deferred income taxes	22,612	51,345
Deferred compensation plan liability	283,210	243,848
Other noncurrent liabilities	16,231	12,658
Total noncurrent liabilities	1,596,540	1,513,889
Commitments and Contingencies		
Stockholders' Equity		
Preferred stock, \$1.00 par value, 471,934 shares authorized, none outstanding	—	—
Common stock, \$0.16 2/3 par value, 600,000,000 shares authorized, 367,680,211 shares issued (363,353,954 in 2001)	61,281	60,560
Capital in excess of par value, net of deferred compensation of \$15,114 (\$25,892 in 2001)	762,473	713,427
Retained earnings	2,179,619	2,074,320
Accumulated other comprehensive income	(1,908)	(204)
	3,001,465	2,848,103

Less 4,493,186 shares in treasury, at cost (103,630 in 2001)	101,449	5,077
	<u>2,900,016</u>	<u>2,843,026</u>
Total stockholders' equity		
	<u>\$4,980,191</u>	<u>\$4,884,863</u>

See accompanying Notes.

ANALOG DEVICES, INC.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
Years ended November 2, 2002, November 3, 2001 and October 28, 2000

	Common Stock		Capital in Excess of Par Value	Retained Earnings	Accumulated Other Comprehensive Income	Treasury Stock	
	Shares	Amount				Shares	Amount
(thousands)							
BALANCE, OCTOBER 30, 1999	178,049	\$29,675	\$523,106	\$1,110,811	\$12,209	(3,162)	\$ (59,770)
Activity in Fiscal 2000							
Net income — 2000				607,132			
Issuance of stock under stock plans and other, net of repurchases	6,205	1,033	52,148			(93)	(8,850)
Compensation recognized under Restricted Stock Plan			2,231				
Tax benefit-stock option exercises			43,566				
Two-for-one stock split	173,715	28,955	(94,231)			3,210	65,003
Other comprehensive income (loss)					(9,368)		
BALANCE, OCTOBER 28, 2000	357,969	59,663	526,820	1,717,943	2,841	(45)	(3,617)
Activity in Fiscal 2001							
Net income — 2001				356,377			
Issuance of stock under stock plans and other, net of repurchases	3,923	654	19,664			358	20,371
Compensation recognized under Restricted Stock Plan			2,114				
Tax benefit-stock option exercises			90,581				
Issuance of common stock in connection with acquisitions	1,462	243	98,274				
Deferred stock-based compensation related to acquisitions (net of amortization of \$8,884)			(24,026)				
Other comprehensive income (loss)					(3,045)		
Common stock repurchased						(417)	(21,831)
BALANCE, NOVEMBER 3, 2001	363,354	60,560	713,427	2,074,320	(204)	(104)	(5,077)
Activity in Fiscal 2002							
Net income — 2002				105,299			
Issuance of stock under stock plans and other, net of repurchases	4,306	718	36,369			(10)	94
Compensation recognized under Restricted Stock Plan			1,421				
Forfeitures of restricted stock						(66)	(519)
Tax benefit-stock option exercises			908				
Issuance of stock in connection with acquisitions	20	3	991			37	1,803
Amortization of deferred stock-based compensation related to acquisitions			9,357				
Other comprehensive income (loss)					(1,704)		
Common stock repurchased						(4,350)	(97,750)
BALANCE, NOVEMBER 2, 2002	367,680	\$61,281	\$762,473	\$2,179,619	\$ (1,908)	(4,493)	\$(101,449)

ANALOG DEVICES, INC.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
Years ended November 2, 2002, November 3, 2001 and October 28, 2000

(thousands)	2002	2001	2000
Net income	\$105,299	\$356,377	\$607,132
Foreign currency translation	950	(2,995)	(2,739)
Minimum pension liability adjustment (net of taxes of \$1,140 in 2002)	(2,117)	—	—
Unrealized gains (losses) on securities:			
Unrealized holding gains (losses) arising during the period (net of taxes of \$2,105 in fiscal 2002, \$122 in 2001 and \$3,569 in 2000)	(3,908)	(226)	—
Less: reclassification adjustment for gains (losses) included in net income	226	—	(6,629)
Net unrealized gains (losses) on securities	(3,682)	(226)	(6,629)
Derivative instruments designated as cash flow hedges:			
Cumulative effect of adopting FAS 133	—	(5,142)	—
Changes in fair value of derivatives	2,878	5,478	—
Less: reclassification into earnings	267	(160)	—
Net change in derivative instruments designated as cash flow hedges	3,145	176	—
Other comprehensive loss	(1,704)	(3,045)	(9,368)
Comprehensive income	\$103,595	\$353,332	\$597,764

See accompanying Notes.

ANALOG DEVICES, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
Years ended November 2, 2002, November 3, 2001 and October 28, 2000

(thousands)	2002	2001	2000
Operations			
Cash flows from operations:			
Net income	\$ 105,299	\$ 356,377	\$ 607,132
Adjustments to reconcile net income to net cash provided by operations:			
Depreciation and amortization	238,002	210,490	156,671
Gain on sale of investments	—	(28,084)	(43,857)
Non-cash portion of special charges	15,841	14,073	—
Other non-cash expense	9,602	10,590	14,132
Purchased in-process research and development	—	9,500	—
Tax benefit — stock option exercises	908	90,581	30,073
Deferred income taxes	(40,563)	(29,923)	(12,544)
Change in operating assets and liabilities:			
(Increase) decrease in accounts receivable	(10,771)	237,344	(213,696)
(Increase) decrease in inventories	(59,382)	82,267	(82,321)
Decrease (increase) in prepaid expenses and other current assets	4,018	(8,507)	(9,706)
Increase in investments — trading	(35,093)	(60,751)	(123,165)
(Decrease) increase in accounts payable, deferred income and accrued liabilities	(45,285)	(138,609)	233,408
Increase in income taxes payable	4,524	35,712	20,204
Increase in other liabilities	39,026	62,553	128,174
Total adjustments	120,827	487,236	97,373
Net cash provided by operations	226,126	843,613	704,505
Investments			
Cash flows from investments:			
Additions to property, plant and equipment, net	(57,412)	(297,236)	(274,837)
Purchases of short-term investments available-for-sale	(3,405,217)	(2,963,922)	(868,394)
Maturities of short-term investments available-for-sale	3,555,238	2,034,488	776,103
Proceeds from sale of investment	—	60,936	64,641
(Increase) decrease in long-term investments	—	(4,750)	348
Payments for acquisitions, net of cash acquired	(5,245)	(38,469)	(169,270)
Decrease (increase) in other assets	2,846	(11,427)	15,192
Net cash provided (used) by investments	90,210	(1,220,380)	(456,217)
Financing Activities			
Cash flows from financing activities:			
Proceeds from issuance of long-term debt	—	—	1,172,135
Repurchase of common stock	(97,750)	(21,831)	—
Proceeds from employee stock plans	37,305	39,947	42,864
Payments on capital lease obligations	(7,830)	(10,746)	(8,293)
Net decrease in variable rate borrowings	(437)	(5,473)	(76,416)
Net cash (used) provided by financing activities	(68,712)	1,897	1,130,290
Effect of exchange rate changes on cash	1,180	3,398	1,952
Net increase (decrease) in cash and cash equivalents	248,804	(371,472)	1,380,530
Cash and cash equivalents at beginning of year	1,364,949	1,736,421	355,891
Cash and cash equivalents at end of year	\$ 1,613,753	\$ 1,364,949	\$1,736,421

See accompanying Notes.

ANALOG DEVICES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Years ended November 2, 2002, November 3, 2001 and October 28, 2000
(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. 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, smart munitions, base stations, central office equipment, wireless telephones, computers, cars, CAT scanners, digital cameras and DVD players.

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 significant 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 year 2002 was a 52-week year, fiscal year 2001 was a 53-week year, and fiscal year 2000 was a 52-week year.

Certain amounts reported in previous years have been reclassified to conform to the fiscal 2002 presentation, such reclassifications were immaterial.

b. Cash, Cash Equivalents and 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. The Company’s investments, which generally have maturities between three and twelve months at time of acquisition, are considered short-term. Cash, cash equivalents and short-term investments consist primarily of corporate obligations such as commercial paper, corporate bonds and auction rate securities, but also include government agency notes, certificates of deposit, bank time deposits, institutional money market funds and bankers’ acceptances. Long-term investments consist of mutual funds, commercial paper and institutional money market funds that are acquired to generate returns that offset changes in certain liabilities related to deferred compensation arrangements, as well as equity securities.

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 and such designation is evaluated as of each balance sheet date. 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 either available-for-sale or trading. Available-for-sale securities are carried at fair value with unrealized gains and losses, net of related tax, if any, reported as a separate component of stockholders’ equity. Realized gains and losses, as well as interest, dividends and capital gains distributions on all securities, are included in earnings.

ANALOG DEVICES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The components of the Company's available-for-sale securities as of November 2, 2002 and November 3, 2001 were as follows:

	2002	2001
Corporate obligations	\$2,588,483	\$2,385,433
Government agency and municipal	98,200	207,270
Institutional money market funds	42,111	27,252
Bankers' acceptances	5,352	4,239
Total available-for-sale securities	\$2,734,146	\$2,624,194

Cash equivalents and short-term investments classified as held-to-maturity were \$130 million and \$108 million at November 2, 2002 and November 3, 2001, respectively and were comprised solely of Euro time deposits. Substantially all of the Company's short-term investments have contractual maturities of twelve months or less at time of acquisition. Because of the short term to maturity, and hence relative price insensitivity to changes in market interest rates, amortized cost approximates fair value for all of these securities. No realized gains or losses were recorded during fiscal 2002, 2001 or 2000. Unrealized losses of \$3.9 million, net of tax of \$2.1 million, were recorded in fiscal 2002 and unrealized gains and losses were not material during fiscal 2001 and fiscal 2000. There were no cash equivalents or short-term investments classified as trading at November 2, 2002 and November 3, 2001.

Long-term investments classified as trading were \$278 million and \$243 million at November 2, 2002 and November 3, 2001, respectively, and were based on published market quotes on November 1, 2002 and November 2, 2001, respectively. Gross realized and unrealized gains and losses from trading securities were not material in fiscal 2002, fiscal 2001 and fiscal 2000. There were approximately \$0.9 million and \$1.7 million at November 2, 2002 and November 3, 2001, respectively, of long-term investments classified as available-for-sale. Gross realized and unrealized gains and losses were not material in fiscal 2002, 2001 and 2000. There were no long-term investments classified as held-to-maturity at November 2, 2002 and November 3, 2001.

c. Supplemental Cash Flow Statement Information

	2002	2001	2000
Cash paid during the fiscal year for:			
Income taxes	\$67,709	\$52,353	\$208,441
Interest, net of capitalized interest	\$42,899	\$51,720	\$ 4,039

The Company's primary non-cash financing activities in fiscal 2002 and 2001 resulted from its fiscal 2001 acquisitions for which 1,462,066 shares of common stock were issued (valued at approximately \$81.8 million) and stock options with a fair value of approximately \$4.9 million were assumed. As a result, the Company recognized approximately \$10.3 million and \$8.8 million of stock-based compensation expense in fiscal 2002 and 2001, respectively.

ANALOG DEVICES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

d. Inventories

Inventories are valued at the lower of cost (first-in, first-out method) or market. Inventories at November 2, 2002 and November 3, 2001 were as follows:

	2002	2001
Raw materials	\$ 14,598	\$ 18,221
Work in process	225,680	159,463
Finished goods	66,113	69,168
Total inventories	\$306,391	\$246,852

e. Property, Plant and Equipment

Property, plant and equipment is recorded at cost less allowances for depreciation and amortization. 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 upon 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 and amortization of property, plant and equipment was \$181 million, \$158 million and \$143 million in fiscal 2002, 2001 and 2000, respectively. Property, plant and equipment included \$77 million of capitalized leases in fiscal 2002 and fiscal 2001, net of \$68 million and \$56 million, respectively, of accumulated depreciation. During fiscal 2002 and 2001, the Company recorded \$1.7 million and \$6.5 million of capitalized interest, respectively.

f. Goodwill and Other Acquisition-related Intangibles

	2002	2001
Goodwill	\$166,199	\$219,674
Other intangibles	8,438	9,656
Total	\$174,637	\$229,330

Other intangibles include items such as acquired trained workforce and customer base. Goodwill and intangibles are evaluated for impairment periodically or whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. When impairment indicators arise, goodwill is reviewed for impairment by comparing the carrying amount to the estimated future undiscounted cash flows of the lowest level of related assets. If this review indicates that goodwill is not recoverable, the carrying amount would be reduced to fair value based on a discounted cash flow analysis taking into consideration the time value of money and investment risk factors. Amortization lives are principally five years.

The balances shown are net of total accumulated amortization of \$145 million and \$88 million as of November 2, 2002 and November 3, 2001, respectively. Amortization of goodwill and other acquisition-related intangibles was \$57 million, \$53 million and \$13 million for fiscal 2002, 2001 and 2000, respectively.

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

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

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 accumulated in other comprehensive income. Transaction gains and losses 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 2002, 2001 and 2000.

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 the Japanese Yen and the Euro. 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.

Effective October 29, 2000, the Company adopted Statement of Financial Accounting Standards No. 133 (FAS 133), "Accounting for Derivative Instruments and Hedging Activities," as amended by Statement of Financial Accounting Standards No. 138 (FAS 138), "Accounting for Certain Instruments and Certain Hedging Activities." As a result of the adoption of FAS 133, 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 other comprehensive income (OCI) depending on whether the derivative financial instrument qualifies for hedge accounting as defined by FAS 133. Changes in fair values of derivatives not qualifying for hedge accounting are reported in earnings as they occur. While the adoption of FAS 133 on October 29, 2000 did not have a material impact on operations, it resulted in a \$5 million loss recognized in OCI, which was reclassified into earnings during fiscal 2001.

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 expense. No ineffectiveness was recognized in fiscal 2002 or 2001.

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Additionally, the Company enters into foreign currency forward 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 expense immediately as an offset to the changes in the fair value of the asset or liability being hedged.

Interest Rate Exposure Management — In January 2002, the Company entered into an interest rate swap with an aggregate notional amount of \$1,200 million. The swap is a derivative instrument as defined by FAS 133 and was designated as a fair value hedge at inception. The swap hedges the benchmark interest rate of the Company's \$1,200 million Convertible Subordinated Notes and has the effect of swapping the 4.75% fixed rate of the Convertible Subordinated Notes into a LIBOR-based floating rate (1.61% as of November 6, 2002). The interest rate swap, as well as the Convertible Subordinated Notes, matures on October 1, 2005. As the critical terms of the interest rate swap and the underlying interest component of the Company's notes were matched at inception, effectiveness is 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 expense. The interest rate swap is designed to provide for the termination of the swap in the event the notes are either converted or redeemed early. The Company evaluates 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 Convertible Subordinated 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 is 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 restructuring is expected to increase the effectiveness of the hedge on a prospective basis. The fair value hedge was determined to be highly effective during each quarter, and a minor amount of ineffectiveness, arising prior to the restructuring of the hedge, was recorded in other expense during 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 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.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

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 October 29, 2000 (the date of adoption of FAS 133) through November 2, 2002:

	2002	2001
Balance at beginning of year	\$ (176)	\$ —
Cumulative effect of adopting FAS 133 as of October 29, 2000	—	5,142
Changes in fair value of derivatives – (gain) loss	(2,878)	(5,478)
Reclassifications into earnings from other comprehensive income	(267)	160
Balance at end of year	\$(3,321)	\$ (176)

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. However, considerable judgment is required in interpreting market data to develop the estimates of fair value. Accordingly, the estimates presented herein are not necessarily indicative of the amounts that the Company could realize in a current market exchange.

	November 2, 2002		November 3, 2001	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
Assets:				
Cash and cash equivalents	\$ 1,613,753	\$ 1,613,753	\$ 1,364,949	\$ 1,364,949
Short-term investments	1,284,270	1,284,270	1,428,278	1,428,278
Long-term investments	279,605	279,605	246,505	246,505
Liabilities:				
Short-term borrowings	(6)	(6)	(434)	(434)
Long-term debt, including current portion	(1,274,020)	(1,204,932)	(1,200,000)	(1,145,400)
Foreign Currency Instruments and Interest Rate Agreements:				
Interest rate swap and cap agreements	74,608	74,608	(62)	(62)
Forward foreign currency exchange contracts	573	573	928	928

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 — The carrying amounts of these items are a reasonable estimate of their fair value due to the short term to maturity and readily available market for these types of investments.

Long-term investments — The fair value of long-term investments is based on quoted market values, with the exception of equity investments that are carried at cost.

Short-term borrowings — The carrying amounts of these variable-rate borrowings approximate fair value due to the short period of time to maturity.

Long-term debt — The fair value of long-term debt is based on quoted market values. The carrying amount is based on a FAS 133 valuation (see Note 2i. *Derivative Instruments and Hedging Agreements*).

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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, inventory reserves, potential reserves relating to litigation matters, accrued liabilities, accrued taxes 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 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 automation, instrumentation, military/ aerospace, communications, computers and peripherals, and high-performance 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

Prior to fiscal 2001, the Company recognized revenue from product sales to end users upon shipment. In fiscal 2001, the Company adopted the provisions of Securities and Exchange Commission Staff Accounting Bulletin 101. Accordingly, revenue from product sales to end-users is now recognized when title passes, which for shipments to certain foreign countries is subsequent to product shipment. Title for these shipments

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

ordinarily passes within a week of shipment. This accounting change did not materially impact the Company's results of operations for fiscal 2001. For all periods presented, revenue is deferred on sales made through distributors until the distributors resell the products to the end users.

o. Other Comprehensive Income

Components of other comprehensive income include net income and certain transactions that have generally been reported in the consolidated statement of stockholders' equity. Other comprehensive income is comprised of net income, 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 November 2, 2002 and November 3, 2001 consisted of the following:

	2002	2001
Minimum pension liability adjustments	\$(2,117)	\$ —
Unrealized gains (losses) on securities	(3,908)	(226)
Foreign currency translation	796	(154)
Derivative instruments designated as cash flow hedges	3,321	176
Total accumulated other comprehensive income	\$(1,908)	\$(204)

p. Advertising Expense

Advertising costs are expensed as incurred. Advertising expense was \$10.4 million in fiscal 2002 and fiscal 2001 and \$16.1 million in fiscal 2000.

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

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were excluded because they were anti-dilutive, however these shares could be dilutive in the future. The following table sets forth the computation of basic and diluted earnings per share:

	2002	2001	2000
Basic:			
Net income	\$ 105,299	\$ 356,377	\$ 607,132
Weighted shares outstanding	364,194	359,113	353,363
Earnings per share	\$ 0.29	\$ 1.00	\$ 1.71
Diluted:			
Net income	\$ 105,299	\$ 356,377	\$ 607,132
Weighted shares outstanding	364,194	359,113	353,363
Assumed exercise of common stock equivalents	17,051	22,849	27,794
Weighted average common and common equivalent shares	381,245	381,962	381,157
Earnings per share	\$ 0.28	\$ 0.93	\$ 1.59
Weighted-average anti-dilutive shares related to:			
Outstanding stock options	25,876,756	7,533,121	—
Convertible debt	9,246,720	9,246,720	2,311,680
Employee stock purchase plan	112,932	—	—

s. Stock-Based Compensation

The Company grants stock options for a fixed number of shares to employees with an exercise price equal to the fair market value of the shares at the date of grant. The Company accounts for stock option grants in accordance with APB Opinion No. 25, "Accounting for Stock Issued to Employees" and related interpretations and, accordingly, recognizes no compensation expense for stock option grants. The Company has granted restricted stock for a fixed number of shares to employees for nominal consideration. Compensation expense related to restricted stock awards is recorded ratably over the restriction period.

t. New Accounting Standards

In June 2001, the Financial Accounting Standards Board issued Statements of Financial Accounting Standards No. 141 (FAS 141), "Business Combinations," and No. 142 (FAS 142), "Goodwill and Other Intangible Assets." FAS 141 requires that all business combinations initiated after June 30, 2001 be accounted for using the purchase method of accounting. Under FAS 142, which is effective for fiscal years beginning after December 15, 2001, goodwill and intangible assets deemed to have indefinite lives will no longer be amortized but will be subject to annual impairment tests in accordance with the Statement. Other intangible assets will continue to be amortized over their estimated useful lives. The Company must adopt these new pronouncements no later than November 2002. Application of the non-amortization provisions of FAS 142 is expected to result in an increase in annual net income of approximately \$54 million, beginning in fiscal 2003. During fiscal 2003, the Company will perform the first of the required impairment tests of goodwill as of November 3, 2002.

In June 2001, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 143, (FAS 143), "Accounting for Asset Retirement Obligations," which addresses financial accounting and reporting for legal obligations associated with the retirement of tangible long-lived assets and the associated asset retirement costs. The Company is required to adopt FAS 143 in the

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first quarter of fiscal 2003 and does not believe that the adoption of FAS 143 will have a material effect on its financial position or results of operations.

In August 2001, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 144, (FAS 144), "Accounting for the Impairment or Disposal of Long-Lived Assets," which addresses the financial accounting and reporting for the impairment of long-lived assets. This statement supersedes Statement of Financial Accounting Standards No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of," and the accounting and reporting provisions for the disposal of a segment of a business of APB Opinion No. 30, "Reporting the Results of Operations-Reporting the Effects of Disposal of a Segment of a Business, and Extraordinary, Unusual and Infrequently Occurring Events and Transactions." The Company is required to adopt FAS 144 in the first quarter of fiscal 2003 and does not believe that the adoption of FAS 144 will have a material effect on its financial position or results of operations.

In April 2002, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 145, (FAS 145), "Rescission of FASB Statements No. 4, 44 and 64, Amendment of FASB Statement No. 13, and Technical Corrections." Under FAS 145, gains and losses on extinguishments of debt are to be classified as income or loss from continuing operations rather than extraordinary items. The Company is required to adopt FAS 145 in the first quarter of fiscal 2003 and does not expect the adoption of this statement to have a material impact on its financial condition or results of operations.

In July 2002, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 146, (FAS 146), "Accounting for Costs Associated with Exit or Disposal Activities." The statement requires companies to recognize costs associated with exit or disposal activities when they are incurred rather than at the date of a commitment to an exit or disposal plan. Costs covered by the standard include lease termination costs and certain employee severance costs that are associated with a restructuring, plant closing, or other exit or disposal activity. This statement is effective for exit or disposal activities initiated after December 31, 2002. FAS 146 may affect the timing of the Company's recognition of future exit or disposal costs, if any.

3. Acquisitions

During the first quarter of fiscal 2001, the Company completed the following acquisitions, which were accounted for as purchases, and, generally, the excess of the purchase price over the fair value of the net assets acquired has been allocated to goodwill and is amortized over five years:

- In the first quarter of fiscal 2001, the Company completed the acquisitions of Thomas Neuroth AG (Neuroth), Signal Processing Associates Pty. Ltd. (SPA) and Integrated Micro Instruments, Inc. (IMI). The total amount paid for these acquisitions, as of November 2, 2002, was \$10.2 million. As of November 2, 2002, the remaining contingent consideration was \$2.7 million, which will be paid if certain operational objectives are met, and will be recorded as compensation expense.
- On January 4, 2001, the Company acquired ChipLogic, Inc. (ChipLogic) of Santa Clara, California. ChipLogic is a developer of high-performance integrated circuits and software focused on the convergence of voice, broadband access and network protocol processing. The total purchase price of \$68.3 million consisted of cash of approximately \$4 million, approximately 1 million shares of our common stock valued at \$60.2 million and the assumption of \$4.1 million of outstanding ChipLogic vested stock options. Approximately \$9.5 million represented the purchase price of in-process technology that had not yet reached technological feasibility, had no alternative future use and was charged to operations during fiscal 2001. An additional \$8 million of cash consideration and 489,375 shares of common stock is due if certain operational objectives are achieved and will, if paid, be accounted for as compensation expense. Of these shares, 249,375 contingent shares have a fixed value of approximately \$13 million, which is being charged to

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operations over a five-year period as their restrictions lapse. The remaining 240,000 shares are subject to performance-based criteria and during fiscal 2001, approximately \$4.2 million of expense was recorded related to the issuance of 117,592 shares of common stock associated with the achievement of certain of these objectives. During fiscal 2002, approximately \$5 million of expense was recorded related to the issuance of the remaining shares. As of November 2, 2002, there was \$8 million of contingent consideration remaining to be paid. An additional \$2.8 million of compensation expense is being recorded annually through fiscal 2005 related to the assumption of unvested stock options.

- On January 16, 2001, the Company acquired Staccato Systems, Inc. (Staccato) of Mountain View, California. Staccato is in the field of audio synthesis technology. The total purchase price of \$23.8 million consisted of \$23 million in cash and the assumption of \$0.8 million of outstanding Staccato stock options. The Company paid an additional \$7 million related to the achievement of operational objectives that was accounted for as additional goodwill, of which approximately \$5 million was recorded in fiscal 2002. All of the contingent consideration had been paid as of November 2, 2002. An additional \$0.2 million of compensation expense is being recorded annually through fiscal 2005 related to the assumption of unvested stock options.

Pro forma results of operations for Neuroth, SPA, IMI, ChipLogic and Staccato have not been provided herein as they were not material to the Company on either an individual or an aggregate basis. The results of operations of each acquisition are included in the Company's consolidated statement of income from the date of each acquisition.

During the third quarter of fiscal 2000, the Company acquired BCO Technologies plc (BCO), a company with operations in Belfast, Northern Ireland, in a cash-for-stock transaction valued at approximately \$163 million. The acquisition was accounted for as a purchase, and the excess of the purchase price over the fair value of the assets acquired was allocated to workforce in place and goodwill, which are being amortized on the straight-line basis over five years. In connection with the acquisition, the Company recorded approximately \$158 million of goodwill. There was no in-process research and development write-off related to this acquisition. Pro forma results of operations for BCO have not been provided herein as they were not material to the Company. The results of operations of this acquisition are included in the Company's consolidated statement of income from the date of acquisition.

4. 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 Standard No. 131 (SFAS 131), "Disclosures about Segments of an Enterprise and Related Information."

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)
Geographic Information

The Company operates in the following major geographic areas. Trade sales data is based upon point of sale and long-lived assets based upon physical location. The predominant countries comprising European operations are Ireland, England, France and Germany.

Geographic Segment Information	2002	2001	2000
Sales			
North America	\$ 516,642	\$ 885,584	\$1,151,853
Europe	358,951	553,928	504,669
Japan	288,686	340,951	350,822
Southeast Asia	543,229	496,452	570,203
Total sales	<u>\$1,707,508</u>	<u>\$2,276,915</u>	<u>\$2,577,547</u>
Long-lived Assets			
North America	\$ 466,753	\$ 583,125	\$ 466,612
Europe	407,980	463,920	388,439
Philippines	70,160	72,305	60,320
Japan	739	1,088	1,229
Southeast Asia	9,909	16,834	55,324
Total long-lived assets	<u>\$ 955,541</u>	<u>\$1,137,272</u>	<u>\$ 971,924</u>

5. Special Charges

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

Income Statement	Fiscal 2002				Fiscal 2001
	2nd Quarter Special Charges	3rd Quarter Special Charges	4th Quarter Special Charges	FY02 Total	Special Charges
Workforce reductions	\$15,284	\$ 3,676	\$2,512	\$21,472	\$29,636
Abandonment of equipment	2,327	700	859	3,886	11,573
Equipment/lease cancellation and cleanup fees	8,076			8,076	3,298
Investment impairments	2,125	3,779	2,090	7,994	2,500
Other	903	1,258	944	3,105	
Change in estimate	(1,465)		2,000	535	
Goodwill impairment		3,426		3,426	
Total Special Charges	<u>\$27,250</u>	<u>\$12,839</u>	<u>\$8,405</u>	<u>\$48,494</u>	<u>\$47,007</u>

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

Accrued Restructuring	Fiscal 2002			Fiscal 2001 Special Charges	Total
	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)
Balance at November 3, 2001				26,756	26,756
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)
Balance at November 2, 2002	\$25,017	\$ 4,254	\$ 3,146	\$ 7,607	\$ 40,024

During the second quarter of fiscal 2002, the Company recorded special charges of approximately \$27.2 million (comprised of \$28.7 million of second quarter charges offset by \$1.5 million related to a change in estimate discussed below.) 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 are severance and fringe benefit costs of \$15.3 million for 509 manufacturing employees in the United States and Ireland, of which 182 of these employees had been terminated as of November 2, 2002, \$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 our decision to discontinue various product development strategies. This program is proceeding in accordance with the Company's original plan and is expected to be substantially complete by the end of the second quarter of fiscal 2003.

In addition, the remaining service lives of certain assets within the older four-inch wafer fabrication facilities have been shortened. As a result, depreciation expense included in cost of sales in fiscal 2002 included additional depreciation of approximately \$8.7 million associated with the shortened lives.

During the third quarter of fiscal 2002, the Company recorded special charges of \$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 impairment of goodwill related to the closure 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 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 benefits 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 the manufacturing employees and approximately 32 of the engineering employees had been terminated as of November 2, 2002. The Company expects to substantially complete the above actions by the end of the first quarter of fiscal 2003.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

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 our sales group, several product groups and our manufacturing testing area for approximately 65 employees in the United States and Europe, of which 40 had been terminated as of November 2, 2002. 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 million related to clean-up costs previously 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 below cost basis that was determined to be other-than-temporary and of an equity investment in a private company. The private company equity investment was part of a product strategy the Company decided to abandon. The Company expects to substantially complete this action by the third quarter of fiscal 2003.

During fiscal 2001, the Company recorded special charges of \$47 million related to cost reduction actions taken in response to the current economic climate. 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 U.S., Europe, Asia and the Philippines of which approximately 1,010 of these employees had been terminated as of November 2, 2002. The remaining 190 employees are expected to be terminated during the first quarter of fiscal 2003. As of November 2, 2002, \$23 million of the \$29.6 million aggregate severance cost obligations pertaining to the fiscal 2001 worldwide cost reduction actions had been paid. The special charge 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.

6. Deferred Compensation Plan Investments and Other Investments

During the first quarter of fiscal 2001, the Company sold its investment in WaferTech, realizing a pretax gain on the sale of this investment of approximately \$28 million. The Company had an equity investment in Chartered Semiconductor Manufacturing Pte., Ltd. in Singapore of approximately \$27 million which represented a less than 5% ownership interest. During fiscal 2000, the Company sold its equity investment for \$65 million, realizing a \$44 million gain over the original cost of \$21 million. These gains are included in other nonoperating income.

Investments consist primarily of long-term investments in mutual funds and bank money market funds, which are related to the Company's deferred compensation plan and 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. These investments are classified as trading.

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 other comprehensive income, which is included as a component of stockholders' equity. Adjustments to fair value of, and income pertaining to, other investments are recorded in operating expense.

ANALOG DEVICES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

7. Accrued Liabilities

Accrued liabilities at November 2, 2002 and November 3, 2001 consisted of the following:

	2002	2001
Accrued compensation and benefits	\$ 55,703	\$ 66,261
Special charges	40,024	26,756
Other	56,152	84,860
Total accrued liabilities	<u>\$151,879</u>	<u>\$177,877</u>

8. Debt and Credit Facilities

Long-term debt at November 2, 2002 and November 3, 2001 consisted of the following:

	2002	2001
4.75% Convertible Subordinated Notes due October 1, 2005	\$1,246,576	\$1,200,000
Other	27,444	—
Total long-term debt	<u>\$1,274,020</u>	<u>\$1,200,000</u>

On October 1, 2000, the Company issued \$1,200 million of 4.75% Convertible Subordinated Notes due October 1, 2005 (the “2005 Notes”) with semiannual interest payments on April 1 and October 1 of each year. The 2005 Notes are convertible, at the option of the holder, into the Company’s common stock at any time unless previously redeemed or repurchased, at a conversion price of \$129.78 per share, subject to adjustment in certain events. The net proceeds of the offering were \$1,172 million after payment of the underwriting discount and expenses of the offering, which will be amortized over the term of the 2005 Notes.

Other long-term debt of \$27.4 million is due to a third-party counterparty and is related to the interest rate swap on the 2005 Notes entered into in fiscal 2002 (see Note 2i.) The swap is designed to terminate if the 2005 Notes are converted or redeemed early. As consideration for the restructuring of the interest rate swap agreement in the Company’s favor in October 2002, the Company agreed to pay a fixed amount to the counterparty that is due regardless of when the interest rate swap agreement terminates. This obligation is payable, plus interest at the LIBOR-based floating rate (1.61% as of November 6, 2002), on a quarterly basis over the same term as that of the interest rate swap, but the full amount is accelerated should the swap terminate prior to its contractual maturity.

There were \$6 thousand and \$434 thousand of other short-term borrowings outstanding at November 2, 2002 and November 3, 2001, respectively, which were at prevailing market rates for the respective currencies. Borrowings under the Company’s lines of credit are generally due within six months.

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. The Company’s liability under the Deferred Compensation Plan is an unfunded and unsecured general obligation of the Company. The other items included in other noncurrent liabilities primarily relate to pension liabilities.

ANALOG DEVICES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

10. Lease Commitments

The Company leases certain of its facilities and equipment under various operating and capital leases that expire at various dates through 2020. The lease agreements frequently include renewal and escalation clauses and purchase provisions and require the Company to pay taxes, insurance and maintenance costs. Total rental expense under operating leases was approximately \$21 million in fiscal 2002 and fiscal 2001 and \$19 million in fiscal 2000.

The following is a schedule of future minimum lease payments under capital leases and rental payments required under long-term operating leases at November 2, 2002:

Fiscal Years	Operating Leases	Capital Leases
2003	\$15,793	\$3,828
2004	13,358	467
2005	11,889	—
2006	8,522	—
2007	4,553	—
Later Years	6,868	—
	<hr/>	<hr/>
Total	\$60,983	4,295
	<hr/>	<hr/>
Less amount representing interest		(89)
		<hr/>
Present value of minimum lease payments		\$4,206
		<hr/>

11. Commitments and Contingencies*Litigation*

The Company is a defendant in a federal lawsuit brought in the United States District Court for the Northern District of California (the "Court") by Linear Technology Corporation ("LTC"). On June 26, 1997, LTC filed suit against the Company, Impala Linear Corporation, Toyoda Automatic Loom Works, Ltd., Maxim Integrated Products, Inc. and Unitrode Corporation alleging patent infringement and seeking injunctive relief and unspecified damages. The case was originally scheduled for trial on liability issues beginning on September 7, 1999. The original district judge recused himself and the case was reassigned three times before the Court granted several motions for summary judgment of non-infringement in favor of the defendants in September 2001. The Court also denied LTC's motion for summary judgment of infringement and willful infringement against the Company. On October 4, 2001, the Court indicated that it would stay the matter and certify similar issues as to the Company to allow all parties to take appeals to the United States Court of Appeals for the Federal Circuit ("Federal Circuit"). LTC, Maxim and Unitrode filed cross appeals with the Federal Circuit. On November 1, 2001, LTC and the Company jointly petitioned the Federal Circuit to permit them to address the issues certified for appeal. On February 15, 2002, the Federal Circuit dismissed all of the appeals due to improper certification and denied the petition of LTC and the Company for permission to appeal. On June 4, 2002, LTC and the Company filed a stipulation of dismissal and proposed order dismissing all of LTC's claims against the Company without prejudice. The judge issued an order on June 6, 2002, dismissing the case against the Company without prejudice. While the renewed appeals of the other defendants include a challenge to the propriety of the dismissal of the Company being without prejudice, this matter is formally concluded as to the Company.

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

ANALOG DEVICES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

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. The Company met with Plasma Physics, and those negotiations are ongoing. On October 17, 2002, Plasma Physics served the complaint. Analog has answered the complaint denying the allegations, and the litigation is in its early stages.

On October 7, 2002, Townshend Intellectual Property, L.L.C. (“Townshend”) commenced an action in the United States District Court for the Northern District of California against the Company, alleging that the Company infringed eight patents, alleged to be owned by Townshend. Townshend’s complaint alleges that the Company’s Standalone Embedded Modems and Single Chip Internet Modems infringe those patents. The complaint seeks injunctive relief and unspecified damages. By letter dated October 16, 2002, the Company sought indemnification from Lucent Technologies, Inc. (“Lucent”). Lucent has denied that it has any indemnification obligations to the Company. The Company filed an Answer to the complaint with the Court, on or about December 12, 2002, denying infringement and liability. The Company continues to evaluate issues with regard to defenses and counterclaims, as well as indemnification issues with respect to Lucent.

The Company is currently under audit by the United States Internal Revenue Service (the “IRS”) for fiscal year 1999 and fiscal year 2000. The audit has not been completed and the IRS has not issued a report on its audit.

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 at the time the option is granted. The Company’s 1988 Stock Option Plan (the “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

ANALOG DEVICES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

of grant or in annual installments of 25% on each of the second, third, fourth and fifth anniversaries of the date of grant.

Under the 1994 Director Option Plan, which was restated in 1998, and subsequently amended, each non-employee director was granted annually a non-statutory option to purchase 21,000 shares of common stock at an exercise price equal to the fair market value on the date of grant. Up to 1999, each newly elected non-employee director received a grant of an option to purchase 21,000 shares of common stock upon his or her election to the Board (each, an “Initial Grant”). The 1994 Director Option Plan was amended in 1999 whereby the number of shares of common stock underlying each Initial Grant was increased from 21,000 to 60,000. On December 8, 1999, the 1994 Director Option Plan was terminated (effective March 14, 2000), and 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 20,000 shares (25,000 shares prior to fiscal year 2001) 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, as well as the options previously granted under the 1994 Director Option 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.

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
Balance, October 30, 1999	17,688	45,382	\$ 6.97
Additional shares authorized for 1998 Stock Option Plan	34,000	—	—
Options granted	(15,833)	15,833	31.03
Options exercised	—	(7,210)	5.05
Options canceled	1,755	(1,755)	14.02
Balance, October 28, 2000	37,610	52,250	\$14.31
Options granted	(17,041)	17,041	44.00
Options exercised	—	(3,939)	6.74
Options canceled	1,615	(1,615)	24.37
Balance, November 3, 2001	22,184	63,737	\$22.28
Shares authorized for 2001 Broad-Based Stock Option Plan	50,000	—	—
Shares cancelled 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
Balance, November 2, 2002	44,005	85,851	\$25.41

ANALOG DEVICES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The following table summarizes information about options outstanding at November 2, 2002:

Range of Exercise Price	Outstanding Options			Options Exercisable	
	Number Outstanding at 11/02/02	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price	Number Exercisable at 11/02/02	Weighted Average Exercise Price
\$ 0.98-\$ 9.93	26,835	4.8	\$ 6.95	17,408	\$ 6.89
\$ 9.94-\$19.85	915	5.8	13.46	476	13.42
\$19.86-\$29.78	27,621	8.5	24.33	150	26.25
\$29.79-\$59.55	29,832	8.6	42.34	1,557	40.89
\$59.56-\$99.25	648	7.6	73.66	34	73.23
\$ 0.98-\$99.25	85,851	7.3	\$25.41	19,625	\$10.01

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 436,885 shares of common stock under this plan in fiscal 2002 (390,719 shares and 1,011,624 shares in fiscal 2001 and fiscal 2000, respectively) for a total purchase price of \$13.6 million (\$15.2 million and \$16.5 million in fiscal 2001 and fiscal 2000, respectively). At November 2, 2002, approximately 2,554,000 common shares, net of retirements, 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 2002, 2001 and 2000, \$0.9 million, \$2.1 million, and \$2.2 million, respectively, of compensation expense was recorded in connection with grants made under this plan. As of November 2, 2002, approximately 510,000 common shares were outstanding under the 1991 Restricted Stock Plan.

As of November 2, 2002, a total of 132,410,000 common shares were reserved for issuance under the Company's stock plans.

Common Stock Repurchase

In August 2002, the Company's Board of Directors approved the repurchase of up to 15 million shares of common stock. As of November 2, 2002, the Company had purchased 4,350,100 shares of its common stock at an average purchase price of \$22.47 per share. The repurchased shares are held as treasury shares and are being used for the employee stock purchase plan and other benefit plans.

Stock-Based Compensation

As permitted under Statement of Financial Accounting Standards No. 123 (FAS 123), "Accounting for Stock-Based Compensation," the Company has elected to follow Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees," and related Interpretations, in accounting for stock-based awards to employees. Under APB 25, the Company generally recognizes no compensation expense with respect to such awards.

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

ANALOG DEVICES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

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 value of the Company's stock-based awards to employees was estimated assuming no expected dividends and the following weighted average assumptions:

	Options			ESPP		
	2002	2001	2000	2002	2001	2000
Expected life (years)	5.2	5.3	4.9	1.0	1.0	1.0
Expected stock price volatility	70.5%	65.4%	56.6%	65.0%	89.9%	72.5%
Risk-free interest rate	3.5%	5.7%	6.0%	3.9%	3.9%	6.3%

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

	Weighted Average Grant Date Value		
	2002	2001	2000
Stock option plans	\$18.89	\$26.95	\$16.90
ESPP	\$17.40	\$37.82	\$ 7.88

As required under FAS 123, the reported net (loss) income and basic and diluted earnings per share have been presented to reflect the impact had the Company been required to include the amortization of the Black-Scholes option value as expense. For purposes of this disclosure, the estimated fair value of the options is amortized to expense over the options' vesting periods. The Company's pro forma information follows:

	2002	2001	2000
Net income as reported	\$ 105,299	\$ 356,377	\$607,132
Pro forma stock option expense	(227,166)	(164,779)	(80,517)
Pro forma net income (loss)	\$(121,867)	\$ 191,598	\$526,615
Pro forma diluted earnings (loss) per share — Basic	\$ (0.33)	\$ 0.53	\$ 1.49
Pro forma diluted earnings (loss) per share — Diluted	\$ (0.33)	\$ 0.50	\$ 1.38

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.

Preferred Stock

The Company has 471,934 authorized shares of \$1.00 par value preferred stock. 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 Company also has various defined benefit pension and other retirement plans for certain non-U.S. employees that are consistent with local statutes and practices. The total expense related to all of the Company's retirement plans was approximately \$28 million in each of fiscal 2002 and fiscal 2001 and \$26 million in fiscal year 2000, which primarily consisted of costs related to the U.S. defined contribution plan. Also included in total expense is pension expense related to non-U.S. defined benefit plans of approximately \$4 million in fiscal 2002 and \$3 million for each of the fiscal years 2001 and 2000.

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.

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:

	2002	2001	2000
Service cost	\$ 5,144	\$ 4,334	\$ 4,110
Interest cost	4,023	3,689	3,085
Expected return on plan assets	(5,115)	(4,534)	(4,044)
Amortization of prior service cost	136	131	139
Amortization of transitional (asset) or obligation	(81)	(56)	(68)
Recognized actuarial (gain) or loss	359	(87)	(258)
Net periodic pension cost	<u>\$ 4,466</u>	<u>\$ 3,477</u>	<u>\$ 2,964</u>

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

	2002	2001
Change in Benefit Obligation		
Benefit obligation at beginning of year	\$ 69,059	\$ 63,306
Service cost	5,144	4,334
Interest cost	4,023	3,689
Curtailment (gain)/loss	(1,218)	—
Participant contributions	1,499	1,512
Actuarial (gain)/loss	(3,255)	2,952
Benefits paid	(2,157)	(2,400)
Exchange rate adjustment	6,316	(4,334)
Benefit obligation at end of year	<u>\$ 79,411</u>	<u>\$ 69,059</u>
Change in Plan Assets		
Fair value of plan assets at beginning of year	\$ 58,282	\$ 70,364
Actual return on plan assets	(9,852)	(8,868)
Employer contributions	2,415	2,461
Participant contributions	1,499	1,512
Benefits paid	(2,157)	(2,400)
Exchange rate adjustment	4,856	(4,787)
Fair value of plan assets at end of year	<u>\$ 55,043</u>	<u>\$ 58,282</u>
Reconciliation of Funded Status		
Funded status	\$(24,368)	\$(10,777)
Contribution between September 30 and fiscal year end	204	—
Unrecognized transition obligation or (asset)	13	216
Unrecognized actuarial loss or (gain)	16,820	4,494
Unrecognized prior service cost	551	627
Net amount recognized	<u>\$ (6,780)</u>	<u>\$ (5,440)</u>

ANALOG DEVICES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

	2002	2001
Amounts Recognized in the Balance Sheet Consist of		
Prepaid benefit Cost	\$ 60	\$ 2,108
Accrued benefit liability	(10,404)	(7,548)
Intangible asset	307	—
Accumulated other comprehensive income	3,257	—
Net amount recognized	\$ (6,780)	\$(5,440)
Other comprehensive income attributable to change in additional minimum liability recognition	\$ 3,257	\$ —

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 \$20.8 million, \$17.8 million and \$9.4 million respectively, at September 30, 2002 and \$23.3 million, \$16.9 million and \$11.5 million, respectively, at November 3, 2001.

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 assumptions:

	2002	2001
Discount rate	5.50%	5.73%
Rate of increase in compensation levels	3.80%	3.99%
Expected long-term return on plan assets	7.67%	7.88%

14. Income Taxes

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

	2002	2001	2000
U.S. federal statutory tax rate	35.0%	35.0%	35.0%
Income tax provision reconciliation:			
Tax at statutory rate	\$ 49,123	\$177,535	\$302,999
Irish income subject to lower tax rate	(23,882)	(22,265)	(35,605)
State income taxes, net of federal benefit	260	3,225	6,448
Research and development tax credits	(3,764)	(9,650)	(11,288)
Extraterritorial/income exclusion/ Foreign Sales Corporation	—	(7,700)	(5,392)
Amortization of goodwill	11,746	8,628	1,037
Net foreign tax in excess of U.S. federal statutory tax rate	960	497	428
Other, net	608	597	(48)
Total income tax provision	\$ 35,051	\$150,867	\$258,579

ANALOG DEVICES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

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

	2002	2001	2000
Pretax income (loss):			
Domestic	\$(123,461)	\$217,457	\$622,331
Foreign	263,811	289,787	243,380
Total income before income taxes	<u>\$ 140,350</u>	<u>\$507,244</u>	<u>\$865,711</u>

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

	2002	2001	2000
Current:			
Federal	\$ 27,147	\$113,334	\$224,413
Foreign	48,067	62,494	37,205
State	400	4,962	9,505
Total current	<u>\$ 75,614</u>	<u>\$180,790</u>	<u>\$271,123</u>
Deferred (prepaid):			
Federal	\$(41,868)	\$ (28,448)	\$ (11,807)
Foreign	1,305	(1,475)	(737)
Total deferred (prepaid)	<u>\$(40,563)</u>	<u>\$ (29,923)</u>	<u>\$ (12,544)</u>

The Company's practice is to reinvest indefinitely the earnings of certain international subsidiaries. Accordingly, no U.S. income taxes have been provided for approximately \$1,055 million of unremitted earnings of international subsidiaries. As of November 2, 2002, the amount of unrecognized deferred tax liability on these unremitted earnings was \$230 million. At November 2, 2002, the Company had general business credit carryovers of approximately \$15.6 million that begin to expire in 2021, and a foreign tax credit of approximately \$7 million that will expire in 2008.

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 November 2, 2002 and November 3, 2001 are as follows:

	2002	2001
Deferred tax assets:		
Inventory reserves	\$ 41,204	\$ 40,419
Deferred income on shipments to distributors	26,250	34,670
Reserves for compensation and benefits	60,200	46,398
Tax credit carryovers	22,554	12,228
FAS 115 mark-to-market adjustment	1,983	122
Accrued liabilities	1,895	2,044
Other	4,817	3,537
	<hr/>	<hr/>
Total gross deferred tax assets	158,903	139,418
	<hr/>	<hr/>
Deferred tax liabilities:		
Depreciation	(19,966)	(41,849)
Undistributed earnings of foreign subsidiaries	(6,768)	(8,415)
Other	(2,229)	(1,081)
	<hr/>	<hr/>
Total gross deferred tax liabilities	(28,963)	(51,345)
	<hr/>	<hr/>
Net deferred tax assets	\$129,940	\$ 88,073
	<hr/>	<hr/>

The Company has provided for potential liabilities due in various foreign 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.

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 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 \$206 million of product from TSMC in fiscal year 2002, and approximately \$19 million was payable to TSMC as of November 2, 2002. Management anticipates the Company will make similar purchases in fiscal year 2003.

REPORT OF ERNST & YOUNG LLP, INDEPENDENT AUDITORS

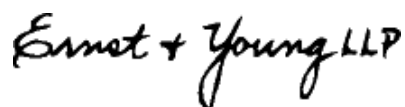
The Board of Directors and Stockholders

Analog Devices, Inc.

We have audited the accompanying consolidated balance sheets of Analog Devices, Inc. as of November 2, 2002 and November 3, 2001, and the related consolidated statements of income, stockholders' equity, comprehensive income and cash flows for each of the three years in the period ended November 2, 2002. Our audits also included the financial statement schedule listed in the Index at Item 15(d). 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 auditing standards generally accepted in the 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 November 2, 2002 and November 3, 2001, and the consolidated results of its operations and its cash flows for each of the three years in the period ended November 2, 2002, in conformity with accounting principles generally accepted in the United States.

The image shows a handwritten signature in black ink that reads "Ernst & Young LLP". The signature is written in a cursive, flowing style.

Boston, Massachusetts

November 18, 2002

ANALOG DEVICES, INC.
SUPPLEMENTARY FINANCIAL INFORMATION
(Unaudited)

Quarterly financial information for fiscal 2002 and fiscal 2001 (thousands except per share amounts and as noted):

	4Q02	3Q02	2Q02	1Q02	4Q01	3Q01	2Q01	1Q01
Net sales	455,718	445,448	413,368	392,974	423,313	479,886	601,442	772,274
Cost of sales	213,084	208,182	192,537	189,177	203,432	226,008	258,635	320,020
Gross margin	242,634	237,266	220,831	203,797	219,881	253,878	342,807	452,254
% of sales	53%	53%	53%	52%	52%	53%	57%	59%
Operating expenses:								
Research and development	109,299	107,040	102,821	104,709	106,054	112,101	124,821	121,710
Selling, marketing, general and administrative	69,204	67,138	62,354	58,358	57,447	66,583	77,563	85,553
Purchased in-process research and development	—	—	—	—	—	—	—	9,500
Amortization of intangibles	14,207	14,327	14,234	14,105	14,487	14,006	13,996	10,306
Special charges	8,405	12,839	27,250	—	20,850	26,157	—	—
Total operating expenses	201,115	201,344	206,659	177,172	198,838	218,847	216,380	227,069
% of sales	44%	45%	50%	45%	47%	46%	36%	29%
Operating income	41,519	35,922	14,172	26,625	21,043	35,031	126,427	225,185
% of sales	9%	8%	3%	7%	5%	7%	21%	29%
Nonoperating expenses (income):								
Interest expense	10,286	10,847	9,542	13,783	13,644	15,716	16,245	16,869
Interest income	(14,610)	(14,566)	(15,358)	(20,359)	(25,424)	(30,158)	(35,817)	(41,248)
Other, net	(517)	(21)	(48)	(1,091)	116	(212)	(1,173)	(28,116)*
Total nonoperating (income) expense	(4,841)	(3,740)	(5,864)	(7,667)	(11,664)	(14,654)	(20,745)	(52,495)
Income before income taxes	46,360	39,662	20,036	34,292	32,707	49,685	147,172	277,680
% of sales	10%	9%	5%	9%	8%	10%	24%	36%
Provision for income taxes	11,590	8,249	5,610	9,602	8,506	10,382	44,676	87,303
Net income	34,770	31,413	14,426	24,690	24,201	39,303	102,496	190,377
% of sales	8%	7%	4%	6%	6%	8%	17%	25%
Per share — basic	.10	.09	.04	.07	.07	.11	.29	.53
Per share — diluted	.09	.08	.04	.06	.06	.10	.27	.50
Shares used to compute earnings per share (in thousands)								
Basic	364,019	365,065	364,545	363,147	361,110	359,535	358,739	357,070
Diluted	377,285	380,770	383,455	383,471	381,775	381,903	380,777	383,392

* Includes \$28 million of realized gain on sale of investment in WaferTech, LLC.

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

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 11, 2003 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 2003 proxy statement under the caption “Section 16(a) Beneficial Ownership Reporting Compliance” 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.

ITEM 11. EXECUTIVE COMPENSATION

The response to this item is contained in our 2003 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 2003 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 2003 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 2003 proxy statement under the caption “Certain Relationships and Related Transactions,” and is incorporated herein by reference.

ITEM 14. CONTROLS AND PROCEDURES

Within the 90-day period prior to the filing of this Annual Report on Form 10-K, an evaluation was carried out under the supervision and with the participation of our management, including our Chief Executive Officer, or CEO, and Chief Financial Officer, or CFO, of the effectiveness of the design and operation of our disclosure controls and procedures. Based on that evaluation, our CEO and CFO have concluded that our disclosure controls and procedures are designed to ensure that information required to be disclosed by us in reports that we file or submit under the Securities Exchange Act of 1934 is recorded, processed, summarized, and reported within the time periods specified in SEC rules and forms and are operating in an effective manner.

There were no significant changes in our internal controls or in other factors that could significantly affect these controls subsequent to the date of their most recent evaluation.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES, AND REPORTS ON FORM 8-K

(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 November 2, 2002, November 3, 2001 and October 28, 2000

— Consolidated Balance Sheets as of November 2, 2002 and November 3, 2001

— Consolidated Statements of Stockholders' Equity for the years ended November 2, 2002, November 3, 2001 and October 28, 2000

— Consolidated Statements of Comprehensive Income (Loss) for the years ended November 2, 2002, November 3, 2001 and October 28, 2000

— Consolidated Statements of Cash Flows for the years ended November 2, 2002, November 3, 2001 and October 28, 2000

(b) Reports on Form 8-K

On August 6, 2002, we filed a current report on Form 8-K pursuant to Item 9 related to the statements under oath of our Chief Executive Officer and our Chief Financial Officer regarding facts and circumstances relating to Exchange Act filings.

(c) Exhibits

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

(d) Financial Statement Schedules

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

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

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

Date: January 29, 2003

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	January 29, 2003
<hr/> <p>/s/ JERALD G. FISHMAN</p> <hr/> <p>Jerald G. Fishman</p>	President, Chief Executive Officer and Director (Principal Executive Officer)	January 29, 2003
<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)	January 29, 2003
<hr/> <p>/s/ JOHN L. DOYLE</p> <hr/> <p>John L. Doyle</p>	Director	January 29, 2003
<hr/> <p>/s/ CHARLES O. HOLLIDAY</p> <hr/> <p>Charles O. Holliday</p>	Director	January 29, 2003
<hr/> <p>/s/ JOEL MOSES</p> <hr/> <p>Joel Moses</p>	Director	January 29, 2003
<hr/> <p>/s/ F. GRANT SAVIERS</p> <hr/> <p>F. Grant Saviers</p>	Director	January 29, 2003
<hr/> <p>/s/ LESTER C. THUROW</p> <hr/> <p>Lester C. Thurow</p>	Director	January 29, 2003

CERTIFICATIONS

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 annual 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 annual report;
3. Based on my knowledge, the financial statements, and other financial information included in this annual 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 annual report;
4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and have:
 - a) Designed such disclosure controls and procedures 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 annual report is being prepared;
 - b) Evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and
 - c) Presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;
5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation, 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 in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and
6. The registrant's other certifying officers and I have indicated in this annual report whether there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

/s/ JERALD G. FISHMAN

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

Dated: January 29, 2003

CERTIFICATIONS

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 annual 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 annual report;
3. Based on my knowledge, the financial statements, and other financial information included in this annual 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 annual report;
4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and have:
 - a) Designed such disclosure controls and procedures 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 annual report is being prepared;
 - b) Evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and
 - c) Presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;
5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation, 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 in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and
6. The registrant's other certifying officers and I have indicated in this annual report whether there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

/s/ JOSEPH E. MCDONOUGH

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

Dated: January 29, 2003

ANALOG DEVICES, INC.

ANNUAL REPORT ON FORM 10-K
YEAR ENDED NOVEMBER 2, 2002
ITEM 15(d)
FINANCIAL STATEMENT SCHEDULE

ANALOG DEVICES, INC.

SCHEDULE II — VALUATION AND QUALIFYING ACCOUNTS

Years ended November 2, 2002, November 3, 2001 and October 28, 2000

(Thousands)

Description	Balance at Beginning of Period	Additions Charged to Income Statement	Deductions	Balance at End of Period
Accounts Receivable Reserves and Allowances:				
Year ended October 28, 2000	\$14,238	\$5,940	\$7,022	\$13,156
Year ended November 3, 2001	\$13,156	\$8,163	\$5,921	\$15,398
Year ended November 2, 2002	\$15,398	\$6,285	\$6,177	\$15,506

Exhibit Index

Exhibit No.	Description
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 January 30, 1999 as filed with the Commission on March 15, 1999 and incorporated herein by reference.
†3.2	By-Laws of Analog Devices, Inc., as amended.
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. 1-07819) 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. 1-07819) as filed with the Commission on November 11, 1999 and incorporated herein by reference.
4.2	Indenture dated October 2, 2000 between Analog Devices, Inc. and State Street Bank and Trust Company, as Trustee, related to the Company's 4.75% Convertible Subordinated Notes due 2005, filed as an exhibit to the Company's Registration Statement on Form S-3 (File No. 333-48928) as filed with the Commission on October 30, 2000 and incorporated herein by reference.
4.3	Registration Rights Agreement dated October 2, 2000 by and between Analog Devices Inc., Goldman, Sachs & Co., SG Cowen Securities Corporation and Salomon Smith Barney Inc. relating to the Company's 4.75% Convertible Subordinated Notes due 2005, filed as an exhibit to the Company's Registration Statement on Form S-3 (File No. 333-48928) as filed with the Commission on October 30, 2000.
*10.1	Analog Devices, Inc. Deferred Compensation Plan filed as an exhibit to the Company's Registration Statement on Form S-8 (File No. 033-64849) as filed with the Commission on December 8, 1995, as amended by Amendments No. 1 and 2 to the Plan, filed as exhibits to Post-Effective Amendment No. 1 to Form S-8 (File No. 033-64849) as filed with the Commission on April 15, 1997, as further amended by Amendment No. 3 to the Plan, filed as an exhibit to Post-Effective Amendment No. 2 to Form S-8 (File No. 33-64849) as filed with the Commission on November 12, 1997 and, in each case, incorporated herein by reference.
*†10.2	1998 Stock Option Plan of Analog Devices Inc., as amended.
*†10.3	Analog Devices BV (Ireland) Employee Stock Option Program, as amended.
*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.
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.

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Exhibit No.	Description
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.
†10.12	Analog Devices, Inc. 2001 Broad-Based Stock Option Plan, as amended.
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 3, 2001 (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 3, 2001 (File No. 1-7819) as filed with the Commission on January 28, 2002 and incorporated herein by reference.
10.19	Lease agreement dated August 8, 1990, as amended, between Precision Monolithics, Inc. and Bourns, Inc. relating to the premises at 1500 Space Park Drive, Santa Clara, California, 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.

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Exhibit No.	Description
10.20	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 1500 Space Park Drive, Santa Clara, California, 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.
*10.21	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.
*10.22	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.
*10.23	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.
*10.24	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 3, 2001 (File No. 1-7819) as filed with the Commission on January 28, 2002 and incorporated herein by reference.
10.25	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 3, 2001 (File No. 1-7819) as filed with the Commission on January 28, 2002 and incorporated herein by reference.
10.26	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 3, 2001 (File No. 1-7819) as filed with the Commission on January 28, 2002 and incorporated herein by reference.
10.27	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 3, 2001 (File No. 1-7819) as filed with the Commission on January 28, 2002 and incorporated herein by reference.
10.28	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.
*10.29	Trust Agreement for Deferred Compensation Plan, filed as an exhibit to the Company's Post-Effective Amendment No. 2 to the Company's Registration Statement on Form S-3 (File No. 333-17651) as filed with the Commission on November 12, 1997 and incorporated herein by reference.

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Exhibit No.	Description
10.30	Lease agreement dated September 19, 1996 between Ren Min Company Limited and Analog Devices Taiwan, Limited relating to the premises at Five-Kung-Five Road, Taipei, Taiwan, 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.
†10.31	Analog Devices, Inc. Code of Business Conduct and Ethics.
†21	Subsidiaries of the Company.
†23	Consent of Ernst & Young LLP.
†99.1	Certification Pursuant to 18 U.S.C. Section 1350 (Chief Executive Officer).
†99.2	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(c) of Form 10-K.

ANALOG DEVICES, INC.

BY-LAWS

ARTICLE I- STOCKHOLDERS

1. PLACE OF MEETINGS. All meetings of stockholders shall be held within Massachusetts unless the Articles of Organization permit the holding of stockholder meetings outside Massachusetts, in which event such meetings may be held either within or without Massachusetts. Meetings of stockholders shall be held at the principal office of the corporation unless a different place is fixed by the Directors or the President and stated in the notice of the meeting.

2. ANNUAL MEETINGS. The annual meeting of stockholders shall be held on such date, within six months after the end of the fiscal year of the corporation, and at such hour and place as shall be fixed by the Board of Directors of the corporation. The purposes for which the annual meeting is to be held, in addition to those prescribed by law, by the Articles of Organization or by these By-Laws, may be specified by the Board of Directors or the President.

3. SPECIAL MEETINGS. Special meetings of stockholders may be called by the President or by the Board of Directors. In addition, upon written application of one or more stockholders who are entitled to vote and who hold at least the Required Percentage (as defined below) of the capital stock entitled to vote at the meeting (the "Voting Stock"), special meetings shall be called by the Clerk, or in case of the death, absence, incapacity or refusal of the Clerk, by any other officer. For purposes of this Section 3, the "Required Percentage" shall be 80% or such lesser percentage as shall constitute the maximum percentage permitted by law for this purpose. Any request for a call of a special meeting of stockholders ("Call") by the holders of the Required Percentage of the Voting Stock shall be governed by and subject to the following:

(a) Any stockholder of record seeking to solicit requests for a Call pursuant to this Section 3 shall so notify the Clerk of the corporation in writing, and such written notification shall set forth the reason or reasons for the Call and the purpose or purposes of such special meeting.

(b) No solicitation of stockholder requests for a Call ("Call Solicitation") may be commenced (i) before the Call Request Record Date, as defined in paragraph (c) of this Section 3, or (ii) during the period of 120 days following the most recent meeting of the stockholders of the corporation.

(c) In order that the corporation may determine the stockholders entitled to request a Call, the Board of Directors of the corporation shall fix a record date (the "Call Request Record Date"). Any stockholder of record seeking to solicit stockholder requests for a Call shall, with delivery to the corporation of the written information specified in paragraph (a), request in writing that the Board of Directors fix the Call Request Record Date. The Board of Directors shall, within 10 days after the date on which such request is received, adopt a resolution fixing the Call Request Record Date, and such Call Request Record Date shall be not more than 10 days after the date upon which

such resolution is adopted by the Board of Directors.

(d) All requests for a Call and revocations thereof shall be delivered to the corporation no later than the 30th day (the "Delivery Date") after the Call Request Record Date.

(e) Any stockholder may revoke a prior request for a Call or opposition to a Call by an instrument in writing delivered prior to the Delivery Date.

(f) Promptly after the Delivery Date, requests for a Call and revocations thereof shall be counted and verified by an independent party selected by the corporation.

(g) If, in response to any Call Solicitation, the holders of record of the Required Percentage of the Voting Stock as of the Call Request Record Date submit valid and unrevoked requests for a Call no later than the Delivery Date, the Board of Directors of the corporation shall fix a record date pursuant to Section 4 of Article I hereof and a meeting date for the special meeting, PROVIDED that the date to be fixed for such meeting shall be no earlier than 60 days or later than 90 days after the Delivery Date, and PROVIDED FURTHER that the Board of Directors shall not be obligated to fix a meeting date or to hold any meeting of stockholders within 60 days of the next scheduled meeting of the stockholders of the corporation.

(h) In the absence of a quorum at any special meeting called pursuant to a Call Solicitation, such special meeting may be postponed or adjourned from time to time only by the officer of the corporation entitled to preside at such meeting.

(i) If a Call Solicitation does not receive the support of the holders of record of the Required Percentage of the Voting Stock, no subsequent Call may be made or solicited by any stockholder during a period of 90 days after the Delivery Date.

4. NOTICE OF MEETINGS. Except as provided in Section 3 of this Article I, a written notice of every meeting of stockholders, stating the place, date and hour thereof, and the purposes for which the meeting is to be held, shall be given by the Clerk or other person calling the meeting at least seven days before the meeting to each stockholder entitled to vote thereat and to each stockholder who, by law, by the Articles of Organization or by these By-Laws, is entitled to such notice, by leaving such notice with him or at his residence or usual place of business, or by mailing it postage prepaid and addressed to him at his address as it appears upon the books of the corporation. Whenever any notice is required to be given to a stockholder by law, by the Articles of Organization or by these By-Laws, no such notice need to be given if a written waiver of notice, executed before or after the meeting by the stockholder or his attorney thereunto duly authorized, is filed with the records of the meeting.

5. QUORUM. Unless the Articles of Organization otherwise provide, a majority in interest of all stock issued, outstanding and entitled to vote on any matter shall constitute a quorum with respect to that matter, except that if two or more classes of stock are outstanding and entitled to vote as separate classes, then in the case of each such class a quorum shall consist of a majority in interest of the stock of that class issued, outstanding and entitled to vote.

6. ADJOURNMENTS. Except as provided in Section 3 of this Article I, any meeting of stockholders may be adjourned to any other time and to any other place at which a meeting of stockholders may be held under these By-Laws by the stockholders present or represented at the meeting, although less than a quorum, or by any officer entitled to preside or to act as clerk of such meeting, if no stockholder is present. It shall not be necessary to notify any stockholder of any adjournment. Any business which could have been transacted at any meeting of the stockholders as originally called may be transacted at any adjournment thereof.

7. VOTING AND PROXIES. Each stockholder shall have one vote for each share of stock entitled to vote held by him of record according to the records of the corporation and a proportionate vote for a fractional share so held by him, unless otherwise provided by the Articles of Organization. Stockholders may vote either in person or by written proxy dated not more than six months before the meeting named therein. Proxies shall be filed with the clerk of the meeting, or of any adjournment thereof, before being voted. Except as otherwise limited therein, proxies shall entitle the persons named therein to vote at any adjournment of such meeting, but shall not be valid after final adjournment of such meeting. A proxy with respect to stock held in the name of two or more persons shall be valid if executed by one of them, unless at or prior to exercise of the proxy the corporation receives a specific written notice to the contrary from any one of them. A proxy purported to be executed by or on behalf of a stockholder shall be deemed valid unless challenged at or prior to its exercise.

8. ACTION AT MEETING. When a quorum is present, the holders of a majority of the stock present or represented and voting on a matter (or if there are two or more classes of stock entitled to vote as separate classes, then in the case of each such class, the holders of a majority of the stock of that class present or represented and voting on a matter), except where a larger vote is required by law, the Articles of Organization or these By-Laws, shall decide any matter to be voted on by the stockholders. Any election by stockholders shall be determined by a plurality of the votes cast by the stockholders entitled to vote at the election. No ballot shall be required for such election unless requested by a stockholder present or represented at the meeting and entitled to vote in the election. The corporation shall not directly or indirectly vote any share of its stock.

9. ACTION WITHOUT MEETING. Any action to be taken by stockholders may be taken without a meeting if all stockholders entitled to vote on the matter consent to the action by a writing filed with the records of the meetings of stockholders. Such consent shall be treated for all purposes as a vote at a meeting.

ARTICLE II - DIRECTORS

1. POWERS. The business of the corporation shall be managed by a Board of Directors who may exercise all the powers of the corporation except as otherwise provided by law, by the Articles of Organization or by these By-Laws. In the event of a vacancy in the Board of Directors, the remaining Directors, except as otherwise provided by law, may exercise the powers of the full Board until the vacancy is filled.

2. NUMBER OF DIRECTORS, ELECTION. The number of Directors of the corporation, which shall not be less than three, shall be fixed from time to time by a majority of the Directors then in office. Elections of Directors need not be by written ballot except as and to the extent provided in the By-Laws of the corporation.

3. CLASSES OF DIRECTORS. The Board of Directors shall be and is divided into three classes: Class I, Class II and Class III. No one class shall have more than one Director more than any other class. If a fraction is contained in the quotient arrived at by dividing the authorized number of Directors by three, then if such fraction is one-third, the extra Director shall be a member of Class III and, if such fraction is two-thirds, one of the extra Directors shall be a member of Class III and one of the extra Directors shall be a member of Class II, unless otherwise provided for from time to time by vote adopted by a majority of the Directors then in office.

4. TERMS OF OFFICE. Each Director shall serve for a term ending on the date of the third annual meeting following the annual meeting at which such Director was elected; provided, however, that each initial Director in Class I shall serve for a term ending on the date of the annual meeting next following the end of the corporation's fiscal year 1990; each initial Director in Class II shall serve for a term ending on the date of the annual meeting next following the end of the corporation's fiscal year 1991; and each initial Director in Class III shall serve for a term ending on the date of the annual meeting next following the end of the corporation's fiscal year 1992. Notwithstanding any provisions to the contrary contained herein, each Director shall serve until a successor is elected and qualified or until his death, resignation or removal.

5. ENLARGEMENT OF THE BOARD; VACANCIES. The number of Directors constituting the Board of Directors may be increased solely by vote of a majority of the Directors then in office, even though less than a quorum. Any vacancies in the Board of Directors occurring for any reason and any newly created directorships resulting from any increase in the number of Directors shall be filled solely by the Board of Directors acting by the vote of a majority of the Directors then in office, even though less than a quorum. Each Director chosen to fill a vacancy shall hold office until the next election of the class for which such Director shall have been chosen and until his successor shall be elected and qualified or until his earlier death, resignation or removal.

6. ALLOCATION OF DIRECTORS AMONG CLASSES. In the event of any increase or decrease in the authorized number of Directors, (a) each Director then serving as such shall nevertheless continue as Director of the class of which he is a member until the expiration of his current term or his prior death, retirement or resignation and (b) the newly created or eliminated directorships resulting from such increase or decrease shall be apportioned by the Board of Directors among the three classes of Directors so as to ensure that no one class has more than one Director more than any other class. To the extent possible, consistent with the foregoing, any newly created directorships shall be added to those classes whose terms of office are to expire at the latest dates following such allocation, and any newly eliminated directorships shall be subtracted from those classes whose terms of office are to expire at the earliest dates following such allocation, unless otherwise provided for from time to time by resolution adopted by a majority of the Directors then in office, although less than a quorum.

7. QUORUM; ACTION OF MEETING. A majority of the Directors at any time in office shall constitute a quorum for the transaction of business and, if at any meeting of the Board of Directors there shall be less than such a quorum, a majority of those present may adjourn the meeting from time to time. Every act or decision done or made by a majority of Directors present at a meeting duly held at which a quorum is present shall be regarded as the act of the Board of Directors unless a greater number be required by law, by the Articles of Organization of the corporation or by these By-Laws.

8. RESIGNATIONS. Any Director may resign by delivering his written resignation to the corporation's President, Clerk or Secretary. Such resignation shall be effective upon receipt unless it is specified to be effective at some other time or upon the happening of some other event.

9. REMOVAL. A Director may be removed from office (a) with or without cause by vote of a majority of the stockholders entitled to vote in the election of Directors, provided that the Directors of a class elected by a particular class of stockholders may be removed only by the vote of the holders of a majority of the shares of such class or (b) for cause by vote of a majority of the Directors then in office. A Director may be removed for cause only after reasonable notice and opportunity to be heard before the body proposing to remove him.

10. MEETINGS. Regular meetings of the Directors may be held without call or notice at such places, within or without Massachusetts, and at such times as the Directors may from time to time determine, provided that any Director who is absent when such determination is made shall be given notice of the determination. A regular meeting of the Directors may be held without a call or notice at the same place as the annual meeting of stockholders, or the special meeting held in lieu thereof, following such meeting of stockholders.

Special meetings of the Directors may be held at any time and place, within or without Massachusetts, designated in a call by the President, Treasurer or two or more Directors.

11. NOTICE OF SPECIAL MEETINGS. Notice of all special meetings of the Directors shall be given to each Director by the Secretary, or if there be no Secretary, by the Clerk, or Assistant Clerk, or in case of the death, absence, incapacity or refusal of such persons, by the officer or one of the Directors calling the meeting. Notice shall be given to each Director in person or by telephone or by telegram sent to his business or home address at least forty-eight hours in advance of the meeting, or by written notice mailed to his business or home address at least seventy-two hours in advance of the meeting. Notice need not be given to any Director if a written waiver of notice, executed by him before or after the meeting, is filed with the records of the meeting, or to any Director who attends the meeting without protesting prior thereto or at its commencement the lack of notice to him. A notice or waiver of notice of a Directors' meeting need not specify the purposes of the meeting.

12. ACTION AT MEETING. At any meeting of the Directors at which a quorum is present, the vote of a majority of those present, unless a different vote is specified by law, by the Articles of Organization or by these By-Laws, shall be sufficient to take any action.

13. ACTION OF CONSENT. Any action by the Directors may be taken without a meeting if a written consent thereto is signed by all the Directors and filed with the records of the Directors' meetings. Such consent shall be

treated as a vote of the Directors for all purposes.

14. COMMITTEES. The Directors may, by vote of a majority of the Directors then in office, elect from their number an executive committee or other committees and may by like vote delegate thereto some or all of their powers except those which by law, the Articles of Organization or these By-Laws they are prohibited from delegating. Except as the Directors may otherwise determine, any such committee may make rules for the conduct of its business, but unless otherwise provided by the Directors or in such rules, its business shall be conducted as nearly as may be in the same manner as is provided by these By-Laws for the Directors.

15. MASSACHUSETTS LAW. To the extent that any of the provisions in this Article II relating to the classification of Directors conflicts or is inconsistent with any of the provisions of Section 50A of Chapter 156B of the General Laws of the Commonwealth of Massachusetts, as amended from time to time, the provisions of Section 50A shall govern and control.

ARTICLE III - OFFICERS

1. ENUMERATION. The officers of the corporation shall consist of a President, a Treasurer, a Clerk, and such other officers, including a Chairman of the Board, one or more Vice Presidents, Assistant Treasurers, Assistant Clerks and Secretary as the Directors may determine.

2. ELECTION. The President, Treasurer and Clerk shall be elected annually by the Directors at their first meeting following the annual meeting of stockholders. Other officers may be appointed by the Directors at such meeting or at any other meeting.

3. QUALIFICATION. The President shall be a Director. No officer need be a stockholder. Any two or more offices may be held by the same person, provided that the President and Clerk shall not be the same person. The Clerk shall be a resident of Massachusetts unless the corporation has a resident agent appointed for the purpose of service of process. Any officer may be required by the Directors to give bond for the faithful performance of his duties to the corporation in such amount and with such sureties as the Directors may determine.

4. TENURE. Except as otherwise provided by law, by the Articles of Organization or by these By-Laws, the President, Treasurer and Clerk shall hold office until the first meeting of the Directors following the annual meeting of stockholders and thereafter until his successor is chosen and qualified; and all other officers shall hold office until the first meeting of the Directors following the annual meeting of stockholders, unless a different term is specified in the vote choosing or appointing them. Any officer may resign by delivering his written resignation to the corporation at its principal office or to the President, Clerk or Secretary, and such resignation shall be effective upon receipt unless it is specified to be effective at some other time or upon the happening of some other event.

5. REMOVAL. The Directors may remove any officer with or without cause by a vote of a majority of the entire number of Directors then in office, provided, that an officer may be removed for cause only after reasonable notice and opportunity to be heard by the Board of Directors prior to action thereon.

6. CHAIRMAN OF THE BOARD. The Directors may appoint a Chairman of

the Board and may designate him as Chief Executive Officer. If the Directors appoint a Chairman of the Board, he shall perform such duties and shall possess such powers as are assigned to him by the Board of Directors. If the Board of Directors shall designate the Chairman as Chief Executive Officer, he shall have general charge and supervision of the business of the corporation, subject to the direction of the Directors. The Chairman of the Board shall, when present, preside at all meetings of the Directors.

7. PRESIDENT. Unless the Directors have designated the Chairman of the Board or another officer as Chief Executive Officer, the President shall be the Chief Executive Officer of the corporation and shall have general charge and supervision of the business of the corporation. The President shall perform such other duties and shall possess such other powers as the Board of Directors may from time to time prescribe.

8. VICE PRESIDENT. The Vice President, or if there shall be more than one, the Vice Presidents in the order determined by the Directors, shall, in the absence or disability of the President, perform the duties and exercise the powers of the President and shall perform such other duties and shall have such other powers as the Directors may from time to time prescribe.

9. TREASURER AND ASSISTANT TREASURERS. The Treasurer shall, subject to the direction of the Directors, have general charge of the financial affairs of the corporation and shall cause to be kept accurate books of account. He shall have custody of all funds, securities and valuable documents of the corporation, except as the Directors may otherwise provide.

The Assistant Treasurer, or if there shall be more than one, the Assistant Treasurers in the order determined by the Directors, shall, in the absence or disability of the Treasurer, perform the duties and exercise the powers of the Treasurer and shall perform such other duties and shall have such other powers as the Directors may from time to time prescribe.

10. CLERK AND ASSISTANT CLERKS. The Clerk shall keep a record of the meetings of stockholders. Unless a Transfer Agent is appointed, the Clerk shall keep or cause to be kept in Massachusetts, at the principal office of the corporation or at his office, the stock and transfer records of the corporation, in which are contained the names of all stockholders and the record address, and the amount of stock held by each.

If there is no Secretary or Assistant Secretary, the Clerk shall keep a record of the meetings of the Directors.

The Assistant Clerk, or if there shall be more than one, the Assistant Clerks in the order determined by the Directors, shall, in the absence or disability of the Clerk, perform the duties and exercise the powers of the Clerk and shall perform such other duties and shall have such other powers as the Directors may from time to time prescribe.

11. SECRETARY AND ASSISTANT SECRETARIES. If a Secretary is appointed, he shall attend all meetings of the Directors and shall keep a record of the meetings of the Directors. He shall, when required, notify the Directors of their meetings, and shall have such other powers and shall perform such other duties as the Directors may from time to time prescribe.

The Assistant Secretary, or if there shall be more than one, the Assistant Secretaries in the order determined by the Directors, shall, in the

absence or disability of the Secretary, perform the duties and exercise the powers of the Secretary and shall perform such other duties and shall have such other powers as the Directors may from time to time prescribe.

12. OTHER POWERS AND DUTIES. Each officer shall, subject to these By-Laws, have in addition to the duties and powers specifically set forth in these By-Laws, such duties and powers as are customarily incident to his office, and such duties and powers as the Directors may from time to time designate.

ARTICLE IV - CAPITAL STOCK

1. CERTIFICATES OF STOCK. Each stockholder shall be entitled to a certificate of the capital stock of the corporation in such form as may be prescribed from time to time by the Directors. The certificate shall be signed by the President or a Vice President, and by the Treasurer or an Assistant Treasurer, but when a certificate is countersigned by a transfer agent or a registrar, other than a Director, officer or employee of the corporation, such signatures may be facsimiles. In case any officer who has signed or whose facsimile signature has been placed on such certificate shall have ceased to be such officer before such certificate is issued, it may be issued by the corporation with the same effect as if he were such officer at the time of its issue.

Every certificate for shares of stock which are subject to any restriction on transfer pursuant to the Articles of Organization, the By-Laws or any agreement to which the corporation is a party, shall have conspicuously noted on the face or back of the certificate either the full text of the restriction or a statement of the existence of such restrictions and a statement that the corporation will furnish a copy thereof to the holder of such certificate upon written request and without charge. Every certificate issued when the corporation is authorized to issue more than one class or series of stock shall set forth on its face or back either the full text of the preferences, voting powers, qualifications and specifications and special and relative rights of the shares of each class and series authorized to be issued or a statement of the existence of such preferences, powers, qualifications and rights and a statement that the corporation will furnish a copy thereof to the holder of such certificate upon written request and without charge.

2. TRANSFERS. Subject to the restrictions, if any, stated or noted on the stock certificates, shares of stock may be transferred on the books of the corporation by the surrender to the corporation or its transfer agent of the certificate therefor properly endorsed or accompanied by a written assignment and power of attorney properly executed, with necessary transfer stamps affixed, and with such proof of the authenticity of signature as the corporation or its transfer agent may reasonably require. Except as may be otherwise required by law, by the Articles of Organization or by these By-Laws, the corporation shall be entitled to treat the record holder of stock as shown on its books as the owner of such stock for all purposes, including the payment of dividends and the right to vote with respect thereto, regardless of any transfer, pledge or other disposition of such stock, until the shares have been transferred on the books of the corporation in accordance with the requirements of these By-Laws.

It shall be the duty of each stockholder to notify the corporation of his post office address and of his taxpayer identification number.

3. RECORD DATE. The Directors may fix in advance a time not more

than sixty days preceding the date of any meeting of stockholders or the date for the payment of any dividend or the making of any distribution to stockholders or the last day on which the consent or dissent of stockholders may be effectively expressed for any purpose, as the record date for determining the stockholders having the right to notice of and to vote at such meeting, and any adjournment thereof, or the right to receive such dividend or distribution or the right to give such consent or dissent. In such case only stockholders of record on such record date shall have such right, notwithstanding any transfer of stock on the books of the corporation after the record date. Without fixing such record date the Directors may for any of such purposes close the transfer books for all or any part of such period.

4. REPLACEMENT OF CERTIFICATES. In case of the alleged loss or destruction or the mutilation of a certificate of stock, a duplicate certificate may be issued in place thereof, upon such terms as the Directors may prescribe, including the presentation of reasonable evidence of such loss, destruction or mutilation and the giving of such indemnity as the Directors may require for the protection of the corporation or any transfer agent or registrar.

5. ISSUE OF CAPITAL STOCK. Unless otherwise voted by the stockholders, the whole or any part of any unissued balance of the authorized capital stock of the corporation or the whole or any part of the capital stock of the corporation held in its treasury may be issued or disposed of by vote of the Directors, in such manner, for such consideration and on such terms as the Directors may determine.

ARTICLE V - MISCELLANEOUS PROVISIONS

1. FISCAL YEAR. Except as from time to time otherwise determined by the Directors, the fiscal year of the corporation shall be the 52 or 53 week period, as the case may be, ending on the Saturday which is closest to the last day of October.

2. SEAL. The seal of the corporation shall, subject to alteration by the Directors, bear its name, the word "Massachusetts," and the year of its incorporation.

3. EXECUTION OF INSTRUMENTS. All deeds, leases, transfers, contracts, bonds, notes and other obligations authorized to be executed by an officer of the corporation in its behalf shall be signed by the President or the Treasurer except as the directors may generally or in particular cases otherwise determine.

4. VOTING OF SECURITIES. Except as the Directors may otherwise designate, the President or Treasurer may waive notice of, and act as, or appoint any person or persons to act as, proxy or attorney in fact for, this corporation (with or without power of substitution) at any meeting of stockholders or shareholders of any other corporation or organization, the securities of which may be held by this corporation.

5. CORPORATE RECORDS. The original, or attested copies, of the Articles of Organization, By-Laws and records of all meetings of the incorporators and stockholders, and the stock and transfer records, which shall contain the names of all stockholders and the record address and the amount of stock held by each, shall be kept in Massachusetts at the principal office of the corporation, or at an office of its transfer agent or of the Clerk. Said

copies and records need not all be kept in the same office. They shall be available at all reasonable times to the inspection of any stockholder for any proper purpose, but not to secure a list of stockholders for the purpose of selling said list or copies thereof or of using the same for a purpose other than in the interest of the applicant, as a stockholder, relative to the affairs of the corporation.

6. EVIDENCE OF AUTHORITY. A certificate by the Clerk or Secretary, or an Assistant Clerk or Assistant Secretary, or a temporary Clerk or temporary Secretary, as to any action taken by the stockholders, Directors, Executive Committee or any officer or representative of the corporation shall as to all persons who rely thereon in good faith be conclusive evidence of such action.

7. ARTICLES OF ORGANIZATION. All reference in these By-Laws to the Articles of Organization shall be deemed to refer to the Articles of Organization of the corporation, as amended and in effect from time to time.

8. TRANSACTIONS WITH INTERESTED PARTIES. In the absence of fraud, no contract or other transaction between this corporation and any other corporation or any firm, association, partnership or person shall be affected or invalidated by the fact that any Director or officer of this corporation is pecuniarily or otherwise interested in or is a director, member or officer of such other corporation or of such firm, association or partnership or is a party to or is pecuniarily or otherwise interested in such contract or other transaction or is in any way connected with any person or persons, firm, association, partnership or corporation pecuniarily or otherwise interested therein; provided that the fact that he individually or as a director, member or officer of such corporation, firm, association or partnership is such a party or is so interested shall be disclosed to or shall have been known by the Board of Directors or a majority of such members thereof as shall be present at a meeting of the Board of Directors at which action upon any such contract or transaction shall be taken; any Director may be counted in determining the existence of a quorum and may vote at any meeting of the Board of Directors of this corporation for the purpose of authorizing any such contract or transaction with like force and effect as if he were not so interested, or were not a director, member or officer of such other corporation, firm, association or partnership, provided that any vote with respect to such contract or transaction must be adopted by a majority of the Directors then in office who have no interest in such contract or transaction.

9. AMENDMENTS. These By-Laws may be amended by the affirmative vote of the holders of a majority of the shares of each class of capital stock at the time outstanding and entitled to vote at any annual or special meeting of stockholders, provided that notice of the substance of the proposed amendment is stated in the notice of such meeting. If authorized by the Articles of Organization, the Directors, by a majority of their number then in office, may also make, amend or repeal these By-Laws, in whole or in part, except with respect to (a) the provisions of these By-Laws governing (i) the removal of Directors, (ii) the indemnification of Directors and (iii) the amendment of these By-Laws and (b) any provision of these By-Laws which by law, the Articles of Organization or these By-Laws requires action by the stockholders.

Not later than the time of giving notice of the meeting of stockholders next following the making, amending or repealing by the Directors of any By-Law, notice thereof stating the substance of such change shall be given to all stockholders entitled to vote on amending the By-Laws.

Any By-Law adopted by the Directors may be amended or repealed by the stockholders entitled to vote on amending the By-Laws.

10. MASSACHUSETTS CONTROL SHARE ACQUISITION ACT. The provisions of Chapter 110D of the Massachusetts General Laws shall not apply to any "control share acquisition" of the corporation (as such term is defined in such Chapter 110D).

AMENDMENT TO BY-LAWS

By action of the Board of Directors on January 24, 2003, Article I, Section 7 of the By-Laws of Analog Devices, Inc. is hereby deleted in its entirety and the following provision is implemented in lieu thereof:

7. Voting and Proxies. Each stockholder shall have one vote for each share of stock entitled to vote held by him of record according to the records of the corporation and a proportionate vote for a fractional share so held by him, unless otherwise provided by the Articles of Organization. Stockholders may vote either in person or by written proxy dated not more than six months before the meeting named therein. The delivery of a proxy on behalf of a stockholder consistent with telephonic or electronically transmitted instructions obtained pursuant to procedures of the corporation reasonably designed to verify that such instructions have been authorized by such stockholder shall constitute execution and delivery of such proxy by or on behalf of such stockholder. Proxies shall be filed with the clerk of the meeting, or of any adjournment thereof, before being voted. Except as otherwise limited therein, proxies shall entitle the persons named therein to vote at any adjournment of such meeting, but shall not be valid after final adjournment of such meeting. A proxy with respect to stock held in the name of two or more persons shall be valid if executed by one of them, unless at or prior to exercise of the proxy the corporation receives a specific written notice to the contrary from any one of them. A proxy purported to be executed by or on behalf of a stockholder shall be deemed valid unless challenged at or prior to its exercise.

ANALOG DEVICES, INC.
1998 STOCK OPTION PLAN

1. Purpose

The purpose of this 1998 Stock Option Plan (the "Plan") of Analog Devices, Inc. a Massachusetts corporation (the "Company"), is to advance the interests of the Company's stockholders by enhancing the Company's ability to attract, retain and motivate persons who make (or are expected to make) important contributions to the Company by providing such persons with equity ownership opportunities and thereby better aligning the interests of such persons with those of the Company's stockholders. Except where the context otherwise requires, the term "Company" shall include any present or future subsidiary corporations of Analog Devices, Inc. as defined in Section 424(f) of the Internal Revenue Code of 1986, as amended, and any regulations promulgated thereunder (the "Code").

2. Eligibility

All of the Company's employees, officers, directors, consultants and advisors are eligible to be granted options (each, an "Option") under the Plan. Each person who has been granted an Option under the Plan is hereinafter referred to as "Optionee".

3. Administration; Delegation

(a) Administration by Board of Directors. The Plan will be administered by the Board of Directors of the Company (the "Board"). The Board shall have authority to grant Options and to adopt, amend and repeal such administrative rules, guidelines and practices relating to the Plan as it shall deem advisable. The Board may correct any defect, supply any omission or reconcile any inconsistency in the Plan or any Option in the manner and to the extent it shall deem expedient to carry the Plan into effect and it shall be the sole and final judge of such expediency. All decisions by the Board shall be made in the Board's sole discretion and shall be final and binding on all persons having or claiming any interest in the Plan or in any Option. No director or person acting pursuant to the authority delegated. by the Board shall be liable for any action or determination relating to or under the Plan made in good faith.

(b) Appointment of Committees. To the extent permitted by applicable law, the Board may delegate any or all of its powers under the Plan to one or more

committees or subcommittees of the Board (a "Committee"). All references in the Plan to the "Board" shall mean the Board, the Committee or the executive officer referred to in Section 3(c) to the extent that the Board's powers or authority under the Plan have been delegated to the Committee or executive officer.

(c) Delegation to Executive Officers. To the extent permitted by applicable law, the Board may delegate to one or more executive officers of the Company the power to grant Options and exercise such other powers under the Plan as the Board may determine, provided that the Board shall fix the maximum number of shares subject to Options and the maximum number of shares for any one Optionee to be made by such executive officers.

4. Stock Available for Options

(a) Number of Shares. Subject to adjustment pursuant to Section 4(c), Options may be granted under the Plan for up to 15,000,000 shares of common stock, \$0.16-2/3 par value of the Company ("Common Stock"). If any Option expires or is terminated, surrendered or canceled without having been fully exercised or is forfeited in whole or in part or results in any Common Stock not being issued, the unused Common Stock covered by such Option shall again be available for the grant of Options under the Plan, subject, however, in the case of Incentive Stock Options (as hereinafter defined), to any limitation required under the Code. Shares issued under the Plan may consist in whole or in part of authorized but unissued shares or treasury shares.

(b) Per-Optionee Limit. Subject to adjustment pursuant to Section 4(c), the maximum number of shares of Common Stock with respect to which an Option may be granted to any Optionee under the Plan shall be 750,000 per calendar year. The per-Optionee limit described in this Section 4(b) shall be construed and applied consistently with Section 162(m) of the Code.

(c) Chances in Capitalization. In the event of any stock split, reverse stock split, stock dividend, recapitalization, combination of shares, reclassification of shares, liquidation, spin-off or other similar change in capitalization or event, or any distribution to holders of Common Stock other than a normal cash dividend, (i) the number and class of securities available under this Plan, (ii) the per-Optionee limitation set forth in Section 4(b) and (iii) the number and class of securities and exercise price per share subject to each outstanding Option shall be appropriately adjusted by the Company to the extent the Board shall determine, in good faith, that such an adjustment is necessary and appropriate. If this Section 4(c) applies and Section 6(b) also applies to any event, Section 6(b) shall be applicable to such event, and this Section 4(c) shall not be applicable.

(d) Substitute Options. Options may be granted under the Plan from time to time in substitution for stock options held by individuals employed by corporations who become employees as a result of a merger or consolidation of the employing corporation with the Company or any subsidiary, or the acquisition by the Company or a subsidiary of the assets of the employing corporation, or the acquisition by the Company or a subsidiary of stock of the employing corporation with the result that such employing corporation becomes a subsidiary.

5. Option Terms

(a) General. The Board may grant Options to purchase Common Stock and determine the number of shares of Common Stock to be covered by each Option, the exercise price of each Option and the conditions and limitations applicable to the exercise of each Option, including conditions relating to applicable federal or state securities laws, as it considers necessary or advisable. An Option which is not intended to be an Incentive Stock Option (as hereinafter defined) shall be designated a "Nonstatutory Stock Option".

(b) Incentive Stock Options. An Option that the Board intends to be an "incentive stock option" as defined in Section 422 of the Code (an "Incentive Stock Option") shall only be granted to employees of the Company and shall be subject to and shall be construed consistently with the requirements of Section 422 of the Code. The Company shall have no liability to an Optionee, or any other party, if an Option (or any part thereof) which is intended to be an Incentive Stock Option is not an Incentive Stock Option.

(c) Exercise Price. The Board shall establish the exercise price at the time each Option is granted and specify it in the applicable Option Agreement; provided, however, that the exercise price shall be not less than 100% of the fair market value of the Common Stock, as determined by the Board, at the time of the Option grant ("Fair Market Value").

(d) Option Agreement; Duration of Options. Each Option may be evidenced by an Option Agreement in such form and containing such provisions as the Board from time to time shall approve. Any Option not documented by written agreement shall be memorialized by a written confirming memorandum to the Optionee stating the material terms of the Option. (For purposes of the Plan, Option Agreement, as defined herein, shall also include any such confirming memorandum.) Each Option Agreement shall specify the period or periods during which the Option may be exercised and shall specify the effect of termination of employment on the exercisability of the Option. The Option Agreement may also include, without limitation, provisions relating to (i) subject to the provisions of Section 6, the acceleration and vesting of Options, (ii) a provision that permits Options to vest and remain exercisable after the Optionee ceases to be employed by, or retained as a

consultant or advisor to, the Company or any subsidiary or affiliate of the Company, and (iii) any other matters not inconsistent with the terms and provisions of this Plan that the Board shall, in its sole discretion, determine. The terms and conditions of the respective Option Agreements need not be identical.

(e) Exercise of Option. Options may be exercised by delivery to the Company of a written notice of exercise, e-mail or other form of notice approved by the Board together with payment as specified in Section 5(f) for the number of shares for which the Option is exercised.

(f) Payment Upon Exercise. Common Stock purchased upon the exercise of an Option granted under the Plan shall be paid for as follows:

(1) in cash or by check, payable to the order of the Company;

(2) except as the Board may, in its sole discretion, otherwise provide in an Option Agreement, (i) delivery of an irrevocable and unconditional undertaking by a creditworthy broker to deliver promptly to the Company sufficient funds to pay the exercise price or (ii) delivery by the Optionee to the Company of a copy of irrevocable and unconditional instructions to a creditworthy broker to deliver promptly to the Company cash or a check sufficient to pay the exercise price;

(3) delivery of shares of Common Stock owned by the Optionee valued at their Fair Market Value as determined by the Board, which Common Stock was owned by the Optionee for at least six months prior to such delivery;

(4) to the extent permitted by the Board, in its sole discretion, (i) by delivery of a promissory note of the Optionee to the Company on terms determined by the Board or (ii) by payment of such other lawful consideration as the Board may determine; or

(5) any combination of the above permitted forms of payment.

6. LIQUIDATION; ACQUISITION EVENT; CHANGE IN CONTROL

(a) Liquidation or Dissolution. In the event of a proposed liquidation or dissolution of the Company, the Board shall upon written notice to the Optionees provide that all then unexercised Options will (i) become exercisable in full as of a specified time at least 10 business days prior to the effective date of such liquidation or dissolution and (ii) terminate effective upon such liquidation or dissolution, except to the extent exercised before such effective date.

(b) Acquisition and Change in Control Events

(1) Definitions

(a) An "Acquisition Event" shall mean:

(i) any merger or consolidation of the Company with or into another entity as a result of which the Common Stock is converted into or exchanged for the right to receive cash, securities or other property;

or

(ii) any exchange of shares of the Company for cash, securities or other property pursuant to a statutory share exchange transaction.

(b) A "Change in Control Event" shall mean:

(i) the acquisition by an individual, entity or group (within the meaning of Section 13(d)(3) or 14(d)(2) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")) (a "Person") of beneficial ownership of any capital stock of the Company if, after such acquisition, such Person beneficially owns (within the meaning of Rule 13d-3 promulgated under the Exchange Act) 30% or more of either (x) the then outstanding shares of common stock of the Company (the "Outstanding Company Common Stock") or (y) the combined voting power of the then outstanding securities of the Company entitled to vote generally in the election of directors (the "Outstanding Company Voting Securities"); provided, however, that for purposes of this subsection (i), the following acquisitions shall not constitute a Change in Control Event: (A) any acquisition directly from the Company (excluding an acquisition pursuant to the exercise, conversion or exchange of any security exercisable for, convertible into or exchangeable for common stock or voting securities of the Company, unless the Person exercising, converting or exchanging such security acquired such security directly from the Company or an underwriter or agent of the Company), (B) any acquisition by any employee benefit plan (or related trust) sponsored or maintained by the Company or

any corporation controlled by the Company, or (C) any acquisition by any corporation pursuant to a Business Combination (as defined below) which complies with clauses (x) and (y) of subsection (iii) of this definition; or

- (ii) such time as the Continuing Directors (as defined below) do not constitute a majority of the Board (or, if applicable, the Board of Directors of a successor corporation to the Company), where the term "Continuing Director" means at any date a member of the Board (x) who was a member of the Board on the date of the initial adoption of this Plan by the Board or (y) who was nominated or elected subsequent to such date by at least a majority of the directors who were Continuing Directors at the time of such nomination or election or whose election to the Board was recommended or endorsed by at least a majority of the directors who were Continuing Directors at the time of such nomination or election; provided, however, that there shall be excluded from this clause (y) any individual whose initial assumption of office occurred as a result of an actual or threatened election contest with respect to the election or removal of directors or other actual or threatened solicitation of proxies or consents, by or on behalf of a person other than the Board; or
- (iii) the consummation of a merger, consolidation, reorganization or statutory share exchange involving the Company or a sale or other disposition of all or substantially all of the assets of the Company (a "Business Combination"), unless, immediately following such Business Combination, each of the following two conditions is satisfied: (x) all or substantially all of the individuals and entities who were the beneficial owners of the Outstanding Company Common Stock and Outstanding Company Voting Securities immediately prior to such Business Combination beneficially own, directly or indirectly, more than 50% of the then outstanding shares of common stock and the combined voting power of the then outstanding

securities entitled to vote generally in the election of directors, respectively, of the resulting or acquiring corporation in such Business Combination (which shall include, without limitation, a corporation which as a result of such transaction owns the Company or substantially all of the Company's assets either directly or through one or more subsidiaries) (such resulting or acquiring corporation is referred to herein as the "Acquiring Corporation") in substantially the same proportions as their respective ownership of the Outstanding Company Common Stock and Outstanding Company Voting Securities immediately prior to such Business Combination and (y) no Person (excluding the Acquiring Corporation or any employee benefit plan (or related trust) maintained or sponsored by the Company or by the Acquiring Corporation) beneficially owns, directly or indirectly, 30% or more of the then outstanding shares of common stock of the Acquiring Corporation, or of the combined voting power of the then-outstanding securities of such corporation entitled to vote generally in the election of directors (except to the extent that such ownership existed prior to the Business Combination).

- (c) "Good Reason" shall mean any significant diminution in the Optionee's title, authority, or responsibilities from and after such Acquisition Event or Change in Control Event, as the case may be, or any reduction in the annual cash compensation payable to the Optionee from and after such Acquisition Event or Change in Control Event, as the case may be, or the relocation of the place of business at which the Optionee is principally located to a location that is greater than [35] miles from the current site.
- (d) "Cause" shall mean any (i) willful failure by the Optionee, which failure is not cured within 30 days of written notice to the Optionee from the Company, to perform his or her material responsibilities to the Company or (ii) willful misconduct by the Optionee which affects the business reputation of the Company.

(2) Effect on Options

- (a) Acquisition Event. Upon the occurrence of an Acquisition Event (regardless of whether such event also constitutes a Change in Control Event), or the execution by the Company of any agreement with respect to an Acquisition Event (regardless of whether such event will result in a Change in Control Event), the Board shall provide that all of the outstanding Options shall be assumed, or equivalent options shall be substituted, by the acquiring or succeeding corporation (or an affiliate thereof); provided that (i) any options substituted for Incentive Stock Options shall satisfy, in the determination of the Board, the requirements of Section 422 of the Code and (ii) if such Acquisition Event also constitutes a Change in Control Event, except to the extent specifically provided to the contrary in the instrument evidencing any Option or any other agreement between an Optionee and the Company, the vesting schedule of such assumed or substituted options shall provide (A) that one-half of the number of shares subject to the Option which were not already vested shall be immediately exercisable in a manner consistent with that set forth in the first two sentences of subsection (b) below and (B) that such assumed or substituted options shall immediately become exercisable in full if, on or prior to the first anniversary of the date of the consummation of the Acquisition Event, the Optionee's employment with the Company or the acquiring or succeeding corporation is terminated for Good Reason by the Optionee or is terminated without Cause by the Company or the acquiring or succeeding corporation.

Notwithstanding the foregoing, if the acquiring or succeeding corporation (or an affiliate thereof) does not agree to assume, or substitute for, such Options, then the Board shall (x) upon written notice to the Optionees, provide that all then unexercised Options will become exercisable in full as of a specified time (the "Acceleration Time") prior to the Acquisition Event and will terminate immediately prior to the consummation of such Acquisition Event, except to the extent exercised by the Optionees before the consummation of such Acquisition Event, and/or (y) in the event of an Acquisition Event under the terms of which holders of Common Stock will receive upon consummation thereof a cash payment for

each share of Common Stock surrendered pursuant to such Acquisition Event (the "Acquisition Price"), provide that all outstanding Options shall terminate upon consummation of such Acquisition Event and each Optionee shall receive, in exchange therefor, a cash payment equal to the amount (if any) by which (A) the Acquisition Price multiplied by the number of shares of Common Stock subject to such outstanding Options (whether or not then exercisable), exceeds (B) the aggregate exercise price of such Options.

- (b) Change in Control Event that is not an Acquisition Event. Upon the occurrence of a Change in Control Event that does not also constitute an Acquisition Event, except to the extent specifically provided to the contrary in the instrument evidencing any Option or any other agreement between an Optionee and the Company, the vesting schedule of such Option shall be accelerated in part so that one-half of the number of shares that would otherwise have first become vested on any date or dates after the date of the Change in Control Event shall immediately become exercisable. The remaining one-half of such number of shares that would otherwise have first become vested on each subsequent vesting date shall continue to become vested on each subsequent vesting date in accordance with the original vesting schedule set forth in such Option; provided, however, that each such Option shall immediately become exercisable in full if, on or prior to the first anniversary of the date of the consummation of the Change in Control Event, the Optionee's employment with the Company or the acquiring or succeeding corporation is terminated for Good Reason by the Optionee or is terminated without Cause by the Company or the acquiring or succeeding corporation.

7. Repricing of Options.

The Board shall have the authority, at any time and from time to time, with the consent of the affected option holders, to amend any or all outstanding options granted under the Plan to provide an option exercise price per share which may be lower or higher than the original option exercise price, and/or to cancel any such options and grant in substitution therefor new options covering the same or different numbers of shares of Common Stock having an option exercise price per share which may be lower or higher than the exercise price of the canceled options.

8. General Provisions Applicable to Options

(a) **Transferability of Options.** Except as the Board may otherwise determine or provide in an Option, Options shall not be sold, assigned, transferred, pledged or otherwise encumbered by the person to whom they are granted, either voluntarily or by operation of law, except by will or the laws of descent and distribution, and, during the life of the Optionee, shall be exercisable only by the Optionee. References to an Optionee, to the extent relevant in the context, shall include references to authorized transferees.

(b) **Board Discretion.** Except as otherwise provided by the Plan, each Option may be granted alone or in addition or in relation to any other Option. The terms of each Option need not be identical, and the Board need not treat Optionees uniformly.

(c) **Termination of Status.** The Board shall determine the effect on an Option of the disability, death, retirement, authorized leave of absence or other change in the employment or other status of an Optionee and the extent to which, and the period during which, the Optionee, the Optionee's legal representative, conservator, guardian or designated beneficiary may exercise rights under the Option.

(d) **Withholding.** Each Optionee shall pay to the Company, or make provision satisfactory to the Board for payment of, any taxes required by law to be withheld in connection with Options granted to such Optionee no later than the date of the event creating the tax liability. Except as the Board may otherwise provide in an Option, Optionees may satisfy such tax obligations in whole or in part by delivery of shares of Common Stock, including shares retained from the Option creating the tax obligation, valued at their Fair Market Value. The Company may, to the extent permitted by law, deduct any such tax obligations from any payment of any kind otherwise due to an Optionee.

(e) **Amendment of Option.** The Board may amend, modify or terminate any outstanding Option, including but not limited to, substituting therefor another Option of the same or a different type, changing the date of exercise or realization, and converting an Incentive Stock Option to a Nonstatutory Stock Option, provided that the Optionee's consent to such action shall be required unless the Board determines that the action, taking into account any related action, would not materially and adversely affect the Optionee.

(f) **Conditions on Delivery of Stock.** The Company will not be obligated to deliver any shares of Common Stock pursuant to the Plan or to remove any restrictions from shares previously delivered under the Plan until (i) all conditions of the Option have been met or removed to the satisfaction of the Company, (ii) in the opinion of the Company's counsel, all other legal matters in connection with the

issuance and delivery of such shares have been satisfied, including any applicable securities laws and any applicable stock exchange or stock market rules and regulations, and (iii) the Optionee has executed and delivered to the Company such representations or agreements as the Company may consider appropriate to satisfy the requirements of any applicable laws, rules or regulations.

(g) Acceleration; Continued Vesting. The Board may at any time provide that any Options shall become immediately exercisable in full or in part, and may at any time provide for the continued vesting and exercisability of any Options for such period of time after the Optionee's employment terminates as the Board shall determine.

9. Miscellaneous

(a) No Right To Employment or Other Status. No person shall have any claim or right to be granted an Option, and the grant of an Option shall not be construed as giving an Optionee the right to continued employment or any other relationship with the Company. The Company expressly reserves the right at any time to dismiss or otherwise terminate its relationship with an Optionee free from any liability or claim under the Plan, except as expressly provided in the applicable Option.

(b) No Rights As Stockholder. Subject to the provisions of the applicable Option, no Optionee or designated beneficiary of the Optionee shall have any rights as a stockholder with respect to any shares of Common Stock to be distributed with respect to an Option until becoming the record holder of such shares. Notwithstanding the foregoing, in the event the Company effects a split of the Common Stock by means of a stock dividend and the exercise price of and the number of shares subject to such Option are adjusted as of the date of the distribution of the dividend (rather than as of the record date for such dividend), then an Optionee who exercises an Option between the close of business on the record date for such stock dividend and the close of business on the distribution date for such stock dividend shall be entitled to receive, on the distribution date, the stock dividend with respect to the shares of Common Stock acquired upon such Option exercise, notwithstanding the fact that such shares were not outstanding as of the close of business on the record date for such stock dividend.

(c) Effective Date and Term of Plan. The Plan shall become effective on the date on which it is adopted by the Board. No Option shall be granted under the Plan after ten (10) years from the earlier of (i) the date on which the Plan was adopted by the Board or (ii) the date the Plan was approved by the Company's stockholders, but Options previously granted may extend beyond that date.

(d) Amendment and Termination of Plan. The Board may terminate the Plan at any time, except with respect to Option grants then outstanding. The Board may amend or suspend the Plan without stockholder approval, unless such approval is necessary to comply with applicable laws, including provisions of the Exchange Act or the Code.

(e) Governing Law. The provisions of the Plan and all Options granted hereunder shall be governed by and interpreted in accordance with the laws of the Commonwealth of Massachusetts, without regard to any applicable conflicts of law.

Adopted by the Board of Directors on January 15, 1998

Approved by the Stockholders on March 10, 1998

ANALOG DEVICES, INC.

FIRST AMENDMENT TO THE 1998 STOCK OPTION PLAN

Subsection 4(a) of the Plan be and hereby is deleted and the following is inserted in lieu thereof:

"(a) Number of Shares. Subject to adjustment pursuant to Section 4(c), Options may be granted under the Plan for up to 32,000,000 shares of common stock, \$0.16-2/3 par value of the Company ("Common Stock"). If any Option expires or is terminated, surrendered or canceled without having been fully exercised or is forfeited in whole or in part or results in any Common Stock not being issued, the unused Common Stock covered by such Option shall again be available for the grant of Options under the Plan, subject, however, in the case of Incentive Stock Options (as hereinafter defined), to any limitation required under the Code. Shares issued under the Plan may consist in whole or in part of authorized but unissued shares or treasury shares."

That Section 7 of the Plan (Repricing of Options) be and hereby is deleted in its entirety.

Approved by the Board of Directors on December 8, 1999 and authorized by the shareholders on March 14, 2000.

ANALOG DEVICES, INC.

SECOND AMENDMENT TO THE 1998 STOCK OPTION PLAN

The Analog Devices, Inc. 1998 Stock Option Plan, pursuant to Section 9(d) thereof, is hereby amended as follows:

Subsection 8(d) of the Plan be and hereby is deleted and the following is inserted in lieu thereof:

"(d) Withholding. Each Optionee shall pay to the Company, or make provision satisfactory to the Board for payment of, any taxes required by law to be withheld in connection with Options granted to such Optionee no later than the date of the event creating the tax liability. Except as the Board may otherwise provide in an Option, Optionees may satisfy such tax obligations in whole or in part by delivery of shares of Common Stock, including shares retained from the Option creating the tax obligation, valued at their Fair Market Value; provided, however, that the total tax withholding when stock is being used to satisfy such tax obligations cannot exceed the Company's minimum statutory withholding obligations (based on minimum statutory withholding rates for federal and state purposes, including payroll taxes that are applicable to such supplemental taxable income). The Company may, to the extent permitted by law, deduct any such tax obligations from any payment of any kind otherwise due to an Optionee."

Approved by the Board of Directors on December 5, 2001.

ANALOG DEVICES, INC.

THIRD AMENDMENT TO THE 1998 STOCK OPTION PLAN

The Analog Devices, Inc. 1998 Stock Option Plan, pursuant to Section 9(d) thereof, is hereby amended as follows:

Subsection 5(e) of the Plan be and hereby is amended by adding the following new sentence at the end thereof:

"The Corporation may direct that notice of option exercise be delivered to an agent of the Corporation designated to receive such delivery."

Subsection 8(e) of the Plan be and hereby is amended by adding the following new sentence at the end thereof:

"Notwithstanding the foregoing, the Board shall not amend any outstanding option to provide an option exercise price per share which is lower than the original option exercise price."

Approved by the Board of Directors on December 10, 2002.

ANALOG DEVICES BV (IRELAND) EMPLOYEE STOCK OPTION PROGRAM

1. DEFINITIONS

1.1. In these Rules the following words and expressions shall have the following meanings :

"Act"	the Taxes Consolidation Act, 1997,
"Adoption Date"	the date on which the Scheme is adopted by the Board,
"Analog Devices, Inc. 1998 Stock Option Plan"	the stock option plan adopted by the board of directors of Analog Devices, Inc. and approved by the stockholders of Analog Devices, Inc. on 15th January, 1998 and 10th March, 1998 respectively,
"Base Pay"	the remuneration of an Eligible Employee for a Year of Assessment including shift differentials, paid holidays and sick leave but excluding overtime and any other fluctuating emoluments,
"Board"	the Board of Directors of the Company or, except in Rule 10.4, a duly constituted committee thereof,
"Company"	Analog Devices BV
"Control"	has the meaning assigned to it in section 432 of the Act,
"Date of Grant"	the date on which an Option is granted,
"Date of Exercise"	the date on which an Option is exercised,
"Directors"	the directors for the time being of the Company,
"Eligible Employee"	every person, subject to Rule 6, who on the Date of Grant and on the Date of Exercise; (a) is an employee of the Company or a Participating Company, or

(b) is a full-time director of the Company or a Participating Company and

(c) is chargeable to tax under Schedule E in respect of that employment,

PROVIDED that no person shall be an Eligible Employee if that person is ineligible to participate in the Scheme by virtue of paragraph 7, Schedule 12C, to the Act,

"Market Value"	the composite closing price of the common stock of Analog Devices, Inc. on the New York Stock Exchange as reported in The Wall Street Journal on the Date of Grant",
"Key Director"	a full-time director of the Company whose specialist skills, qualifications and relevant experience are vital to the future success of the Company and is so certified to the Revenue Commissioners by the Company,
"Key Employee"	an employee of the Company whose specialist skills, qualifications and relevant experience are vital to the future success of the Company and is so certified to the Revenue Commissioners by the Company,
"Option"	a right to acquire Shares granted in accordance with the Rules of the Scheme,
"Option Agreement"	a document evidencing the option in such form as the Board shall determine and which has been agreed in writing with the Revenue Commissioners,
"Option Holder"	an individual to whom an Option has been granted (including where the context permits, the legal personal representatives of a deceased Option Holder),
"Participating Company"	Any Irish resident company under the Control of Analog Devices BV,

"Rules"	the rules of the Scheme as amended from time to time,
"the Scheme"	means the Analog Devices BV (Ireland) Employee Stock Option Program constituted and governed by these Rules as from time to time amended,
"Shares"	fully paid up shares of common stock \$.016-2/3 par value of Analog Devices Inc. which comply with the provisions of paragraphs 11 to 16, of Schedule 12C, to the Act,
"Subscription Price"	the price at which each Share subject to an Option may be acquired on the exercise of that Option, being, subject to Rule 5.1, the Market Value of a Share, on the day that the Option was granted,
"Vesting Date"	the second anniversary of the Date of Grant
"Year of Assessment"	has the meaning assigned to it by section 2 of the Act.

1.2. Words importing the singular shall include the plural, and vice versa, and words importing the masculine shall include the feminine.

1.3. Any reference to any statute (or a particular Part, Chapter or Section thereof) shall mean and include any statutory modification or re-enactment thereof for the time being in force, and any regulations made thereunder.

2. THE SCHEME

2.1 This Scheme is subject to the rules of the Analog Devices, Inc. 1998 Stock Option Plan and is a sub-scheme of the Analog Devices, Inc. 1998 Stock Option Plan.

2.2 In the event of any difference between the rules of the Analog Devices, Inc. 1998 Stock Option Plan and the Rules of the Scheme, the Rules of the Scheme shall prevail.

3. GRANT OF OPTIONS

- 3.1. The Board may, at any time following the Adoption Date, grant Options to each Eligible Employee to purchase Shares at the Subscription Price.
- 3.2. Subject to Rules 3.2.1, 3.2.2, 3.2.3, 3.3, 3.4, and 4, the form manner and timing of the grant of Options, any terms and conditions attaching to the grant of Options and the basis on which the number of Shares over which an individual shall be granted an Option shall be at the absolute discretion of the Board,

PROVIDED that not less than 70% of the total number of Shares over which Options are granted by the Board in any Year of Assessment shall be granted to Eligible Employees (excluding Key Directors and Key Employees).

- 3.2.1. The form, manner and timing, any terms and conditions and the basis on which the number of Shares over which any individual shall be granted an Option shall be the same for all Eligible Employees, (excluding, at the discretion of the Board, Key Directors and Key Employees).
- 3.2.2. The basis upon which the number of Shares over which Eligible Employees are granted Options (excluding, at the discretion of the Board, Key Directors and Key Employees) shall be determined in accordance with Rule 4 below.
- 3.2.3. Key Directors and Key Employees who are granted Options pursuant to Rule 3.3 shall not be granted Options pursuant to this Rule 3.2.

3.3. A maximum amount not exceeding 30% of the total number of Shares in respect of which Options have been granted to all Eligible Employees (including Key Directors and Key Employees) participating in the Scheme shall be available for grant by the Board to Key Directors and Key Employees in any Year of Assessment.

3.4. As soon as possible after Options have been granted the Board shall issue an Option Agreement in respect of each Option.

3.5. No Option may be transferred, assigned or charged, and any purported transfer, assignment or charge shall cause the Option to lapse forthwith. Each Option Agreement shall carry a statement to this effect.

4. CALCULATION OF ENTITLEMENT

4.1. Subject to Rule 3.2.1 the number of Shares over which an Option is granted to each Eligible Employee on each Date of Grant shall be such an amount as the Board shall determine, expressed as 10% of Base Pay converted to US dollars at the exchange rate prevailing at the Date of Grant, divided by the Market Value of a Share on the Date of Grant.

Provided that if an Eligible Employee's Base Pay converted to U.S. dollars at the exchange rate prevailing at the Date of Grant exceeds US\$250,000 the number of Shares over which an Option is granted to such Eligible Employee on the Date of Grant shall be expressed as 10% of US\$250,000, divided by the Market Value of a Share on the Date of Grant.

5. STOCK SPLITS ETC.

5.1 In the event of any stock split, reverse stock split, stock dividend, recapitalisation, combination of shares, reclassification of shares, spin-off or other similar change in capitalization or event, or any distribution to holders of Shares other than a normal cash dividend, then the number and class of Shares and the Subscription Price of a Share subject to an Option shall be appropriately adjusted by the Company to the extent the Board shall determine, in good faith, is appropriate and necessary

Provided that no such adjustment to the Subscription Price shall be made without the prior written approval of the Revenue Commissioners and

Provided also that following such adjustment the Shares shall continue to satisfy the conditions specified in paragraphs 12 to 16 inclusive, Schedule 12C, to the Act.

5.2 Except on the occurrence of an event listed at Rule 5.1 no adjustment shall be made to the Subscription Price of a Share subject to an Option.

6. EXERCISE OF OPTIONS

6.1. Subject to Rules 6.3, 6.4, 6.5 and 6.6, any Option which has not lapsed may be exercised in whole or in part at any time following the earliest of the following events;

i. the Vesting Date

ii. the death of the Option Holder.

6.2. Subject to Rules 6.3, 6.4, 6.5 and 6.6, an Option shall lapse on the earliest of the following events;

- i. the tenth anniversary of the Date of Grant
- ii. the first anniversary of the Option Holder's death

6.3 If the Company or a Participating Company terminates the employment of an Eligible Employee for cause all his Options shall lapse on termination.

6.4 If an Eligible Employee leaves the employment of the Company or a Participating Company of his own accord then:

- i. any Options which cannot be exercised due to the provisions of Rule 6.1 shall lapse, and
- ii. all or any part of any Options capable of exercise in accordance with Rule 6.1 on the last day of his employment with the Company or a Participating Company may be exercised within 90 days of such date.

6.5 If an Eligible Employee leaves the employment of the Company or a Participating Company due to disability or retirement, then all Options which on the last day of his employment are incapable of exercise due to Rule 6.1 shall continue to be exercisable in accordance with the Rules. An Employee is disabled if he is unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or which has lasted or can be expected to last for a continuous period of not less than 12 months. An individual shall not be considered to be disabled unless he furnishes proof of the existence thereof in the form of a doctor's certification. An Eligible Employee has retired if he terminates employment voluntarily after having (i) attained age 62, (ii) completed ten years of service and (iii) prior to termination of employment had completed an orderly transition of his duties and responsibilities. An Eligible Employee has completed 10 years of service if his total period of service with the Company, including service with any Participating Company and service before the Company was acquired by Analog Devices, Inc., equals or exceeds 10 years. Periods when the Eligible Employee is absent from service due to illness, holiday, approved leave of absence or other similar reason shall be treated as periods of service. Service need not be continuous; periods of service shall be aggregated.

6.6 If an Eligible Employee leaves the employment of the Company or a Participating Company due to redundancy, then all Options which on the last day of his employment are incapable of exercise due to Rule 6.1 shall continue to be exercisable in accordance with the Rules, provided that any such Option must be exercised with

90 days of its Vesting Date. Any Option not exercised within the 90 day period aforesaid shall lapse.

7. TAKE-OVERS

7.1. If a company (in this Rule referred to as "the Acquiring Company") -

obtains Control of Analog Devices Inc. as a result of making a general offer to;

(i) acquire the whole of the issued ordinary share capital of Analog Devices Inc. which is made on condition such that if it is satisfied the person making the offer will have Control of Analog Devices, Inc., or

(ii) acquire all the shares in Analog Devices, Inc. which are of the same class as the scheme Shares

the Option Holder may with the agreement of the Acquiring Company within the "appropriate period" referred to in Rule 7.2 release each Subsisting Option ("the Old Option") in consideration of the grant of a new option ("the New Option") which satisfies the conditions that it

- i. is over shares in the Acquiring Company or some other company falling within sub-paragraphs (b) or (c) of paragraph 12, Schedule 12C, to the Act, which satisfy the conditions specified in paragraphs 12 to 16 inclusive, Schedule 12C, to the Act;
- ii. is a right to acquire such number of such Shares as has on acquisition of the New Option an aggregate Market Value equal to the aggregate Market Value of the Shares subject to the Old Option on its release;
- iii. has a Subscription Price per share such that the aggregate price payable on the complete exercise equals the aggregate price which would have been payable on complete exercise of the Old Option; and
- iv. is otherwise identical in terms to the Old Option.

7.2. The "appropriate period" referred to in Rule 7.1 is 6 months beginning with the time when the person making the offer has obtained Control of Analog Devices, Inc. and any condition subject to which the offer is made is satisfied;

7.3. Where an Option Holder is granted a New Option for release of his Old Option in accordance with Rule 7.1 then;

(i) the New Option shall be treated as having been acquired at the same time as the Old Option and be exercisable in the same manner as the Old Option,

(ii) the New Option shall be subject to the provisions of the Scheme as it had effect in relation to the Old Option immediately before the release, and

(iii) with effect from the release of the Old Option and the grant of the New Option, the provisions of Rules 6,7,8, and 10 shall, in relation to the New Option be construed as if references to Analog Devices Inc. and to the Shares were references to the Acquiring Company or, as the case may be, to the other company to whose shares the New Options relate, and to the shares in that other company, but references to Participating Company shall continue to be construed as if references to the Company were references to Analog Devices BV.

7.4. For the purposes of this Rule 7 a person shall be deemed to have obtained Control of Analog Devices Inc. if he and others acting in concert with him have together obtained Control of it.

7.5. The exercise of an Option pursuant to the preceding provisions of this Rule 7 shall be subject to the provisions of Rule 8 below.

8. MANNER OF EXERCISE OF OPTIONS

8.1. No Option shall be exercised by an individual at any time when he is, or by the personal representatives of an individual who at the date of his death was, precluded by paragraph 7, of Schedule 12C, to the Act from participating in the Scheme.

8.2. Subject to Rule 5.1 no Option shall be exercised at any time when the shares which may be thereby acquired are not Shares as defined in Rule 1.1.

8.3 An Option shall be exercised by the Option Holder, or as the case may be, his personal representatives, by

i. by delivering to the Company a written notice of exercise, e-mail or other form of notice approved by the Board and accompanied by the appropriate payment.

8.4. Shares shall be allotted and issued or transferred pursuant to a notice of exercise within thirty days of the date of exercise. Save for any rights determined by reference to a date preceding the date of allotment, such Shares shall rank pari passu with the other Shares of the same class in issue at that date of allotment.

8.5. When an Option is exercised only in part, the balance shall remain exercisable on the same terms as originally applied to the whole Option and the terms of the Option Agreement issued with respect to the whole Option shall continue to apply to the unexercised balance. A new Option Agreement shall not be issued.

9. SALE OF SHARES

9.1. Where an Option Holder disposes of any of the Shares acquired by him on the exercise of an Option granted under the Scheme within a period of three years from the Date of Grant he must notify the Company of any such disposal.

10. ADMINISTRATION AND AMENDMENT

10.1. The Scheme shall be administered by the Board whose decision on all disputes shall be final.

10.2. The Company may from time to time by resolution of the Board amend these Rules provided that;

i. no amendment shall materially affect an Option Holder as regards an Option granted prior to the amendment being made,

ii. no amendment shall be made which would make the terms on which Options may be granted materially more generous without the prior approval of the Company in general meeting,

iii. no amendment shall be made without the prior written approval of the Revenue Commissioners.

10.3. The costs of establishing and operating the Scheme shall be borne by the Company.

10.4. The Board may establish a committee consisting of not less than three Board members to whom any or all of its powers in relation to the Scheme may be delegated.

10.5. The Board may at any time dissolve the committee, alter its constitution or direct the manner in which it shall act.

10.6. Any notice or other communication under or in connection with the Scheme may be given by the Company either personally or by post and to the Company either personally or by post to the secretary. Items sent by post shall be pre-paid and shall be deemed to have been received seventy two hours after posting.

10.7. The Company shall at all times ensure that there are available sufficient authorised and unissued Shares to satisfy the exercise to the full extent still possible of all Options which have neither lapsed nor been fully exercised, taking account of any other obligations of the Company to issue unissued Shares.

11. GENERAL

11.1 These Rules shall be governed by and construed in accordance with the laws of Ireland.

11.2 The Options granted hereunder are not intended to be Incentive Stock Options within the meaning of Section 422 of The US Internal Revenue Code of 1986.

11.3 No Option may be granted under the Scheme after January 14, 2008, but Options previously granted may extend beyond that date.

11.4 These Rules shall not apply to any option granted under any other plan, scheme or similar arrangement.

ANALOG DEVICES, INC.

FIRST AMENDMENT TO

1998 ANALOG DEVICES BV (IRELAND) EMPLOYEE STOCK OPTION PROGRAM

The Analog Devices BV (Ireland) Employee Stock Option Program (the "Plan"), pursuant to Rule 10.2 thereof, is hereby amended as follows retroactive to June 1, 2001:

1. That Rule 8.3(ii) of the Plan be and hereby is deleted in its entirety.
2. That Rule 8.4 of the Plan be and hereby is amended to read as follows:
 - 8.4. Shares shall be allotted and issued or transferred pursuant to a notice of exercise within thirty days of the date of exercise. Save for any rights determined by reference to a date preceding the date of allotment, such Shares shall rank pari passu with the other Shares of the same class in issue at that date of allotment.

Approved by the Board of Directors on September 5, 2001.

ANALOG DEVICES, INC.

1994 DIRECTOR OPTION PLAN
(RESTATED(1) AS OF MARCH 11, 1998)

1. PURPOSE

The purpose of this 1994 Director Option Plan (the "Plan") of Analog Devices, Inc. (the "Company") is to encourage ownership in the Company by outside directors of the Company whose continued services are considered essential to the Company's future progress and to provide them with a further incentive to remain as directors of the Company.

2. ADMINISTRATION

The Board of Directors shall supervise and administer the Plan. Grants of stock options under the Plan and the amount and nature of the awards to be granted shall be automatic and non-discretionary in accordance with Section 5. However, all questions of interpretation of the Plan or of any options issued under it shall be determined by the Board of Directors and such determination shall be final and binding upon all persons having an interest in the Plan.

3. PARTICIPATION IN THE PLAN

Directors of the Company who are not employees of the Company or any subsidiary of the Company shall be eligible to participate in the Plan.

4. STOCK SUBJECT TO THE PLAN

(a) The maximum number of shares which may be issued under the Plan shall be five hundred fifty thousand (550,000) shares of the Company's Common Stock, par value \$.16-2/3 per share ("Common Stock"), subject to adjustment as provided in Section 9 of the Plan.

(b) If any outstanding option under the Plan for any reason expires or is terminated without having been exercised in full, the shares allocable to the unexercised portion of such option shall again become available for grant pursuant to the Plan.

(c) All options granted under the Plan shall be non-statutory options not entitled to special tax treatment under Section 422 of the Internal Revenue Code of 1986, as amended to date and as may be amended from time to time (the "Code").

5. TERMS, CONDITIONS AND FORM OF OPTIONS

Each option granted under the Plan shall be evidenced by a written agreement in such form as the Board of Directors shall from time to time approve, which agreements shall comply with and be subject to the following terms and conditions:

(a) Automatic Option Grants.

(i) An option for the purchase of 10,500 shares of Common Stock shall be granted automatically to each eligible director at the close of business on the date the Plan is approved by the Board of Directors of the Company (December 7, 1994), subject to shareholder approval of the Plan at the 1995 Annual Meeting of Stockholders.

(ii) Each eligible director who is first elected or appointed to serve on the Board after December 7, 1994 shall be granted an option to purchase 10,500 shares of Common Stock upon such election or appointment.

(iii) Each such eligible director shall be granted an additional option to purchase 10,500 shares of Common Stock upon each of the "Anniversary Dates" (as defined below) of the initial option grant to such eligible director; provided that such person is an eligible director on the applicable Anniversary Date.

(iv) The Anniversary Dates of an eligible director who was a member of the Board of Directors on December 7, 1994 shall be December 7, 1995 and successive anniversaries thereof. The Anniversary Dates of an eligible director who is first elected or appointed to the Board of Directors after December 7, 1994 shall be the date which is twelve (12) months after such election or appointment and the successive anniversaries thereof.

(b) Option Exercise Price. The option exercise price per share for each option granted under the Plan shall equal (i) the last reported sales price per share of the Company's Common Stock, as listed on a nationally recognized securities exchange, on the date of grant (or, if no such price is reported on such date, such price as reported on the nearest preceding day); or (ii) the fair market value of the stock on the date of grant, as determined by the Board of Directors, if the Common Stock is not publicly traded.

(c) Options Non-Transferable. Each option granted under the Plan by its terms shall not be transferable by the optionee otherwise than by will, or by the laws of descent and distribution, or pursuant to a qualified domestic relations order (as defined in Section 414(p) of the Code), and shall be exercised during the lifetime of the optionee only by him. No option or interest therein may be transferred, assigned,

pledged or hypothecated by the optionee during his lifetime, whether by operation of law or otherwise, or be made subject to execution, attachment or similar process.

(d) Exercise Period. Each option shall vest and be exercisable on a cumulative basis as to one-third of the shares subject to such option on each of the first, second and third Anniversary Dates of the grant of such option; provided that subject to the provisions of Sections 5(e) and 5(f), no option may be exercised more than 90 days after the optionee ceases to serve as a director of the Company and such option may then only be exercised for the purchase of such number of shares as were vested and exercisable at the time of such termination; provided, further, however, that if the director shall become an employee of the Company and in connection with such employment he ceases to serve as a director, all options granted to him as a director shall continue to vest during the period that he is so employed and shall be exercisable (i) no later than 90 days after such employment terminates and (ii) for the purchase of such number of shares as were vested at the time of such termination; or if such employment terminates by reason of his death or disability, such options shall be exercisable for such number of shares and for such period as is provided in Section 5(f). No option shall be exercisable after the expiration of ten (10) years from the date of grant or prior to approval of the Plan by the stockholders of the Company.

(e) Exercise Period Upon Retirement. Notwithstanding the provisions of Section 5(d), in the event an optionee ceases to be a director by reason of retirement of the optionee as a director at the retirement age determined by the Company or by reason of the Company's failure to nominate the optionee for reelection as a director (other than for such director's refusal to serve as a director), each option then held by such director shall, at the time he or she ceases to be a director, be exercisable for that number of shares of Common Stock which equals the sum of (i) the shares which are then vested and exercisable and (ii) the shares which would otherwise become vested and exercisable at the next succeeding Anniversary Date.

(f) Exercise Period Upon Death or Disability. Notwithstanding the provisions of Section 5(d), any option granted under the Plan:

(i) may be exercised in full by an optionee who becomes disabled (within the meaning of Section 22(e)(3) of the Code or any successor provision thereto) while serving as a director of the Company; or

(ii) may be exercised

(x) in full upon the death of an optionee while serving as a director of the Company, or

(y) to the extent then exercisable upon the death of an optionee within 90 days of ceasing to serve as a director of the Company,

by the person to whom it is transferred by will, by the laws of descent and distribution, or by written notice filed pursuant to Section 5(i);

in each such case within the period of one year after the date the optionee ceases to be such a director by reason of such death or disability; provided, that no option shall be exercisable after the expiration of ten (10) years from the date of grant or prior to the approval of the Plan by the stockholders of the Company.

(g) Exercise Procedure. Options may be exercised only by written notice to the Company at its principal office accompanied by payment of the full consideration for the shares as to which they are exercised.

(h) Payment of Purchase Price. Options granted under the Plan may provide for the payment of the exercise price (i) by delivery of cash or a check to the order of the Company in an amount equal to the exercise price of such options or, (ii) to the extent provided in the applicable option agreement, by delivery to the Company of shares of Common Stock of the Company already owned by the optionee having a fair market value equal in amount to the exercise price of the options being exercised, or (iii) by any combination of such methods of payment. The fair market value of any shares of the Company's Common Stock which may be delivered upon exercise of an option shall be determined by the Board of Directors.

(i) Exercise by Representative Following Death of Director. A director, by written notice to the Company, may designate one or more persons (and from time to time change such designation) including his legal representative, who, by reason of his death, shall acquire the right to exercise all or a portion of the option. If the person or persons so designated wish to exercise any portion of the option, they must do so within the term of the option as provided herein. Any exercise by a representative shall be subject to the provisions of the Plan.

(j) Deferral of Shares Issuable Upon Exercise. A director may elect, at the discretion of, and in accordance with rules to be established by the Board, to defer receipt of any shares of Common Stock issuable upon the exercise of an option, provided that such election is irrevocable and made at least that number of days prior to the exercise of the option that shall be determined by the Board or the Committee. The director's account under the Analog Devices, Inc. Deferred Compensation Plan shall be credited with a number of stock units equal to the number of shares so deferred.

6. ASSIGNMENTS

The rights and benefits under the Plan may not be assigned except for the designation of a beneficiary as provided in Section 5.

7. TIME FOR GRANTING OPTIONS

All options for shares subject to the Plan shall be granted, if at all, not later than ten (10) years after the approval of the Plan by the Company's stockholders.

8. LIMITATION OF RIGHTS

(a) No Right to Continue as a Director. Neither the Plan, nor the granting of an option nor any other action taken pursuant to the Plan, shall constitute or be evidence of any agreement or understanding, express or implied, that the Company will retain a director for any period of time.

(b) No Stockholders' Rights for Options. An optionee shall have no rights as a stockholder with respect to the shares covered by his options until the date of the issuance to him of a stock certificate therefor, and no adjustment will be made for dividends or other rights for which the record date is prior to the date such certificate is issued.

9. CHANGES IN COMMON STOCK

(a) If (x) the outstanding shares of Common Stock are exchanged for a different number or kind of shares or other securities of the Company, or (y) the outstanding shares of Common Stock are increased or decreased as a result of any recapitalization, reclassification, stock dividend or stock split (except for the 3-for-2 stock split approved by the Board of Directors on November 29, 1994, which has been reflected in the Plan as adopted by the Board of Directors on December 7, 1994), reverse stock split or other similar transaction, an appropriate and proportionate adjustment shall be made in (i) the maximum number and kind of shares reserved for issuance under the Plan, and (ii) the number and kind of shares or other securities subject to then outstanding options under the Plan and (iii) the price for each share subject to any then outstanding options under the Plan, without changing the aggregate purchase price as to which such options remain exercisable. No fractional shares will be issued under the Plan on account of any such adjustments. Notwithstanding the foregoing, no adjustment shall be made pursuant to this Section 9 if such adjustment would cause the Plan to fail to comply with Rule 16b-3 or any successor rule promulgated pursuant to Section 16 of the Securities Exchange Act of 1934.

(b) If any event occurs that would constitute a "Change of Control" within the meaning of clause (iii) or (iv) of Section 10 below, the Board of Directors of the Company, or the board of directors of any corporation assuming the obligations of the Company, shall, subject to the provisions of Section 10, as to outstanding options, take one or more of the following actions: (i) provide that such options shall be assumed, or equivalent options shall be substituted, by the acquiring or succeeding corporation (or an affiliate thereof), (ii) upon written notice to the optionees, provide that all unexercised options will terminate immediately prior to the consummation of such transaction unless exercised by the optionee within a specified period following the date of such notice, or (iii) if, under the terms of a merger transaction, holders of the Common Stock of the Company will receive upon consummation thereof a cash payment for each share surrendered in the merger (the "Merger Price"), make or provide for a cash payment to the optionees equal to the difference between (A) the Merger Price times the number of shares of Common Stock subject to such outstanding options (to the extent then exercisable at prices not in excess of the Merger Price) and (B) the aggregate exercise price of all such outstanding options in exchange for the termination of such options.

10. CHANGE IN CONTROL

Notwithstanding any other provision to the contrary in this Plan, in the event of a Change of Control (as defined below), all options outstanding as of the date such Change in Control occurs shall become exercisable in full, whether or not exercisable in accordance with their terms. A "Change in Control" shall occur or be deemed to have occurred only if any of the following events occur: (i) any "person," as such term is used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended, (other than the Company, any trustee or other fiduciary holding securities under an employee benefit plan of the Company, or any corporation owned directly or indirectly by the stockholders of the Company in substantially the same proportion as their ownership of stock of the Company) is or becomes the "beneficial owner" (as defined in Rule 13d-3 under the Securities Exchange Act of 1934), directly or indirectly, of securities of the Company representing 50% or more of the combined voting power of the Company's then outstanding securities; (ii) individuals who, as of July 1, 1992, constitute the Board of Directors of the Company (as of the date thereof, the "Incumbent Board") cease for any reason to constitute at least a majority of the Board, provided that any person becoming a director subsequent to the date thereof whose election, or nomination for election by the Company's stockholders, was approved by a vote of at least a majority of the directors then comprising the Incumbent Board (other than an election or nomination of an individual whose initial assumption of office is in connection with an actual or threatened election contest relating to the election of the directors of the Company, as such terms are used in Rule 14a-11 of Regulation 14A under the Securities Exchange Act of 1934) shall be, for purposes of this Agreement, considered as though such person were a member of the Incumbent Board; (iii) the stockholders of the Company approve a merger or

consolidation of the Company with any other corporation, other than (A) a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity) more than 50% of the combined voting power of the voting securities of the Company or such surviving entity outstanding immediately after such merger or consolidation or (B) a merger or consolidation effected to implement a recapitalization of the Company (or similar transaction) in which no "person" (as hereinabove defined) acquires more than 30% of the combined voting power of the Company's then outstanding securities; or (iv) the stockholders of the Company approve a plan of complete liquidation of the Company or an agreement for the sale or disposition by the Company of all or substantially all of the Company's assets."

11. AMENDMENT OF THE PLAN

The Board of Directors may suspend or discontinue the Plan or review or amend it in any respect whatsoever; provided, however, that without approval of the stockholders of the Company no revision or amendment shall change the number of shares subject to the Plan (except as provided in Section 9), change the designation of the class of directors eligible to receive options, or materially increase the benefits accruing to participants under the Plan. The Plan may not be amended more than once in any six-month period.

12. WITHHOLDING

The Company shall have the right to deduct from payments of any kind otherwise due to the optionee any federal, state or local taxes of any kind required by law to be withheld with respect to any shares issued upon exercise of options under the Plan.

13. EFFECTIVE DATE AND DURATION OF THE PLAN

(a) Effective Date. The Plan shall become effective when adopted by the Board of Directors, but no option granted under the Plan shall become exercisable unless and until the Plan shall have been approved by the Company's shareholders. If such shareholder approval is not obtained within twelve months after the date of the Board's adoption of the Plan, all options granted under the Plan shall terminate and no further options shall be granted under the Plan. Amendments to the Plan not requiring shareholder approval shall become effective when adopted by the Board of Directors; amendments requiring shareholder approval (as provided in Section 11) shall become effective when adopted by the Board of Directors, but no option granted after the date of such amendment shall become exercisable (to the extent that such amendment to the Plan was required to enable the Company to grant such option to a particular optionee) unless and until such amendment shall have been

approved by the Company's shareholders. If such shareholder approval is not obtained within twelve months of the Board's adoption of such amendment, any options granted on or after the date of such amendment shall terminate to the extent that such amendment to the Plan was required to enable the Company to grant such option to a particular optionee. Subject to this limitation, options may be granted under the Plan at any time after the effective date and before the date fixed for termination of the Plan.

(b) Termination. Unless sooner terminated in accordance with Section 9, the Plan shall terminate upon the earlier of (i) the close of business on March 31, 2001, or (ii) the date on which all shares available for issuance under the Plan shall have been issued pursuant to the exercise or cancellation of options granted under the Plan. If the date of termination is determined under (i) above, then options outstanding on such date shall continue to have force and effect in accordance with the provisions of the instruments evidencing such options.

14. NOTICE

Any written notice to the Company required by any of the provisions of the Plan shall be addressed to the Treasurer of the Company and shall become effective when it is received.

15. COMPLIANCE WITH RULE 16B-3

Transactions under the Plan are intended to comply with all applicable conditions of Rule 16b-3 or its successor promulgated pursuant to Section 16 of the Securities Exchange Act of 1934. To the extent any provision of the Plan or action by the Board of Directors in administering the Plan fails to so comply, it shall be deemed null and void, to the extent permitted by law and deemed advisable by the Board of Directors.

16. GOVERNING LAW

The Plan and all determinations made and actions taken pursuant hereto shall be governed by the laws of the Commonwealth of Massachusetts.

Approved by the Board of Directors
on December 7, 1994

Approved by the Stockholders on
March 14, 1995

1. This Restatement of the 1994 Director Option Plan is dated as of March 11, 1998 (the "Restatement Date") and incorporates the 1st Amendment to the Plan, adopted by the Board of Directors on December 3, 1996; and the Second Amendment to the plan, adopted by the Board of Directors on January 15, 1998 and approved by the stockholders of the Company on March 10, 1998. All share numbers have been adjusted to reflect all stock splits effected by the Company through the Restatement Date.

ANALOG DEVICES, INC.

AMENDMENT TO 1994 DIRECTOR OPTION PLAN

Clause (ii) of Section 5(a) of the 1994 Director Option Plan be and hereby is deleted and the following new clause (ii) is substituted in lieu thereof:

"(ii) Each eligible director who is first elected or appointed to serve on the Board after December 9, 1998 shall be granted an option to purchase 30,000 shares of Common Stock upon such election or appointment."

Approved by the Board of Directors on December 9, 1998.

ANALOG DEVICES, INC.

SECOND AMENDMENT TO RESTATED 1994 DIRECTOR OPTION PLAN

Subsection (c) of Section 5 of the Restated 1994 Director Option Plan be and hereby is deleted and the following new Subsection (c) is substituted in lieu thereof:

"(c) Transferability of Options. Except as the Board may otherwise determine or provide in an Option or an amendment to an outstanding Option, Options shall not be sold, assigned, transferred, pledged or otherwise encumbered by the person to whom they are granted, either voluntarily or by operation of law, except by will, or by the laws of descent and distribution, or pursuant to a qualified domestic relations order as defined in Section 414(p) of the Code, and during the life of the Optionee, shall be exercisable only by the Optionee. References to an Optionee, the extent relevant in the context, shall include references to authorized transferees."

Approved by the Board of Directors on June 21, 2000.

ANALOG DEVICES, INC.

2001 BROAD-BASED STOCK OPTION PLAN

EFFECTIVE DATE: DECEMBER 5, 2001

1. Purpose.

The purpose of this 2001 Broad-Based Stock Option Plan (the "Plan") of Analog Devices, Inc. a Massachusetts corporation (the "Company"), is to advance the interests of the Company's stockholders by enhancing the Company's ability to attract, retain and motivate persons who make (or are expected to make) important contributions to the Company by providing such persons with equity ownership opportunities and thereby better aligning the interests of such persons with those of the Company's stockholders. Except where the context otherwise requires, the term "Company" shall include any present or future subsidiaries of Analog Devices, Inc. as defined in Section 424(f) of the Internal Revenue Code of 1986, as amended, and any regulations promulgated thereunder (the "Code") and any other business venture (including, without limitation, joint venture or limited liability company) in which the Company has a controlling interest, as determined by the Board of Directors of the Company (the "Board").

2. Eligibility of Optionees.

All of the Company's employees, consultants and advisors are eligible to be granted options (each, an "Option") under the Plan; provided, however, no Options may be granted under the Plan to any directors of the Company or to any employees who are also officers of the Company as the term "officer" is defined by the Securities and Exchange Commission in Rule 16a-1(f) promulgated under the Securities Exchange Act of 1934, or any successor rule. Each person who has been granted an Option under the Plan is hereinafter referred to as "Optionee".

3. Administration; Delegation.

(a) Administration by Board of Directors. The Plan will be administered by the Board. The Board shall have authority to grant Options and to adopt, amend and repeal such administrative rules, guidelines and practices relating to the Plan as it shall deem advisable. The Board may correct any defect, supply any omission or reconcile any inconsistency in the Plan or any Option in the manner and to the extent it shall deem expedient to carry the Plan into effect and it shall be the sole and final judge of such expediency. All decisions by the Board shall be made in the Board's sole discretion and shall be final and binding on all persons having or claiming any interest in the Plan or in any Option. No director or person acting pursuant to the authority delegated by the Board shall be liable for any action or determination relating to or under the Plan made in good faith.

(b) Appointment of Committees. To the extent permitted by applicable law, the Board may delegate any or all of its powers under the Plan to one or more committees or subcommittees of the Board (a "Committee"). All references in the Plan to the "Board" shall mean the Board, the Committee or the executive officer referred to in Section 3(c) to the extent

that the Board's powers or authority under the Plan have been delegated to the Committee or executive officer.

(c) Delegation to Executive Officers. To the extent permitted by applicable law, the Board may delegate to one or more executive officers of the Company the power to grant Options and exercise such other powers under the Plan as the Board may determine, provided that the Board shall fix the maximum number of shares subject to Options and the maximum number of shares for any one Optionee to be made by such executive officers.

4. Stock Available for Options. Subject to adjustment pursuant to Section 6(a), Options may be granted under the Plan for up to 50,000,000 shares of common stock, \$0.16-2/3 par value of the Company ("Common Stock"). If any Option expires or is terminated, surrendered or canceled without having been fully exercised or is forfeited in whole or in part or results in any Common Stock not being issued, the unused Common Stock covered by such Option shall again be available for the grant of Options under the Plan. Shares issued under the Plan may consist in whole or in part of authorized but unissued shares or treasury shares.

5. Option Terms.

(a) General. The Board may grant Options to purchase Common Stock and determine the number of shares of Common Stock to be covered by each Option, the exercise price of each Option and the conditions and limitations applicable to the exercise of each Option, including conditions relating to applicable federal or state securities laws, as it considers necessary or advisable.

(b) Exercise Price. The Board shall establish the exercise price at the time each Option is granted and specify it in the applicable Option Agreement; provided, however, that the exercise price shall be not less than 100% of the fair market value of the Common Stock, as determined by the Board, at the time of the Option grant ("Fair Market Value").

(c) Option Agreement; Duration of Options. Each Option may be evidenced by (i) an Option Agreement in such form and containing such provisions as the Board from time to time shall approve or (ii) a written confirming memorandum to the Optionee setting forth the material terms of the Option. (For purposes of the Plan, Option Agreement, as defined herein, shall also include any such confirming memorandum.) Each Option Agreement shall specify the period or periods during which the Option may be exercised and shall specify the effect of termination of employment on the exercisability of the Option. The Option Agreement may also include, without limitation, provisions relating to (i) subject to the provisions of Section 7, the acceleration and vesting of Options, (ii) a provision that permits Options to vest and remain exercisable after the Optionee ceases to be employed by, or retained as a consultant or advisor to, the Company or any subsidiary or affiliate of the Company, and (iii) any other matters not inconsistent with the terms and provisions of the Plan that the Board shall, in its sole discretion, determine. The terms and conditions of the respective Option Agreements need not be identical.

(d) Exercise of Option. Options may be exercised by delivery to the Company of a written notice of exercise, e-mail or other form of notice (including electronic notice) approved

by the Board together with payment as specified in Section 5(e) for the number of shares for which the Option is exercised.

(e) Payment Upon Exercise. Payment for Common Stock purchased upon the exercise of an Option granted under the Plan shall be made as follows:

(1) in cash or by check, payable to the order of the Company;

(2) except as the Board may, in its sole discretion, otherwise provide in an Option Agreement, (i) delivery of an irrevocable and unconditional undertaking by a creditworthy broker to deliver promptly to the Company sufficient funds to pay the exercise price or (ii) delivery by the Optionee to the Company of a copy of irrevocable and unconditional instructions to a creditworthy broker to deliver promptly to the Company cash or a check sufficient to pay the exercise price and any required withholding;

(3) delivery of shares of Common Stock owned by the Optionee valued at their Fair Market Value as determined by (or in a manner approved by) the Board in good faith, provided (i) such method of payment is then permitted under applicable law and (ii) such Common Stock, if acquired directly from the Company, was owned by the Optionee for at least six months prior to such delivery;

(4) to the extent permitted by the Board, in its sole discretion, (i) by delivery of a promissory note of the Optionee to the Company on terms determined by the Board or (ii) by payment of such other lawful consideration as the Board may determine; or

(5) by any combination of the above permitted forms of payment.

(f) Substitute Options. In connection with a merger or consolidation of an entity with the Company or the acquisition by the Company of property or stock, the Board may grant options in substitution for any stock options or other stock or stock-based awards granted by such entity or an affiliate thereof. Substitute Options may be granted on such terms as the Board deems appropriate in the circumstances, notwithstanding any limitations on Options contained in the other sections of this Section 5.

6. Adjustments for Changes in Common Stock; Liquidation.

(a) Changes in Capitalization. In the event of any stock split, reverse stock split, stock dividend, recapitalization, combination of shares, reclassification of shares, liquidation, spin-off or other similar change in capitalization or event, or any distribution to holders of Common Stock other than a normal cash dividend, (i) the number and class of securities available under the Plan and (ii) the number and class of securities and exercise price per share subject to each outstanding Option shall be appropriately adjusted by the Company to the extent the Board shall determine, in good faith, that such an adjustment is necessary and appropriate. If this Section 6(a) applies and Section 7 also applies to any event, Section 7 shall be applicable to such event, and this Section 6(a) shall not be applicable.

(b) Liquidation or Dissolution. In the event of a proposed liquidation or dissolution of the Company, the Board shall upon written notice to the Optionees provide that all then

unexercised Options will (i) become exercisable in full as of a specified time at least 10 business days prior to the effective date of such liquidation or dissolution and (ii) terminate effective upon such liquidation or dissolution, except to the extent exercised before such effective date.

7. Reorganization and Change in Control Events.

(a) Definitions.

(1) A "Reorganization Event" shall mean:

- (A) any merger or consolidation of the Company with or into another entity as a result of which all of the Common Stock of the Company is converted into or exchanged for the right to receive cash, securities or other property; or
- (B) any exchange of all of the Common Stock of the Company for cash, securities or other property pursuant to a share exchange transaction.

(2) A "Change in Control Event" shall mean:

- (A) the acquisition by an individual, entity or group (within the meaning of Section 13(d)(3) or 14(d)(2) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")) (a "Person") of beneficial ownership of any capital stock of the Company if, after such acquisition, such Person beneficially owns (within the meaning of Rule 13d-3 promulgated under the Exchange Act) 30% or more of either (x) the then outstanding shares of common stock of the Company (the "Outstanding Company Common Stock") or (y) the combined voting power of the then outstanding securities of the Company entitled to vote generally in the election of directors (the "Outstanding Company Voting Securities"); provided, however, that for purposes of this subsection (A), the following acquisitions shall not constitute a Change in Control Event: (i) any acquisition directly from the Company (excluding an acquisition pursuant to the exercise, conversion or exchange of any security exercisable for, convertible into or exchangeable for common stock or voting securities of the Company, unless the Person exercising, converting or exchanging such security acquired such security directly from the Company or an underwriter or agent of the Company), (ii) any acquisition by any employee benefit plan (or related trust) sponsored or maintained by the Company or any corporation controlled by the Company, or (iii) any acquisition by any corporation pursuant to a Business Combination (as defined below) which complies with clauses (x) and (y) of subsection (C) of this definition; or

- (B) such time as the Continuing Directors (as defined below) do not constitute a majority of the Board (or, if applicable, the Board of Directors of a successor corporation to the Company), where the term "Continuing Director" means at any date a member of the Board (x) who was a member of the Board on the date of the initial adoption of this Plan by the Board or (y) who was nominated or elected subsequent to such date by at least a majority of the directors who were Continuing Directors at the time of such nomination or election or whose election to the Board was recommended or endorsed by at least a majority of the directors who were Continuing Directors at the time of such nomination or election; provided, however, that there shall be excluded from this clause (y) any individual whose initial assumption of office occurred as a result of an actual or threatened election contest with respect to the election or removal of directors or other actual or threatened solicitation of proxies or consents, by or on behalf of a person other than the Board; or
- (C) the consummation of a merger, consolidation, reorganization, recapitalization or share exchange involving the Company or a sale or other disposition of all or substantially all of the assets of the Company (a "Business Combination"), unless, immediately following such Business Combination, each of the following two conditions is satisfied: (x) all or substantially all of the individuals and entities who were the beneficial owners of the Outstanding Company Common Stock and Outstanding Company Voting Securities immediately prior to such Business Combination beneficially own, directly or indirectly, more than 50% of the then outstanding shares of common stock and the combined voting power of the then outstanding securities entitled to vote generally in the election of directors, respectively, of the resulting or acquiring corporation in such Business Combination (which shall include, without limitation, a corporation which as a result of such transaction owns the Company or substantially all of the Company's assets either directly or through one or more subsidiaries) (such resulting or acquiring corporation is referred to herein as the "Acquiring Corporation") in substantially the same proportions as their respective ownership of the Outstanding Company Common Stock and Outstanding Company Voting Securities immediately prior to such Business Combination and (y) no Person (excluding the Acquiring Corporation or any employee benefit plan (or related trust) maintained or sponsored by the Company or by the Acquiring Corporation) beneficially owns, directly or indirectly, 30% or more of the then outstanding shares of common stock of the Acquiring Corporation, or of the combined voting power of the then-outstanding securities of such corporation entitled to vote generally in the election of directors (except to the

extent that such ownership existed prior to the Business Combination).

(3) "Good Reason" shall mean any significant diminution in the Optionee's title, authority, or responsibilities from and after such Reorganization Event or Change in Control Event, as the case may be, or any reduction in the annual cash compensation payable to the Optionee from and after such Reorganization Event or Change in Control Event, as the case may be, or the relocation of the place of business at which the Optionee is principally located to a location that is greater than 50 miles from the current site.

(4) "Cause" shall mean any (i) willful failure by the Optionee, which failure is not cured within 30 days of written notice to the Optionee from the Company, to perform his or her material responsibilities to the Company or (ii) willful misconduct by the Optionee which affects the business reputation of the Company.

(b) Effect on Options.

(1) Reorganization Event. Upon the occurrence of a Reorganization Event (regardless of whether such event also constitutes a Change in Control Event), or the execution by the Company of any agreement with respect to a Reorganization Event (regardless of whether such event will result in a Change in Control Event), the Board shall provide that all of the outstanding Options shall be assumed, or equivalent options shall be substituted, by the acquiring or succeeding corporation (or an affiliate thereof); provided that if such Reorganization Event also constitutes a Change in Control Event, except to the extent specifically provided to the contrary in the instrument evidencing any Option or any other agreement between an Optionee and the Company, (x) one-half of the number of shares subject to the Option which were not already vested shall be immediately exercisable upon the occurrence of such Reorganization Event, and subject to (y) below, the remaining one-half of such number of shares shall continue to become vested in accordance with the original vesting schedule set forth in such option, with one-half of the number of shares that would otherwise have become vested on each subsequent vesting date in accordance with the original schedule becoming vested on each subsequent vesting date and (y) such assumed or substituted options shall become immediately exercisable in full if, on or prior to the first anniversary of the date of the consummation of the Reorganization Event, the Optionee's employment with the Company or the acquiring or succeeding corporation is terminated for Good Reason by the Optionee or is terminated without Cause by the Company or the acquiring or succeeding corporation. For purposes hereof, an Option shall be considered to be assumed if, following consummation of the Reorganization Event, the Option confers the right to purchase, for each share of Common Stock subject to the Option immediately prior to the consummation of the Reorganization Event, the consideration (whether cash, securities or other property) received as a result of the Reorganization Event by holders of Common Stock for each share of Common Stock held immediately prior to the consummation of the Reorganization Event (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding shares of Common Stock); provided, however, that if the consideration received as a result of the Reorganization Event is not solely common stock of the acquiring or succeeding corporation (or an affiliate thereof), the Company may, with the consent of the acquiring or succeeding corporation, provide for the consideration to be received upon the exercise of Options to consist

solely of common stock of the acquiring or succeeding corporation (or an affiliate thereof) equivalent in fair market value to the per share consideration received by holders of outstanding shares of Common Stock as a result of the Reorganization Event.

Notwithstanding the foregoing, if the acquiring or succeeding corporation (or an affiliate thereof) does not agree to assume, or substitute for, such Options, then the Board shall, upon written notice to the Optionees, provide that all then unexercised Options will become exercisable in full as of a specified time prior to the Reorganization Event and will terminate immediately prior to the consummation of such Reorganization Event, except to the extent exercised by the Optionees before the consummation of such Reorganization Event; provided, however, that in the event of a Reorganization Event under the terms of which holders of Common Stock will receive upon consummation thereof a cash payment for each share of Common Stock surrendered pursuant to such Reorganization Event (the "Acquisition Price"), then the Board may instead provide that all outstanding Options shall terminate upon consummation of such Reorganization Event and that each Optionee shall receive, in exchange therefor, a cash payment equal to the amount (if any) by which (i) the Acquisition Price multiplied by the number of shares of Common Stock subject to such outstanding Options (whether or not then exercisable), exceeds (ii) the aggregate exercise price of such Options. To the extent all or any portion of an Option becomes exercisable solely as a result of the first sentence of this paragraph, upon exercise of such Option the Optionee shall receive shares subject to a right of repurchase by the Company or its successor at the Option exercise price. Such repurchase right shall lapse at the same rate as the Option would have become exercisable under its terms and shall not apply to any shares subject to the Option that were exercisable under its terms without regard to the first sentence of this paragraph.

(2) Change in Control Event that is not a Reorganization Event. Upon the occurrence of a Change in Control Event that does not also constitute a Reorganization Event, except to the extent specifically provided to the contrary in the instrument evidencing any Option or any other agreement between an Optionee and the Company, the vesting schedule of such Option shall be accelerated in part so that one-half of the number of shares that would otherwise have first become vested on any date or dates after the date of the Change in Control Event shall immediately become exercisable. The remaining one-half of such number of shares shall continue to become vested in accordance with the original vesting schedule set forth in such Option with one-half of the number of shares that would otherwise have become vested on each subsequent vesting date; provided, however, that each such Option shall immediately become exercisable in full if, on or prior to the first anniversary of the date of the consummation of the Change in Control Event, the Optionee's employment with the Company or the acquiring or succeeding corporation is terminated for Good Reason by the Optionee or is terminated without Cause by the Company or the acquiring or succeeding corporation.

8. General Provisions Applicable to Options.

(a) Transferability of Options. Except as the Board may otherwise determine or provide in an Option, Options shall not be sold, assigned, transferred, pledged or otherwise encumbered by the person to whom they are granted, either voluntarily or by operation of law, except by will or the laws of descent and distribution, and, during the life of the Optionee, shall

be exercisable only by the Optionee. References to an Optionee, to the extent relevant in the context, shall include references to authorized transferees.

(b) Board Discretion. Except as otherwise provided by the Plan, each Option may be granted alone or in addition or in relation to any other Option. The terms of each Option need not be identical, and the Board need not treat Optionees uniformly.

(c) Termination of Status. The Board shall determine the effect on an Option of the disability, death, retirement, authorized leave of absence or other change in the employment or other status of an Optionee and the extent to which, and the period during which, the Optionee, the Optionee's legal representative, conservator, guardian or designated beneficiary may exercise rights under the Option.

(d) Withholding. Each Optionee shall pay to the Company, or make provision satisfactory to the Board for payment of, any taxes required by law to be withheld in connection with Options granted to such Optionee no later than the date of the event creating the tax liability. Except as the Board may otherwise provide in an Option, Optionees may satisfy such tax obligations in whole or in part by delivery of shares of Common Stock, including shares retained from the Option creating the tax obligation, valued at their Fair Market Value; provided, however, that the total tax withholding when stock is being used to satisfy such tax obligations cannot exceed the Company's minimum statutory withholding obligations (based on minimum statutory withholding rates for federal and state tax purposes, including payroll taxes, that are applicable to such supplemental taxable income). The Company may, to the extent permitted by law, deduct any such tax obligations from any payment of any kind otherwise due to an Optionee.

(e) Amendment of Option. The Board may amend, modify or terminate any outstanding Option, including but not limited to, substituting therefor another Option of the same or a different type and changing the date of exercise or realization, provided that the Optionee's consent to such action shall be required unless the Board determines that the action, taking into account any related action, would not materially and adversely affect the Optionee.

(f) Conditions on Delivery of Stock. The Company will not be obligated to deliver any shares of Common Stock pursuant to the Plan or to remove any restrictions from shares previously delivered under the Plan until (i) all conditions of the Option have been met or removed to the satisfaction of the Company, (ii) in the opinion of the Company's counsel, all other legal matters in connection with the issuance and delivery of such shares have been satisfied, including any applicable securities laws and any applicable stock exchange or stock market rules and regulations, and (iii) the Optionee has executed and delivered to the Company such representations or agreements as the Company may consider appropriate to satisfy the requirements of any applicable laws, rules or regulations.

(g) Acceleration; Continued Vesting. The Board may at any time provide that any Options shall become immediately exercisable in full or in part, and may at any time provide for the continued vesting and exercisability of any Options for such period of time after the Optionee's employment terminates as the Board shall determine.

9. Miscellaneous.

(a) No Right To Employment or Other Status. No person shall have any claim or right to be granted an Option, and the grant of an Option shall not be construed as giving an Optionee the right to continued employment or any other relationship with the Company. The Company expressly reserves the right at any time to dismiss or otherwise terminate its relationship with an Optionee free from any liability or claim under the Plan, except as expressly provided in the applicable Option.

(b) No Rights As Stockholder. Subject to the provisions of the applicable Option, no Optionee or designated beneficiary of the Optionee shall have any rights as a stockholder with respect to any shares of Common Stock to be distributed with respect to an Option until becoming the record holder of such shares. Notwithstanding the foregoing, in the event the Company effects a split of the Common Stock by means of a stock dividend and the exercise price of and the number of shares subject to such Option are adjusted as of the date of the distribution of the dividend (rather than as of the record date for such dividend), then an Optionee who exercises an Option between the close of business on the record date for such stock dividend and the close of business on the distribution date for such stock dividend shall be entitled to receive, on the distribution date, the stock dividend with respect to the shares of Common Stock acquired upon such Option exercise, notwithstanding the fact that such shares were not outstanding as of the close of business on the record date for such stock dividend.

(c) Effective Date and Term of Plan. The Plan shall become effective on the date on which it is adopted by the Board. No Option shall be granted under the Plan after ten (10) years from the date on which the Plan was adopted by the Board, but Options previously granted may extend beyond that date.

(d) Amendment and Termination of Plan. The Board may amend, suspend or terminate the Plan or any portion thereof at any time.

(e) Governing Law. The provisions of the Plan and all Options granted hereunder shall be governed by and interpreted in accordance with the laws of the Commonwealth of Massachusetts, without regard to any applicable conflicts of law.

Adopted by the Board of Directors on December 5, 2001

ANALOG DEVICES; INC.

FIRST AMENDMENT TO THE 2001 BROAD-BASED STOCK OPTION PLAN

The Analog Devices, Inc. 2001 Broad-Based Stock Option Plan, pursuant to Section 9(d) thereof, is hereby amended as follows:

VOTED: That the Corporation hereby adopts and approves a certain amendment to the Corporation's 2001 Broad-Based Stock Option Plan in substantially the form attached to the minutes of this meeting as Exhibit F (such amendment referred to as "Appendix A - Israel") to permit the Corporation's Israeli employees (specifically, employees, advisors and consultants of Analog Devices (Israel) Ltd. and Analog Development (Israel) 1999 Ltd.) to qualify for certain tax benefits under the tax laws of the country of Israel; and further that the Chairman of the Board, the President and Chief Executive Officer, Vice President, Finance and Chief Financial Officer, and the Treasurer of the Corporation, and any one of them acting singly, are hereby authorized and empowered to execute any document necessary or proper to give effect to "Appendix A - Israel" under the laws and regulations of the country of Israel, and further the aforementioned officers be, and each acting singly hereby is, authorized in the name and on behalf of the Corporation to sign, acknowledge, swear to and deliver any affidavit, agreement or other documents, the same being in such form as the authorized person or persons executing the same shall determine to be in the best interest of the Corporation to give proper effect to such "Appendix A - Israel", the execution of any such documents to be sufficient evidence of such determination; and that the Clerk and Assistant Clerks of the Corporation be, and each acting singly hereby is, authorized to attest, co-sign and affix the corporate seal to such documents.

FURTHER

VOTED: That the President and Chief Executive Officer, Vice President, Finance and Chief Financial Officer, and the Treasurer of the Corporation, or any one of them acting singly, are hereby authorized and empowered to adopt and approve certain amendments to the Corporation's 2001 Broad-Based Stock Option Plan relating to establishing conditions or provisions for the participation of eligible foreign employees in the 2001 Broad-Based Stock Option Plan in order to comply with the tax, securities and other laws and regulations of the foreign countries in which such employees reside, even if such conditions or provisions increase the benefits accruing to such employees under the 2001 Broad-Based Stock Option Plan; and further that the Chairman of the Board, the President and Chief Executive Officer, Vice President, Finance and Chief Financial Officer, and the Treasurer of the Corporation, and any one of them acting singly, are hereby authorized and empowered to execute any document necessary or proper to give effect to such

amendments under the laws and regulations of the appropriate country, and further the aforementioned officers be, and each acting singly hereby is, authorized in the name and on behalf of the Corporation to sign, acknowledge, swear to and deliver any affidavit, agreement or other documents, the same being in such form as the authorized person or persons executing the same shall determine to be in the best interest of the Corporation to give proper effect to such amendments, the execution of any such documents to be sufficient evidence of such determination; and that the Clerk and Assistant Clerks of the Corporation be, and each acting singly hereby is, authorized to attest, co-sign and affix the corporate seal to such documents.

Subsection 5(d) of the Plan be and hereby is amended by adding the following new sentence at the end thereof:

"The Corporation may direct that notice of option exercise be delivered to an agent of the Corporation designated to receive such delivery."

Subsection 8(e) of the Plan be and hereby is amended by adding the following new sentence at the end thereof:

"Notwithstanding the foregoing, the Board shall not amend any outstanding option to provide an option exercise price per share which is lower than the original option exercise price."

Approved by the Board of Directors on December 10, 2002.

AMENDED APPENDIX A - ISRAEL

TO THE 2001 BOARD-BASED STOCK OPTION PLAN

1. GENERAL

- 1.1. This appendix (the "APPENDIX") shall apply only to optionees who are employees/advisors/consultants of one of the two following companies, Analog Devices (Israel) Ltd., Analog Development (Israel) 1996 Ltd, and are residents of the state of Israel for the payment of tax. The provisions specified hereunder shall form an integral part of the 2001 Board-Based Stock Option Plan of Analog Devices Inc. (hereinafter: the "PLAN"), which applies to the issuance of options to purchase Common Stock of Analog Devices Inc. (hereinafter: the "COMPANY"). According to the Plan, options to purchase the Company's Common Stock may be issued to employees, directors and consultants and advisors of the Company or its Affiliates.
- 1.2. This Appendix is effective with respect to Options granted as of January 1, 2003 and shall comply with Amendment no. 132 of the Israeli Tax Ordinance.
- 1.3. This Appendix is to be read as a continuation of the Plan and only modifies Options granted to Israeli optionees so that they comply with the requirements set by the Israeli law in general, and in particular with the provisions of Section 102 (as specified herein), as may be amended or replaced from time to time. For the avoidance of doubt, this Appendix does not add to or modify the Plan in respect of any other category of optionees.
- 1.4. The Plan and this Appendix are complimentary to each other and shall be deemed as one. In any case of contradiction, whether explicit or implied, between the provisions of this Appendix and the Plan, the provisions set out in the Appendix shall prevail.
- 1.5. Any capitalized terms not specifically defined in this Appendix shall be construed according to the interpretation given to it in the Plan.

2. DEFINITIONS

- 2.1. "AFFILIATE" means any "employing company" within the meaning of Section 102(a) of the Ordinance.
- 2.2. "APPROVED 102 OPTION" means an Option granted pursuant to Section 102(b) of the Ordinance and held in trust by a Trustee for the benefit of the optionee.

- 2.3. "CAPITAL GAIN OPTION (CGO)" means an Approved 102 Option elected and designated by the Company to qualify under the capital gain tax treatment in accordance with the provisions of Section 102(b)(2) of the Ordinance.
- 2.4. "CONTROLLING SHAREHOLDER" shall have the meaning ascribed to it in Section 32(9) of the Ordinance.
- 2.5. "EMPLOYEE" means a person who is employed by the Company or its Affiliates, including an individual who is serving as a director or an office holder, but excluding any Controlling Shareholder.
- 2.6. "TTA" means the Israeli Tax Authorities.
- 2.7. "NON-EMPLOYEE" means a consultant, adviser, service provider, Controlling Shareholder or any other person who is not an Employee.
- 2.8. "ORDINARY INCOME OPTION (OIO)" means an Approved 102 Option elected and designated by the Company to qualify under the ordinary income tax treatment in accordance with the provisions of Section 102(b)(1) of the Ordinance.
- 2.9. "OPTION" means an option to purchase one or more Common Stock of the Company pursuant to the Plan.
- 2.10. "102 OPTION" means any Option granted to Employees pursuant to Section 102 of the Ordinance.
- 2.11. "3(I) OPTION" means an Option granted pursuant to Section 3(i) of the Ordinance to any person who is a Non-Employee.
- 2.12. "OPTION AGREEMENT" means the share option agreement between the Company and a optionee that sets out the terms and conditions of an Option.
- 2.13. "ORDINANCE" means the 1961 Israeli Income Tax Ordinance [New Version] 1961 as now in effect or as hereafter amended.
- 2.14. "SECTION 102" means section 102 of the Ordinance and any regulations, rules, orders or procedures promulgated there under as now in effect or as hereafter amended.
- 2.15. "TRUSTEE" means any individual or entity appointed by the Company to serve as a trustee and approved by the ITA, all in accordance with the provisions of Section 102(a) of the Ordinance.
- 2.16. "UNAPPROVED 102 OPTION" means an Option granted pursuant to Section 102(c) of the Ordinance and not held in trust by a Trustee.

3. ISSUANCE OF OPTIONS

- 3.1. The persons eligible for participation in the Plan as optionees shall include any Employees and/or Non-Employees of the Company or of any Affiliate; provided, however, that (i) Employees may only be granted 102 Options; and (ii) Non-Employees and/or Controlling Shareholders may only be granted 3(i) Options
- 3.2. The Company may designate Options granted to Employees pursuant to Section 102 as Unapproved 102 Options or Approved 102 Options.
- 3.3. The grant of Approved 102 Options shall be made under this Appendix adopted by the Board, and shall be conditioned upon the approval of this Appendix by the ITA.
- 3.4. Approved 102 Options may either be classified as Capital Gain Options ("CGOs") or Ordinary Income Options ("OIOs").
- 3.5. No Approved 102 Options may be granted under this Appendix to any eligible Employee, unless and until, the Company's election of the type of Approved 102 Options as CGI or OIO granted to Employees (the "ELECTION"), is appropriately filed with the ITA. Such Election shall become effective beginning the first Grant Date of an Approved 102 Option under this Appendix and shall remain in effect until the end of the year following the year during which the Company first granted Approved 102 Options. The Election shall obligate the Company to grant only the type of Approved 102 Option it has elected, and shall apply to all optionees who were granted Approved 102 Options during the period indicated herein, all in accordance with the provisions of Section 102(g) of the Ordinance. For the avoidance of doubt, such Election shall not prevent the Company from granting Unapproved 102 Options simultaneously.
- 3.6. All Approved 102 Options must be held in trust by a Trustee, as described in Section 4 below.
- 3.7. For the avoidance of doubt, the designation of Unapproved 102 Options and Approved 102 Options shall be subject to the terms and conditions set forth in Section 102.

4. TRUSTEE

- 4.1. Approved 102 Options which shall be granted under this Appendix and/or any Common Stock allocated or issued upon exercise of such Approved 102 Options and/or other shares received subsequently following any realization of rights, shall be allocated or issued to the Trustee and held for the benefit of the optionees for such period of time as required by Section 102 or any regulations, rules or orders or procedures promulgated there under. In the case the requirements for Approved 102 Options are not met, then the Approved 102 Options shall be regarded as Unapproved 102 Options, all in accordance with the provisions of Section 102.

4.2. Notwithstanding anything to the contrary, the Trustee shall not release any Common Stock allocated or issued upon exercise of Approved 102 Options prior to the full payment of the optionee's tax liabilities arising from Approved 102 Options which were granted to him and/or any Common Stock allocated or issued upon exercise of such Options.

4.3. Upon receipt of Approved 102 Option, the optionee will sign an undertaking to release the Trustee from any liability in respect of any action or decision duly taken and bona fide executed in relation with this Appendix, or any Approved 102 Option or Ordinary Share granted to him there under.

5. THE OPTIONS

The terms AND conditions upon which the Options shall be issued and exercised, shall be as specified in the Option Agreement to be executed pursuant to the Plan and to this Appendix. Each Option Agreement shall state, inter alia, the number of Common Stock to which the Option relates, the vesting provisions and the exercise price.

6. OPTION EXERCISE PRICE

Solely for the purpose of determining the tax liability pursuant to Section 102(b)(3) of the Ordinance, if at the date of grant the Company's shares are listed on any established stock exchange or a national market system or if the Company's shares will be registered for trading within ninety (90) days following the date of grant of the CGOs, the option exercise price of the Common Stock at the date of grant shall be determined in accordance with the average value of the Company's New York Stock Exchange closing share price on the thirty (30) trading days preceding the date of grant or on the thirty (30) trading days following the date of registration for trading, as the case may be. In no case, however, shall the option exercise price be less than the closing share price of the Company's stock on the date of grant.

7. EXERCISE OF OPTIONS

Options shall be exercised by the optionee by giving notice to the Company and/or to any third party designated by the Company (the "REPRESENTATIVE"), in such form and method as may be determined by the Company and, when applicable, by the Trustee, in accordance with the requirements of Section 102, which exercise shall be effective upon receipt of such notice by the Company and/or the Representative and the payment of the exercise price for the number of Common Stock with respect to which the option is being exercised, at the Company's or the Representative's principal office. The notice shall specify the number of Common Stock with respect to which the option is being exercised.

8. ASSIGNABILITY AND SALE OF OPTIONS

8.1. Notwithstanding any other provision of the Plan, no Option or any right with respect thereto, purchasable hereunder, whether fully paid or not, shall be assignable, transferable or given as collateral or any right with respect to them given to any third party whatsoever, and during the lifetime of the optionee each

and all of such optionee's rights to purchase Common Stock hereunder shall be exercisable only by the optionee.

Any such action made directly or indirectly, for an immediate validation or for a future one, shall be void.

- 8.2. As long as Options or Common Stock purchased pursuant to thereto are held by the Trustee on behalf of the optionee, all rights of the optionee over the shares are personal, can not be transferred, assigned, pledged or mortgaged, other than by will or laws of descent and distribution.

9. INTEGRATION OF SECTION 102 AND TAX ASSESSING OFFICER'S PERMIT

9.1. With regards to Approved 102 Options, the provisions of the Plan and/or the Appendix and/or the Option Agreement shall be subject to the provisions of Section 102 and the Tax Assessing Officer's permit, and the said provisions and permit shall be deemed an integral part of the Plan and of the Appendix and of the Option Agreement.

9.2. Any provision of Section 102 and/or the said permit which is necessary in order to receive and/or to keep any tax benefit pursuant to Section 102, which is not expressly specified in the Plan or the Appendix or the Option Agreement, shall be considered binding upon the Company and the optionees.

10. DIVIDEND

10.1. Subject to the incorporation documents, with respect to all Common Stock (but excluding, for avoidance of any doubt, any unexercised options) allocated or issued upon the exercise of options and held by the optionee or by the Trustee as the case may be, the optionee shall be entitled to receive dividends in accordance with the quantity of such shares, and subject to any applicable taxation on distribution of dividends.

10.2. During the period in which Common Stocks are held by the Trustee on behalf of the optionee, the cash dividends paid with respect thereto shall be paid directly to the optionee.

11. TAX CONSEQUENCES

11.1. Any tax consequences arising from the grant or exercise of any Option, from the payment for Common Stock covered thereby or from any other event or act (of the Company, and/or its Affiliates, and the Trustee or the optionee), hereunder, shall be borne solely by the optionee. The Company and/or its Affiliates, and/or the Trustee shall withhold taxes according to the requirements under the applicable laws, rules, and regulations, including withholding taxes at source. Furthermore, the optionee shall agree to indemnify the Company and/or its Affiliates and/or the Trustee and hold them harmless against and from any and all liability for any such tax or interest or penalty thereon, including without

limitation, liabilities relating to the necessity to withhold, or to have withheld, any such tax from any payment made to the optionee.

- 11.2. The Company and/or, when applicable, the Trustee shall not be required to release any share certificate to an optionee until all required payments have been fully made.

ANALOG DEVICES, INC. CODE OF BUSINESS CONDUCT AND ETHICS

TO ALL EMPLOYEES:

We all face choices in our jobs every day. The purpose of this Code of Business Conduct and Ethics (the "Code") is to help you make the right choices -- those that will help maintain the integrity and reputation of Analog Devices (ADI).

ADI expects honest and ethical conduct from all its personnel. Good ethics are good business. Whether you work in manufacturing, finance, engineering, marketing, sales or in an administrative or executive function, you should consider yourself a guardian of ADI's good name. The trust and respect of all stakeholders -- co-workers, customers, shareholders, suppliers, our communities and the general public -- are assets that cannot be purchased and can only be sustained through our continued vigilance. Only by maintaining the highest ethical standards can we preserve, and grow, these crucial relationships.

This Code is based on ethical guidelines that have been in place for years at ADI. Ethical business practices have been and will continue to be the foundation of all ADI policies and procedures.

Of course, no code of business conduct and ethics can replace the thoughtful behavior of an ethical director, officer or employee. However, this Code is intended to help you focus on areas of ethical risk, provide you with guidance, help you recognize and deal with ethical issues, provide ways for you to report unethical conduct, and enlist your help in fostering a culture of honesty and accountability here at ADI.

I encourage you to review this information and to familiarize yourself with the standards we expect to achieve at ADI.

Jerald G. Fishman
President & Chief Executive Officer

ABOUT THIS CODE OF BUSINESS CONDUCT AND ETHICS

THIS CODE OF BUSINESS CONDUCT AND ETHICS APPLIES TO ALL

This Code of Business Conduct and Ethics (the "Code") applies to everyone who works for ADI, including its subsidiaries. This includes the Chief Executive Officer, the Chief Financial Officer, members of the board of directors, other senior financial, business and technical management, and every employee.

OUR OPEN DOOR

ADI has an open door policy to hear from you about issues that may arise under this Code and about any violations of any law, rule or regulation. You may bring these issues to your supervisor or you may contact your Human Resources department or ADI's legal counsel. We hope that your involvement in this process will be a positive experience for you and ADI as we work together to prevent or eliminate any unethical or illegal practices that you bring to ADI's attention. While it is the company's desire to address matters internally, nothing in this Code should discourage you from reporting any illegal activity or any violation of law, rule or regulation to the appropriate governmental authority. Employees who in good faith assist ADI in identifying or investigating violations or suspected violations of law, rule, regulation or this Code will not be subject to any retaliation by ADI or its employees.

ADI's legal counsel can be reached by fax, mail or email at:

Analog Devices, Inc.
Legal Department, Confidential
One Technology Way, PO Box 9106
Norwood, MA 02062

Fax: 781-461-3491

Email: William.Wise@analog.com

In addition, ADI has established a toll-free phone line- 1-800-xxx-xxxx, where you can speak to a person about any issue under this Code or any actual or suspected violations of any law, rule or regulation. While we prefer that you identify yourself when reporting, you can also decline to identify yourself if you wish.

CONCERNS REGARDING ACCOUNTING OR AUDITING MATTERS

Employees with concerns regarding questionable accounting or auditing matters or complaints regarding accounting, internal accounting controls or auditing matters may confidentially, and anonymously if they wish, submit such concerns or complaints in writing to ADI's legal counsel or may use the toll-free phone line shown above under "About this Code of Business Conduct and Ethics - Our Open Door." All such complaints will be forwarded to the Audit Committee of the Board of Directors. Such complaints will be forwarded promptly, except that any complaint

determined to be without merit by both ADI's legal counsel and internal auditor may instead be reported at the next regularly scheduled meeting of the Audit Committee. The Audit Committee will evaluate the merits of any complaints received and authorize such follow-up actions, if any, as it deems necessary or appropriate to address the substance of the complaint. ADI will not discipline, discriminate against or retaliate against any employee who reports a complaint or concern in good faith.

ETHICS IN THE MARKETPLACE

ADI's reputation for integrity in all aspects of business is a priceless asset. Our promotional literature must protect and enhance this image by providing complete and unambiguous performance information regarding ADI's products. Statements regarding ADI's products and offerings, and those of our competitors, must be based on factual data and avoid deliberately misleading information.

These principles of truthfulness and integrity apply equally to verbal discussions with customers. ADI employees must never disparage our competitors or their products to customers. Comparative presentations of ADI's products versus those of competitors' must be based on factual engineering analysis. ADI employees should also not reveal to outside parties any information that might affect prices.

Our customers are not naive. Product interest created by misleading or untruthful statements will ultimately work to the company's disadvantage. Our actions can serve to either enhance or damage ADI's reputation and it is the responsibility of each employee to always represent the company with the greatest possible integrity.

RECIPROCAL DEALINGS

It is ADI's policy to sell its products and services by meeting customers' needs, rather than by using its purchasing power as a weapon. ADI does not require its vendors to buy from ADI under any manner of coercion, either expressed or implied. Similarly, ADI selects its vendors solely on the basis of their superior ability to service our needs. The fact that a potential vendor may be a large customer of ADI must not be a factor in the consideration of that vendor.

OPEN AND FAIR COMPETITION

It is unlawful in the United States and many other countries to collaborate with competitors or anyone representing them for the purposes of establishing or maintaining prices, division of markets or customers, group boycotts or restraining trade. It is also unlawful to collaborate with competitors or anyone representing them to restrain competition in other ways such as restricting production or agreeing not to do business with specific customers. ADI and its employees fully and unreservedly comply with the laws of the United States including, but not limited to, the laws associated with export of commodities, antitrust laws and the laws of the states and countries where ADI does business. Accordingly, it is unlawful to discuss prices with competitors under any circumstances other than those in connection with legitimate sales or purchase transactions. Employees who are involved in trade associations and professional groups should be vigilant that discussions in these forums do not violate ethical or legal standards. If you have doubts as to whether a contemplated action may have the effect of restraining competition, you should consult ADI's legal counsel.

REASONABLE ESTIMATES

Many employees are responsible for providing prices, cost and expense estimates to government procurement personnel, taxing authorities and audit agencies, as well as to other customers and suppliers. Similar estimates are also used daily in ADI's internal operations. Estimates should be reasonable and based upon known facts, or upon the estimator's plausible and honest judgment in the absence of facts.

Government regulations often exist that govern development of estimates. These regulations may allow for judgment and interpretation of costs and allocation of costs by the estimator as a basis for price negotiation. ADI's policy is to ensure that price estimates will provide a fair profit, taking into account various factors such as risk, technical innovation and product demand.

FAIR DEALING GENERALLY

In general, each employee should deal fairly with the company's customers, suppliers, competitors and employees. Statements regarding the company's products and services should not be intentionally deceptive or fraudulent. None should take unfair advantage of anyone through manipulation, concealment, abuse of privileged information, misrepresentation of material facts, or any other unfair-dealing practice.

COMPLIANCE WITH APPLICABLE LAWS

ADI expects that all officers, members of the board of directors, and employees (and sales representatives, consultants, vendors and customers engaged in business activities with ADI) in the course of their services for ADI will comply with the law, including all applicable statutes, rules and regulations.

ETHICS WITH PROPRIETARY INFORMATION

ADI's trade secrets, proprietary information and most other internal information are valuable assets. Protection of this information is vital for ADI's continued growth and competitiveness. Under the laws of most countries, a trade secret is treated as property, usually in the form of information, knowledge or know-how. The possession of a trade secret gives the owner some advantage over competitors who do not possess the information. A trade secret must not be publicly known. But it does not need to be patentable subject matter to qualify as a trade secret.

Except when disclosure is legally mandated (and then only to the extent required by law), our obligations regarding proprietary and trade secret information of ADI are:

1. Not to disclose this information to persons or organizations outside of ADI, such as in conversations with visitors, suppliers or family;
2. Not to use trade secrets for our own benefit or for the profit or benefit of persons or organizations outside ADI, and;
3. To only disclose this information to other ADI employees on a "need to know" or "need to use" basis and then only with a positive statement that the information is an ADI trade secret.

ADI's trade secret and proprietary information is not always of a technical nature. Typical trade secret information includes ADI's strategic, business, marketing, financial and product plans; divisional and departmental sales, profits and any unpublished financial or pricing information; yields, designs, efficiencies and capacities of ADI's production facilities, methods and systems; employee rosters; customer and vendor lists and detailed information regarding customer requirements, preferences, business habits and plans. This list, while not complete, suggests the wide scope and variety of ADI's proprietary information that needs to be safeguarded.

A person leaving the employment of ADI has an obligation to protect ADI's trade secrets and proprietary information until the information becomes publicly available or until ADI no longer considers it a trade secret or proprietary. You should also remember that correspondence, printed matter, documents or records of any kind, describing specific process knowledge, procedures, special ADI ways of doing things, whether classified or not, are all the property of and must remain at ADI. Of course, personal skills acquired or improved on the job are personal assets of the individual.

INFORMATION FROM OUTSIDE ADI

It is ADI's policy and practice to respect trade secrets of other companies and individuals. Never reveal to any person at ADI any information that you believe is a trade secret, whether it belongs to a former employer, customer or supplier. If you have questions about what constitutes a trade secret, consult the company's legal counsel for guidance.

It is ADI's policy to refuse to receive or consider any information regarding trade secrets, such as ideas, inventions, patent applications that are submitted from companies or individuals outside

ADI without the prior written approval of ADI's patent counsel. It is also ADI's policy that software licensed by the company should not be used in any manner inconsistent with ADI's rights and the vendor's rights as described in the licensing agreements.

ETHICS IN THE STOCK MARKET

Occasionally we have information about ADI that is not known to the investing public, such as bookings levels, prospects for sales or profitability, acquisitions, new product line development, specific technological achievements, major financial problems at a division, etc. Until disclosure to the public takes place, employees with knowledge of material information, and their immediate families, have a two-fold responsibility under U.S. law and Securities and Exchange Commission (SEC) rules:

1. They cannot buy or sell ADI's stock until after the material information has been released to the public, and;
2. They cannot disclose the information to others who might use it to their advantage in buying or selling ADI stock until after it has been released to the public.

If, in the course of their jobs, employees of ADI learn of material non-public information from another company, they may be considered an insider of that company and be subject to trading restrictions for that company's stock. Insider trading is both unethical and illegal, and will be dealt with decisively. If a question arises concerning whether or not information is material or if the information has been released to the public, please consult the company's legal counsel.

Short sale or derivative transactions may have the potential of placing an employee's personal financial concerns in direct conflict with the concerns of ADI since short sale and derivative transactions are much more valuable if ADI stock declines in value. Employees should consider whether engaging in short sale or derivative transactions could adversely influence, or create the appearance of adversely influencing, judgments, decisions or actions in meeting responsibilities to ADI.

Officers and members of the board of directors of the company and certain other employees who have access to financial information have additional restrictions on their freedom to purchase and sell stock, including a prohibition against "short-swing trading" or "selling short" or "trading options." These trading restraints are imposed by Section 16(b) of the Securities Exchange Act and SEC rules. In addition, officers, members of the board of directors and certain other employees may not buy and sell the company's stock during the ADI-imposed non-trading period. If you have questions about restrictions on stock trading, please contact ADI's legal counsel.

For a more detailed discussion of these policies, please see the company's Insider Trading Policy, which is available at <http://www-corp.analog.com/company/policy/stocktra.shtml> on ADI's Intranet.

FAIR AND ACCURATE FILINGS

ADI has an obligation to make full, fair, accurate, timely and understandable disclosures in the reports and documents filed with, or submitted to, the SEC, as well as in other public

communications. Employees involved in the creation, assembly and approval of these reports and documents should, at all times, discharge their duties consistently with this obligation.

ACCURACY OF BOOKS AND RECORDS

Employees, officers and directors must honestly and accurately report all business transactions. You are responsible for the accuracy of your records, time sheets and reports. Accurate information is essential to ADI's ability to meet legal and regulatory obligations.

All company books, records and accounts must accurately reflect the true nature of the transactions they record. The financial statements of the company shall conform to generally accepted accounting rules and the company's accounting policies. No undisclosed or unrecorded account or fund shall be established for any purpose. No false or misleading entries shall be made in the company's books or records for any reason, and no disbursement of corporate funds or other corporate property shall be made without adequate supporting documentation or for any purpose other than as described in the documents. If you believe that the company's books and records are not being maintained in accordance with these requirements, you should report the matter to your supervisor or ADI's legal counsel.

RELEASE OF COMPANY INFORMATION

All requests for information from the media, market professionals (i.e., securities analysts, institutional investors, investment advisers, broker and dealers) and holders of securities of ADI should be directed to the Director of Corporate Communications.

ETHICS WITH ADI PROPERTY AND OPPORTUNITIES

The equipment, tools, materials and supplies with which we accomplish our jobs have been purchased for a specific purpose. Unauthorized removal or purposeful misapplication or waste of these items places an unnecessary financial burden on ADI, handicapping the company's ability to operate profitably and may be a violation of criminal law.

All employees, officers and directors should seek to protect the company's assets. Theft, carelessness and waste have a direct impact on ADI's profitability. All company assets should be used only for the legitimate business purposes of ADI.

You should not take for yourself personally business or financial opportunities that are discovered through the use of ADI's property or information or your position at ADI. These opportunities belong to ADI. You should never use ADI's property or information for personal gain or the personal benefit of anyone else.

ETHICS WITH ADI TECHNOLOGY RESOURCES

The use of technology resources including e-mail, voice mail, Internet and Intranet access to generate and communicate business-related data has become central to our business. ADI provides technology resources to help employees accomplish job responsibilities, achieve business objectives and otherwise further our collective success. At the same time, we cannot ignore the reality that technology resources in the workplace raise serious concerns about the accuracy, security and control of company information, including confidential and proprietary matters. This is especially true because electronic communications tend to be more immediate and informal than traditional paper-based communications and because passwords and delete functions create an illusion of privacy, control and confidentiality. Usage of ADI technology resources thus must be ethical and in full compliance with ADI's technology resources policy. ADI's policy may be found at:
<http://www-corp.analog.com/company/policy/technology/>.

ETHICS WITH GIFTS AND ENTERTAINMENT

It is ADI's policy that you or members of your immediate family may not give or accept gifts if such gifts would influence or appear to influence business decisions or judgments by our customers, competitors, suppliers or others doing business with ADI. Employees of ADI may not accept gifts from anyone with whom ADI does business, other than promotional items of limited value and infrequent business entertainment that is modest and clearly intended to serve legitimate business goals. Employees of ADI must not solicit gifts from anyone with whom we do business. Similarly, employees of ADI may not offer gifts to employees of customers, competitors, suppliers or others doing business with ADI, except for promotional items of limited value and business entertainment meeting the standards set forth above. Common sense and moderation should prevail in entertaining customers or others on behalf of ADI. In addition, employees should make sure that all gifts and entertainment expenses are properly recorded in ADI's records and accounts. If you have any questions about the appropriateness of a specific gift or entertainment activity, you should discuss it with your supervisor or ADI's legal counsel.

ETHICS WITH CONFLICT OF INTEREST

GENERAL POLICY

Employees, officers and directors must act in the best interests of ADI. You must refrain from engaging in any activity or having a personal interest that presents a "conflict of interest." A conflict of interest occurs when your private interest interferes, or appears to interfere, with the interests of ADI. A conflict of interest can arise whenever you, as an officer, director or employee, take action or have interests that prevent you from performing your ADI duties and responsibilities honestly, objectively and effectively.

For example:

- No employee, officer or director shall perform services as a consultant, employee, officer or director of a significant and direct competitor of ADI, other than services performed at the request of the Company; and
- No employee, officer or director shall use his or her position with ADI to influence a transaction with a supplier or customer in which such person has any personal interest, other than a financial interest representing less than one percent (1%) of the outstanding shares of a publicly-held company.

It is your responsibility to disclose any material transaction or relationship that reasonably could be expected to give rise to a conflict of interest to ADI's legal counsel or, if you are an officer or director, to the Board of Directors, which shall be responsible for determining whether such transaction or relationship constitutes a conflict of interest.

LOANS TO EXECUTIVE OFFICERS AND DIRECTORS

ADI will not, directly or indirectly, extend or maintain credit, or arrange for an extension of credit, in the form of a personal loan to or for any executive officer or director.

ETHICS IN GOVERNMENT RELATIONS

ADI's products are frequently purchased by agencies of state and national governments and are used in equipment that is purchased by these agencies. Our policy is to seek our fair share of this business solely on the basis of superior price, performance, reliability, delivery or customer service versus our competitors.

It is ADI's policy to prohibit the payment or gift, whether made directly or indirectly, of corporate funds or other assets to any political party or committee, to any candidate for public office and to any official or employee of any local, state or federal government agency of the United States or of any foreign country in which we do business. The prohibition of payments shall apply to employees or persons acting on behalf of ADI, its divisions and its subsidiaries. It also extends to any payment or gift granted to a third party, whether it be an individual or a corporation, in which there is an understanding or presumption that part of or all of the payment or gift may ultimately be paid to any political party or committee, candidate for public office, governmental official or employee. This policy does not prohibit infrequent modest business meals or infrequent modest entertainment that is permitted by law and meets the criteria of ADI's policy on gifts and entertainment.

ETHICS WITH WORKPLACE SAFETY AND NATURAL RESOURCES

It is ADI's policy to conduct its business in compliance with all applicable laws, regulations and standards regarding workplace safety and the preservation of our natural resources. It is the responsibility of all employees of ADI to ensure that all ADI policies, procedures and guidelines regarding workplace safety and the preservation of our natural resources are fully implemented and observed. Unsafe conditions in the workplace and conditions that endanger our employees or other parties, or endanger the quality of our air, water or land, will not be tolerated. ADI managers have a responsibility to be vigilant about preserving safe working conditions and our environment. In turn, managers also have a responsibility to correct the situation and restore safe working and environmental conditions in a timely manner. Each ADI facility has developed specific site guidelines to implement this corporate policy. You may consult the appropriate ADI facility health and safety manager with respect to any safety or environmental issue. In the event of uncertainty regarding workplace safety or the preservation of our natural resources, please consult ADI's legal counsel.

COMPLIANCE

IF ISSUES OR QUESTIONS ARISE

If you become aware of any violation or suspected violation of this Code by any person, you have a right and a responsibility to point it out promptly to ADI's legal counsel or your supervisor.

If you are asked to depart from this Code, whether by your supervisor, another employee or anyone else, you have a right and a responsibility to seek clarification and/or guidance as to the propriety of the actions in question from ADI's legal counsel.

ACCOUNTABILITY

The company has assigned to ADI's legal counsel overall accountability for tracking and responding to issues and questions relating to, and reported violations of, this Code. If ADI's legal counsel receives information regarding an alleged violation of this Code, he or such other person authorized by the board of directors to investigate alleged violations of this Code shall, as appropriate, (a) evaluate such information, (b) if the alleged violation involves an executive officer or a member of the board of directors, inform the Chief Executive Officer and board of directors of the alleged violation, (c) determine whether it is necessary to conduct an inquiry or investigation and, if so, conduct such inquiry or investigation as he deems to be appropriate and (d) report the results of such inquiry or investigation (if any), together with a recommendation as to disposition of the matter, to the appropriate executive officer or member(s) of the board of directors for action, or if the alleged violation involves an executive officer or a member of the board of directors, report the results of such inquiry or investigation to the board of directors. Employees, officers and members of the board of directors are expected to cooperate fully with any inquiry or investigation by the company regarding an alleged violation of this Code. Failure to cooperate with any such inquiry or investigation may result in disciplinary action, up to and including discharge.

CONSEQUENCES OF VIOLATION OF THE CODE

ADI's policy is to take prompt and consistent action to enforce this Code. Depending on the seriousness of the violation and the other relevant circumstances, violations of this Code may result in warnings, reprimands, demotion, suspension, dismissal, or other disciplinary action. Certain violations of this Code may require the company to refer the matter to the appropriate authorities for criminal prosecution. Moreover, any supervisor who directs or approves of any conduct in violation of this Code, or who has knowledge of such conduct and does not immediately report it, also will be subject to disciplinary action, up to and including discharge.

WAIVER

There may be circumstances where a waiver of the Code is appropriate. Any request for a waiver should be in writing and should be presented to ADI's legal counsel, who is responsible for maintaining a complete record of all requests for waivers to any of these policies and the

disposition of such requests. No waiver will be effective unless from an authorized representative of ADI. Any waiver of the Code for executive officers or members of the board of directors or any change to this Code that applies to executive officers or members of the board of directors may be made only by the board of directors or a board committee and will be disclosed as required by law or stock exchange regulation.

DISSEMINATION AND AMENDMENT

This Code shall be distributed periodically to each employee, officer and member of the board of directors of the company. To ensure the continued dissemination and communication of this Code, ADI's legal counsel shall take, or cause to be taken, reasonable steps to communicate effectively the standards and procedures included in this Code to employees, officers and members of the board of directors of the company.

The company reserves the right to amend or alter this Code at any time for any reason. The most current version of this Code can be found at:
http://www-corp.analog.com/company/emp_comm/ethical/ on the company's Intranet.

This document is not an employment contract between the company and any of its employees, officers or members of the board of directors and does not alter the company's policy of at-will employment.

SUBSIDIARIES

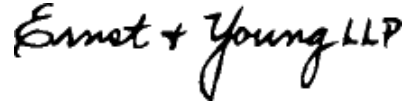
The following is a list of the Company's subsidiaries:

	Organized Under Law of	Percentage of Voting Securities Owned by Registrant as of November 2, 2002
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 Company	Ireland	100%
Analog Devices Foreign Sales Corporation	Barbados	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%
AD Micromachines, Inc.	Delaware	100%
Analog Devices Micromachines, Ltd.	United Kingdom	100%
BCO Technologies Limited	United Kingdom	100%
Analog Devices Belfast, Ltd.	United Kingdom	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/ 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 AUDITORS

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, 33-60696, 33-60642, 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 and 333-75170, and Form S-3 Nos. 333-08505, 333-08509, 333-17651, 333-87053, 333-48928, 333-51530 and 333-53660) of Analog Devices, Inc. and in the related Prospectuses of our report dated November 18, 2002, 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 November 2, 2002.

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

January 24, 2003

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 November 2, 2002 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.

Dated: January 29, 2003

/s/ Jerald G. Fishman

Jerald G. Fishman
Chief Executive 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 November 2, 2002 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.

Dated: January 29, 2003

/s/ Joseph E. McDonough

Joseph E. McDonough
Chief Financial Officer

