
SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549 FORM 10-K

| (| MARK | ONE) |
|---|------|------|
| | | |

[X]

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15 (D) OF THE SECURITIES EXCHANGE ACT OF 1934 [FEE REQUIRED]

FOR THE FISCAL YEAR ENDED OCTOBER 29, 1994

0R

[] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15 (D) OF THE SECURITIES EXCHANGE ACT OF 1934 [NO FEE REQUIRED]

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)

(I.R.S. Employer Identification No.)

ONE TECHNOLOGY WAY, NORWOOD, MA (Address of principal executive offices)

02062-9106 (Zip Code)

(617) 329-4700 egistrant's telephone number, inc

(Registrant's telephone number, including area code)

SECURITIES REGISTERED PURSUANT TO SECTION 12 (B) OF THE ACT:

COMMON STOCK \$.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

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 (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

The aggregate market value of the voting stock held by non-affiliates of the registrant was approximately \$1,695,071,277 based on the closing price of the Common Stock on the New York Stock Exchange Composite Tape reporting system on December 30, 1994.

Indicate the number of shares outstanding of each class of Common Stock: 75,383,933 shares of \$.16 2/3 par value Common Stock as of December 30, 1994.

DOCUMENTS INCORPORATED BY REFERENCE

DOCUMENT DESCRIPTION

10-K PART

Portions of the Registrant's Proxy Statement for the Annual Meeting of Stockholders to be held March 14, 1995 II

PART I

ITEM 1. BUSINESS

Analog Devices, Inc. ("Analog" or the "Company") designs, manufactures and markets a broad line of high-performance linear, mixed-signal and digital integrated circuits ("ICs") that address a wide range of real-world signal processing applications. The Company's principal products include special-purpose linear and mixed-signal ICs ("SPLICs"), digital signal processing ICs ("DSP ICs") and general-purpose, standard-function linear and mixed-signal ICs ("SLICs"). The Company also manufactures and markets devices using assembled product technology, the largest portion of which are hybrid ICs, which combine unpackaged IC chips and other chip-level components in a single package.

Nearly all of the Company's products are components, which are typically incorporated by original equipment manufacturers (OEMs) in a wide range of equipment and systems for use in computer, telecommunication, industrial, instrumentation, military/aerospace and high-performance consumer electronics applications. The Company sells its products worldwide; approximately 44% of the Company's fiscal 1994 net sales were made to customers in North America, while most of the balance was to customers in Western Europe and the Far East.

INDUSTRY OVERVIEW

Real-world phenomena, such as temperature, pressure, sound, images, speed, acceleration, position and rotation angle, are inherently analog in nature, consisting of continuously varying information. 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, e.g., amplification, filtering and shaping. They are then usually converted to digital form for input to a microprocessor, which is used to manipulate, store or display the information. In many cases the signals are further processed after conversion to digital form using a technology called "digital signal processing." In addition, digital signals are frequently converted to analog form to provide signals for analog display, sound, or control functions. These manipulations and transformations are collectively known as "real-world signal processing."

Significant advances in semiconductor technology over the past ten to fifteen years have led to substantial increases in the performance and functionality of ICs used for signal processing applications. Key among these advances is the ability to create VLSI (Very Large Scale Integration) mixed-signal ICs that contain both high-performance analog circuitry and large amounts of high-density digital circuitry. The analog circuitry portion of the IC is used for manipulating real-world signals while still in analog form and for converting analog signals into digital form (or vice versa), and the digital portion is used for further processing analog signals subsequent to their conversion to digital form. The ICs resulting from these advances are used as components in equipment and systems to achieve more effective interaction with natural phenomena and the human senses.

TRENDS IN THE COMPANY'S BUSINESS

Analog has long been a leader in the development, production and marketing of linear and mixed-signal ICs, particularly technology-driven, high-performance, general-purpose, standard-function ICs (or SLICs). Building on its core technical competencies, Analog believes that it is a leading worldwide supplier of data converters and operational amplifiers and that data converters and operational amplifiers collectively account for approximately half of the semiconductor industry's total SLIC sales. SLICs are sold to a very large customer base for a wide variety of applications. Early markets for these products were primarily manufacturers of equipment and systems for the industrial, instrumentation and military/aerospace markets, and these markets still account for a significant part of the Company's business.

As linear IC technology has evolved within the industry, it has been employed to develop market-driven, special-purpose linear and mixed-signal ICs (or SPLICs) tailored to specific high-volume applications. Early-generation SPLICs were generally low-performance devices for applications in automotive, computer, consumer and certain communications applications. These devices were subject to commodity-like pricing pressures, and the Company therefore chose initially not to compete in this area. However, the emerging demand for the highest levels of performance in many high-volume applications has provided the Company an opportunity to leverage its expertise by diversifying into SPLICs and DSP ICs for selected applications in these market segments. Products for such applications must also have a high level of functionality (i.e., many functions on one chip) to satisfy OEMs' requirements for low cost per function.

Over the past four years, Analog has been engaged in a transition from being primarily a supplier of SLICs (and to a lesser extent, assembled products) serving a very fragmented market to a company whose strategy is to balance its traditionally stable, profitable SLIC business with the growth opportunities available for SPLICs and DSP ICs, which are typically sold in high volume to a relatively small number of customers. Toward this end, the Company has refocused much of its direct sales force and marketing resources on the needs of SPLIC and DSP IC customers and moved a significant portion of its traditional SLIC business into the distribution sales channel to better serve the fragmented customer base characteristic of the instrumentation, industrial and military/aerospace markets.

PRINCIPAL PRODUCTS

The Company operates predominantly in one industry segment: the design, manufacture and marketing of a broad line of high-performance linear, mixed-signal and digital integrated circuits that address a wide range of real-world signal processing applications. Analog's products can be divided into three classifications: standard-function linear and mixed-signal ICs (SLICs); special-purpose linear and mixed-signal ICs (SPLICs) and digital signal processing ICs (DSP ICs); and assembled products.

A substantial portion of the Company's products are proprietary (available only from Analog), while equivalents to most of its other products are available from a limited number of other suppliers. Many of the Company's products tend to be less price sensitive than other types of ICs, such as DRAM (Dynamic Random Access Memory) ICs, primarily because there are fewer suppliers and because OEMs, in many cases, after qualifying one manufacturer's high-performance linear or mixed-signal IC for a specific application, are reluctant to switch manufacturers due to the risk of degradation in the performance of their product and/or the effort required to qualify additional suppliers.

The following table sets forth the approximate percentage of revenue attributable to each of the Company's product groups for the past three fiscal years:

| PRODUCTS | 1994 | 1993 | 1992 |
|--------------------|------|------|------|
| SLICS | 59% | 60% | 64% |
| SPLICs and DSP ICs | 30 | 26 | 18 |
| Assembled Products | 11 | 14 | 18 |

SLICS

SLICs have been the foundation of the Company's business for more than 20 years, and the Company expects that they will continue to be its core products for much of the 1990s. Analog believes that it is currently one of the world's largest suppliers of SLIC products. The Company's SLIC products are primarily high-performance, single-function devices. The majority of the Company's SLIC revenue is attributable to data converters (analog-to-digital and digital-to-analog) and amplifiers. Other products within this category with significant sales are analog signal-processing devices (such as analog multipliers), voltage references and comparators. The Company is currently expanding its SLIC product offerings in areas where it traditionally has had limited focus, principally interface circuits and power management ICs. It is also expanding its SLIC product line to include a much larger number of products designed to operate from single-supply 3- or 5-volt power sources to better meet the needs of customers designing portable, battery-operated equipment.

Analog's SLIC products tend to be general purpose in nature, which allows customers to incorporate them in a wide variety of equipment and systems. Analog's product portfolio includes several hundred SLICs, any one of which can have as many as several hundred customers. The Company's SLIC customers include both OEMs and customers who build equipment for their own use. Historically, most SLICs have been purchased by OEMs which serve the industrial and military/aerospace markets, but they are now also being used for applications in personal computers (PCs), peripheral equipment used with PCs and computers, and commercial and consumer communications equipment.

Design engineers employed by the Company's OEM customers typically select SLIC products based on information in the Company's catalogs, datasheets and other promotional materials. By using standard, high-performance, readily available, off-the-shelf components in their designs, Analog's customers can reduce the time required to develop and bring new products to market. Given the high cost of developing customized ICs, SLICs usually provide the most cost-effective solutions for low- to medium-volume applications. In addition, combinations of SLICs connected together on a printed circuit board can provide functionality that cannot currently be implemented with a single-chip device.

SPLICs and DSP ICs, which are collectively referred to as system-level ICs, are multi-function devices that feature high levels of functional integration on a single chip. Most SPLICs are mixed-signal devices (some of which include DSP capability) and the balance are linear-only devices. SPLICs are almost always designed to the requirements of a specific application, and the design process often includes significant input from one or more potential key customers. Market demand for SPLICs is driven by the benefits that result from using one of these devices rather than a combination of SLICs and other ICs. These benefits include higher performance, lower cost per function, smaller size, lower weight, fewer parts, decreased power consumption, easier design-ins and faster time to market. These benefits are becoming more important to the Company's OEM customers as they increase their focus on high-performance, small, lightweight products, many of which are battery powered. Many of the products they are designing could not be developed without these types of ICs.

The Company's DSP ICs are designed to efficiently execute specialized programs (algorithms) associated with processing real-time, real-world data. The Company's fixed-point and floating-point DSP ICs share a common architecture and code compatibility, which allows system designers to make cost, performance and time-to-market trade-offs. By reducing the manufacturing cost of its fixed-point DSP ICs, the Company has been able to reduce the selling prices of these devices, which has made it possible to incorporate them in mass-market products such as PCs and modems. Analog's DSP ICs are supported with specialized applications and easy-to-use, low-cost design tools, which reduce product development cost and time to market. The Company's DSP IC revenue growth has been aided by the availability of analog and mixed-signal "front-end" ICs such as data converters from the Company.

The Company's DSP IC revenues are derived from both digital-only devices and mixed-signal ICs that include a DSP core along with data conversion and analog signal processing circuitry. Demand for system-level ICs that incorporate both DSP functionality and sophisticated mixed-signal capability is expected to increase as customers continue to demand as much functionality as possible from a single chip.

ASSEMBLED PRODUCTS

The Company's assembled products consist primarily of hybrid products (devices with several IC chips mounted and wired together on a substrate) and modules (ICs and other components soldered to a small printed circuit board, which is mounted inside a small plastic case). These are primarily older products, which include devices such as amplifiers and data converters used in data acquisition applications. Revenue from this product group began declining in fiscal 1989, due in part to the deliberate obsolescence of certain products (in conjunction with a manufacturing consolidation program implemented by the Company) and their replacement with newer- generation ICs from the Company. Assembled products revenue is expected to continue declining at a moderate rate. However, given the proprietary nature of the majority of the products in this line, the Company expects that these products will continue providing a positive contribution to cash flow and profits.

PRINCIPAL MARKET AND APPLICATIONS

The Company's principal market is comprised of original equipment manufacturers (OEMs) that incorporate the Company's products in equipment, instruments and systems sold to end users for a wide variety of applications, including computers and computer peripherals; communications equipment; engineering, medical and scientific instruments; industrial automation equipment; military/aerospace equipment; and high-end consumer electronics products. The Company's growth has been aided both by the expansion of the markets represented by these end-use applications and by the increasing use of computer technology in the equipment and systems offered for sale in these markets.

Analog believes that for fiscal 1994 its 20 largest customers accounted for approximately 27% of the Company's net sales. The largest single customer represented less than 5% of net sales. Sales of the Company's products are not highly seasonal.

Listed below are some of the characteristics of each of the Company's major served markets:

INSTRUMENTATION--includes manufacturers of engineering, medical and scientific instruments. These products are usually designed using the highest performance SLICs available, where the end product must be substantially more accurate than the equipment or phenomena it is expected to measure, and where production volumes generally do not warrant custom or application-specific ICs. The Company's products sold into this market usually have long product life cycles.

INDUSTRIAL AUTOMATION--includes data acquisition systems, automatic process control systems, robotics, environmental control systems and automatic test equipment (ATE). 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 SLICs are therefore usually employed to achieve the necessary functionality (ATE being an exception, where the high level of electronic circuitry required per tester has created opportunities for SPLICs). ICs sold into this market tend to have long product life cycles.

MILITARY/AEROSPACE--includes the military, commercial avionics and space markets, all of which require high-performance ICs that meet rigorous environmental and reliability specifications. Nearly all of the Company's SLICs can be supplied in versions that meet the requirements of MIL-STD-883C, Class B, and many can be supplied to Class S, an even more stringent specification that governs ICs used for spaceflight applications. Most of the Company's products sold into this market are derived from standard commercial grade ICs, although the Company sometimes develops products expressly for military/aerospace applications.

COMPUTERS AND COMPUTER PERIPHERALS--includes high-performance personal computers, workstations and peripheral devices such as hard disk drives. The Company currently supplies 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; processing analog signals from a hard disk drive's read head and positioning the read head over a hard disk drive platter; and providing enhanced sound input and output capability for business and entertainment applications. This market is characterized by rapidly developing technology.

COMMUNICATIONS--includes data and fax modems, digital cellular telephones and portable, wireless communications equipment. The need for ever higher speed, coupled with more reliable, more bandwidth-efficient communications is creating increasing demand for systems that include both digital and analog signal processing capability. Demand for signal processing ICs for this market is also being driven by the equipment manufacturers' need for components that enable them to develop cost-effective products that feature high performance, small size, low weight and minimal power consumption.

CONSUMER ELECTRONICS--The emergence of high-performance consumer products, such as compact disc players, digital VCRs, digital audio tape equipment and digital camcorders, has led to the need for high-performance SPLICs with a high level of functionality. Although the Company's revenue from this market is not currently significant, the Company expects to supply ICs for sophisticated products used by consumers for computing, communications and entertainment applications, and believes that many of these applications will involve digital signal processing.

In addition to the above markets, Analog is pursuing the automotive market. Although this market has historically been served with low-cost, low-performance ICs, demand has developed for higher performance devices for a wide range of applications. In response, Analog is developing products specifically for the automotive market. The Company began shipments of its first automotive product, a micromachined IC employed as a crash sensor in airbag systems, in 1993. In 1994 the Company began shipments of this device to Delco for airbag systems in several 1995 model-year General Motors "W body" cars, including the Pontiac Grand Prix, Oldsmobile Cutlass and Buick Century. Revenues from this device were not significant in 1994, but are expected to increase substantially beginning in 1995.

Analog's revenue growth is driven by a continuing flow of new products. More than 40% of the Company's orders in fiscal 1994 were for products introduced within the preceding five years. Among the key new products introduced and/or first actively marketed in 1994 were:

SHARC 32-BIT, FLOATING-POINT DSP--A high-performance 32-bit, floating-point digital signal processor (DSP), with 40 MIPS (millions of instructions/second) capability. It is available in two versions: the ADSP-21060 with 4 Mb of on-board static memory and the ADSP-21062 with 2 Mb. This device achieved a broad range of design-ins during 1994, and is well suited for applications such as digital mobile radio base stations, speech processing, graphics and imaging systems and high-performance arcade games.

ADSP-2171 HIGH-PERFORMANCE 16-BIT, FIXED-POINT DSP--Analog's highest-performance fixed-point DSP. Because of its low power, high MIPS and added functionality, this device is particularly well suited for handling speech coding requirements for digital radio communications. It is also well suited for PC applications for processing real-time signals such as those used in voice, audio and telephone applications.

AD899 COMPLETE READ CHANNEL--A fully integrated read-channel IC for hard disk drives. It replaces multiple-chip solutions with a single device that significantly reduces power and space requirements, as well as overall function cost, while supporting data transfer rates of up to 32 Mbits per second.

AD8001 HIGH-SPEED, LOW-POWER AMPLIFIER--A very fast general-purpose operational amplifier. It provides operation at 800 MHz while consuming only 50 mW of power. The AD8001 is well suited for use as an A/D converter driver, in numerous video applications, and in the RF (radio frequency) section of receivers.

AD1845/46 STEREO CODECS--Third-generation 16-bit codec ICs that provide low-cost, single-chip audio solution for business audio and multimedia applications for both computer motherboard and add-in card implementations. Both devices are compatible with the Windows Sound System (a trademark of Microsoft Corp.). The AD1846 provides a parallel computer interface, while the AD1845 has an asynchronous interface and includes sample rate conversion technology, which permits audio signals digitized at different sample rates to be used in the same system.

AD20MSP815 PERSONAL SOUNDCOMM CHIPSET--A five-chip chipset for implementing many popular PC functions, including 14.4 Kbps fax and data modem capability, industry-standard 16-bit audio capability, and telephone functions such as answering machine and speaker phone capability. The chipset consists of a DSP IC, a stereo audio codec IC, a complete, high-performance analog front-end and two custom logic chips. A complete design guide is also available that greatly simplifies the customer's design-in task.

ADM663/666 VOLTAGE REGULATORS--Five-volt regulators used for power management in end products such as communications equipment and computers. These products are representative of Analog's increased focus on ICs designed expressly for power management applications.

AD835 MULTIPLIER AND AD831 MIXER --These two analog ICs are used as building blocks for RF (radio frequency) front-ends in receivers. They are among the first parts introduced by Analog aimed specifically at RF front-end applications for products such as digital mobile radio base stations and handsets, RF modems, and communications and aircraft receivers.

AD420 4-20 mA D/A CONVERTER--A serial-input 16-bit digital-to-analog converter used to generate a 4-to-20 mA analog output signal that is proportional to its digital input signal. It provides a high-precision, fully integrated, low-cost, single-chip solution for generating the industry-standard control loop signals required in industrial automation systems.

LOW VOLTAGE, LOW POWER ICs--During 1994 Analog Devices introduced a substantial number of ICs designed to operate from single-supply 3- and 5-volt power sources. Some of these products represent new functionality, while many are lower-voltage, lower-power versions of existing products. They are much better suited for many emerging computer and communication applications in battery-powered portable products where power consumption is a primary concern. Products in this catergory included amplifiers, data converters and DSPs.

7 RESEARCH AND DEVELOPMENT

The markets served by Analog are characterized by rapid technological changes and advances. Accordingly, the Company makes substantial investments in the design and development of new products and processes, and for significant improvement of existing products and processes. Analog spent \$106.9 million during fiscal 1994 for the design, development and improvement of new and existing products and processes, compared to \$94.1 million during fiscal 1993 and \$88.2 million during 1992.

In fiscal 1994, approximately half of the Company's R&D expenditures were devoted to the design and development of SPLICs and DSP ICs, and the development and improvement of processes used for these products. The Company believes that it will be able to leverage its core technological competencies and leadership position in linear and DSP technology to design and develop a wide range of highly integrated, high-performance, cost-effective mixed-signal SPLICs, many of which will include DSP capability. At the same time, however, the Company expects to continue developing new and improved SLIC products to increase its share of the SLIC market.

As of December 1, 1994, the Company owned 262 U.S. patents and had 91 patent applications on file with the United States patent office. The Company believes that while its patents may provide some advantage, its competitive position is largely determined by such factors as the knowledge, ability and experience of the Company's personnel, new product development, market recognition and ongoing marketing efforts, customer service and technical support.

SALES CHANNELS

Analog sells its products in both North America and internationally through a direct sales force, third-party distributors and independent sales representatives. Approximately 44% of fiscal 1994 revenue was derived from customers in North America. As of December 1, 1994, the Company had 17 sales offices in the United States, and its third-party distribution channel consisted of nine national and regional third-party distributors and several independent sales representatives with numerous locations throughout the U.S. and Canada.

Approximately 26% of the Company's fiscal 1994 revenue was derived from sales to customers in Europe; 17% to customers in Japan; and 13% to customers in other international markets. As of December 1, 1994, the Company had direct sales offices in Austria, Belgium, Denmark, France, Germany, Hong Kong, India, Israel, Italy, Japan, Korea, The Netherlands, Sweden, Switzerland, Taiwan and the United Kingdom. The Company also had sales representatives and/or distributors in approximately 25 countries outside North America, including countries where the Company also has direct sales offices.

Approximately one-third of Analog's fiscal 1994 revenue was derived from sales made through distributors. The Company's distributors typically maintain an inventory of Analog products. Some of these distributors also sell products competitive with the Company's products, including those for which the Company is an alternate source. Sales to distributors are made under agreements which provide protection to the distributors for their inventory of Company products against price reductions and products that are slow-moving or have been discontinued by the Company. These agreements generally contain a provision for the return of the products to the Company in the event the relationship with the distributor is terminated.

Sales to North American distributors are not recognized until the products are resold by distributors to their customers. Sales made to distributors outside North America are recognized upon shipment to the distributor, but the Company provides specific reserves for possible returns and allowances.

The Company's worldwide 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. The Company publishes and distributes full-length databooks, short-form catalogs, applications guides, technical handbooks and detailed data sheets for individual products. The Company also maintains a staff of application engineers who aid customers in incorporating Analog's products into their products during their product development cycles.

Monolithic integrated circuit components are manufactured in a sequence of 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 plastic packaging.

In addition to using industry-standard bipolar and CMOS wafer fabrication processes, Analog employs a number of Company-developed proprietary processes specifically tailored for use in fabricating high-performance linear and mixed-signal SLICs and SPLICs.

Analog's IC products are fabricated both at the Company's production facilities and by third-party wafer fabricators. Assuming that the Company can continue to maintain favorable relationships with its third-party wafer fabricators, it intends to continue using such suppliers for meeting most of its needs for wafers that can be fabricated using industry-standard digital processes. The Company intends to meet most of its needs for wafers fabricated with linear and mixed-signal processes with wafers fabricated at the Company's production facilities.

Hybrid products are manufactured by mounting and connecting together several integrated circuit chips in a single package. Some of the chips used in the Company's hybrids are manufactured by the Company and some are purchased from outside suppliers. The production process for modular components, subsystems and systems consists primarily of assembly, packaging and testing. Some of the Company's assembled products are assembled and tested within the Company's U.S. manufacturing facilities, while others are assembled and tested at Company-owned facilities outside the United States or by subcontractors, principally in the Far East.

In general, the Company uses standard supplies and components in the manufacture of its products and most are available from a number of suppliers. Certain items are made to the Company's specifications and are available from a limited number of suppliers. However, the Company believes that, if necessary, alternative sources of supply for these items could be developed, and that any delays in obtaining alternative sources would be temporary and would not have a material adverse effect on the Company's business.

WORKING CAPITAL REQUIREMENTS

The Company manufactures and sells a wide variety of products, a significant portion of which are standard products delivered from inventory on a current basis. As a result, the Company generally maintains finished goods inventories sufficient to meet customer delivery requirements within a short time following receipt of an order.

BACKLOG

The Company defines its backlog at any point in time as those orders for which customers have requested shipment within the next 13 weeks. The quantities of the Company's products to be delivered and their delivery schedules, as covered by customer purchase orders, are frequently revised by customers to reflect changes in their needs. As is customary in the semiconductor industry, most such orders can be canceled or deliveries delayed by the customer without significant penalty.

Backlog at the end of fiscal 1994 was approximately \$152.8 million; it was approximately \$127.1 million at the end of the prior fiscal year. In the past, backlog at the end of one quarter has typically represented about 60% to 70% of the next quarter's sales. For example, the backlog at the end of the third quarter of fiscal 1994 was approximately \$140.1 million; sales for the fourth quarter of fiscal 1994 were \$203.3 million. Standard products, which are typically delivered from current inventory, usually account for much of the difference between one quarter's ending backlog and the next quarter's sales.

Agreements between the Company and its third-party stocking distributors provide price protection for the distributors and certain rights of return for merchandise unsold by the distributors; as a result, sales to domestic distributors are not recognized until the products are resold by the distributors to their customers. For these reasons, and the previously mentioned ability of customers to cancel orders or delay deliveries without significant penalty, the Company believes that its backlog is not necessarily a reliable indicator of future revenue.

The Company estimates that approximately 15% of its total worldwide revenue is attributable to sales to the U.S. government and government contractors and subcontractors. Analog's government contract-related business is predominantly in the form of negotiated, firm fixed-priced subcontracts. All such contracts and subcontracts contain standard provisions related to termination at the election of the United States government. The Company expects that the U.S. government's intention to further reduce U.S. military spending will result in a continuing gradual reduction in the percentage of the Company's total sales going to governmental users and contractors.

COMPETITION

Analog competes with a large number of semiconductor companies in markets that are highly competitive. The Company believes it is one of the largest suppliers of high-performance linear and mixed-signal signal-processing components. These types of products fall into both the SLIC and SPLIC product categories. Competitors for the Company's linear and mixed-signal products include Brooktree Corp., Burr-Brown Corp., Cirrus Logic Inc., Exar Corp., Harris Corp., Linear Technology Corp., Maxim Integrated Products, Inc., National Semiconductor Corp., Sierra Semiconductor Corp., Siliconix Inc., Silicon Systems (a subsidiary of TDK Corp), Texas Instruments, Inc. and others.

Sales of DSP ICs represent a growing percentage of the Company's total sales. Analog's competitors for DSP ICs include AT&T, Integrated Device Technology, Inc., Motorola Semiconductor Products and Texas Instruments, Inc.

Many other companies offer components that compete with Analog's products; some also offer other electronic products, and some have financial resources substantially larger than Analog's. Also, some formerly independent competitors have been purchased by larger companies (which in some cases may be viewed as a means by which the acquiring company gains in-house capability). However, to the Company's knowledge, no manufacturer competes with Analog across all of the product types offered by the Company in its signal-processing components product line.

Analog believes that competitive performance in the marketplace for real-world signal-processing components depends upon several factors, including product price, technical innovation, product quality and reliability, range of products, customer service and technical support. Analog believes its aggressive technical innovation emphasizing product performance and reliability, supported by its commitment to strong customer service and technical support, will allow the Company to continue to compete successfully in its chosen markets against both foreign and domestic semiconductor manufacturers.

ENVIRONMENT

Analog's 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 the Company's capital expenditures, earnings or competitive position.

EMPLOYEES

As of October 29, 1994, the Company employed approximately 5,400 persons. The Company believes that relations with its employees are good.

INTERNATIONAL OPERATIONS

Analog has direct sales offices in 16 countries outside the United States. In addition, the Company has manufacturing facilities in Ireland, Japan, the Philippines and Taiwan. The Company also has arrangements with subcontractors, principally in the Far East, for the wafer fabrication, assembly and testing of certain products. The majority of Analog's international sales in the past fiscal year were made through its direct international sales offices while the balance, approximately one-third of the total, were made through distributors.

A significant portion of Analog's revenues and operating profits are derived from international operations, and the Company is therefore subject to the economic and political risks inherent in international operations generally, including expropriation, air transportation disruptions, currency controls and changes in currency exchange rates, tax and tariff rates and freight rates. The Company has taken steps it deems prudent in its international operations to diversify and otherwise insure and protect against these risks. Financial information concerning domestic and international operations appears in Notes 1(f), 1(g) and 2 in the Notes to Consolidated Financial Statements included as part of this report.

ITEM 2. **PROPERTIES**

The Company's corporate headquarters is located in Norwood, Massachusetts. Manufacturing and other operations are carried on in several locations worldwide. The following tables provide certain information as to the Company's principal general offices and manufacturing facilities:

| PLANT | LOCATION |
|-------|----------|
| | |

| OWNED: | USE | FLOOR SPACE |
|-------------------------------|--|-----------------|
| Wilmington, Massachusetts | Wafer fabrication, components assembly and testing, engineering and administrative offices | 245,200 sq. ft. |
| Wilmington, Massachusetts | Components engineering, marketing and administrative offices | 67,200 sq. ft. |
| Limerick, Ireland | Wafer fabrication, components assembly and testing, engineering and administrative offices | 236,200 sq. ft. |
| Greensboro, North Carolina | Components and board assembly and testing, engineering and administrative offices | 90,000 sq. ft. |
| Manila, Philippines | Components assembly and testing, engineering and administrative offices | 81,800 sq. ft. |
| Tokyo, Japan | Components assembly and testing, engineering and administrative offices | 69,200 sq. ft. |

| PRINCIPAL | | | LEASE | |
|-----------------------------------|--|-----------------|---------------|-----------------------------------|
| PROPERTIES | USE | FLOOR SPACE | EXPIRATION | RENEWALS |
| LEASED | | | (FISCAL YEAR) | |
| Norwood, Massachusetts (1) | Corporate headquarters, engineering, components assembly and sales and marketing offices | 135,000 sq. ft. | 2007 | 3, five-yr. periods |
| Westwood, Massachusetts (2) | Components and subsystems assembly and testing, engineering and administrative offices | 100,400 sq. ft. | 1996 | 2, ten-yr. periods |
| Santa Clara, California | Wafer fabrication, components assembly and testing, engineering and administrative offices | 72,800 sq. ft. | 1995 | 3, five-yr. periods |
| Santa Clara, California | Administrative offices and engineering | 43,500 sq. ft. | 1995 | 3, five-yr. periods |
| Wilmington, Massachusetts | Engineering, systems assembly and administrative offices | 91,000 sq. ft. | 1995 | - |
| Taipei, Taiwan | Components testing, engineering and administrative offices | 27,700 sq. ft. | 1997 | 3 to 5 yr. option to extend |

See Note 6 - "Commitments and Contingencies" in the Notes to Consolidated Financial Statements for information regarding contingent liabilities related to the lease of the Norwood, Massachusetts property.
 The Westwood, Massachusetts facility is subject to a 25-year capital lease with an option to purchase.

In addition to the principal leased properties listed above, the Company also leases sales offices and other premises at 24 locations in the United States and 26 locations overseas under operating lease agreements. These leases expire at various dates through the year 2010.

See Note 5 - "Lease Commitments" in the Notes to Consolidated Financial Statements for information concerning the Company's obligations under all operating and capital leases.

The Company believes that its existing and planned facilities are adequate and suitable for the manufacture and sale of its products, and have sufficient productive capacity to meet its current and anticipated requirements. In addition, the Company anticipates no difficulty in retaining occupancy of any of its manufacturing, office or sales facilities through lease renewals prior to expiration or through month-to-month occupancy, or in replacing them with equivalent facilities.

TEXAS INSTRUMENTS LITIGATION

The Company is a defendant in a lawsuit brought by Texas Instruments, Inc. ("TI") on July 9, 1990 in the United States District Court for the Western District of Texas (Dallas Division). The complaint alleges that certain plastic encapsulation processes conducted by the Company's subsidiaries in Ireland and the Philippines infringe two TI patents (both of which had expired by August 1994) and seeks an injunction and unspecified damages. The alleged infringement of one of these patents was also the subject matter of a proceeding brought by TI against the Company before the International Trade Commission (the "ITC") on July 9, 1990 seeking an injunction preventing the Company from importing allegedly infringing products into the United States.

Following a hearing in May 1991, the ITC upheld the validity of the TI patent, determined that certain types of encapsulation processes practiced by the Company's subsidiaries infringed the TI patent and found that alternative encapsulation processes used by the Company's subsidiaries did not infringe the TI patent. The ITC also determined that, upon the merger of Precision Monolithics, Inc. ("PMI") into the Company in November 1990, the Company acquired the benefit of a license from TI to PMI for the TI patent. Pursuant to such license, the Company obtained what it believed was the right to import annually up to \$94 million of integrated circuits using the patented encapsulation process. The decision of the ITC was upheld on appeal by the United States Court of Appeals for the Federal Circuit. Even if the Company's ability to utilize the full amount of the PMI license is upheld by the District Court, TI could seek damages for sales of allegedly infringing products between February 1989 and the November 1990 merger with PMI.

On January 10, 1994, the ITC brought an enforcement proceeding against the Company alleging that the Company had violated the ITC's cease and desist order of February 1992, as modified in July 1993. The ITC is seeking substantial penalties against the Company for these alleged violations. The Company has denied that it violated either of these orders. An initial hearing in this proceeding is scheduled to begin on February 13. 1995.

On June 19, 1992, the Company commenced a lawsuit in the United States District Court for the District of Massachusetts alleging that certain TI digital signal processors infringed a patent owned by the Company. TI has filed counterclaims in this action alleging that certain of the Company's products infringe four TI patents relating to digital signal processing and electrostatic discharge protection in integrated circuits. In its counterclaim, TI seeks an injunction against the Company from violating the TI patents and unspecified damages. The Company has denied the essential allegations in the TI counterclaims. A trial in this case is currently scheduled for June 1995.

MAXIM LITIGATION

The Company is a defendant in a suit brought by Maxim Integrated Products, Inc. ("Maxim") on November 11, 1992 in the United States District Court for the Northern District of California. The complaint alleges violations of federal antitrust law and pendant state claims in connection with distribution arrangements between the Company and certain distributors. Maxim alleged that a number of these distributors ceased doing business with Maxim as a result of the distribution arrangements between the distributors and the Company. Maxim claims that those agreements have improperly restricted its access to channels by which it distributes its products. Maxim seeks, among other things, injunctive relief and actual, consequential and punitive damages. In a pre-trial submission dated August 31, 1994, Maxim asserted actual and consequential damages in the amount of \$14.1 million. It also claims restitution and punitive damages in an unspecified amount. Under applicable law, Maxim would receive three times the amount of any actual damages suffered as a result of any antitrust violation.

On September 7, 1994, the Northern District of California ruled in favor of the Company on a summary judgment motion, dismissing all of Maxim's claim for lack of evidence. Maxim has appealed this ruling to the Ninth Circuit Court of Appeals, which has ordered that briefing of the appeal be concluded by March 7, 1995.

For additional information concerning the above described lawsuits and the potential impact of such suits upon the Company's financial condition and results of operations, see Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations."

14 OTHER

The Company has also received and made inquiries with regard to other possible patent infringement claims. These inquiries have been referred to counsel and are in various stages of discussion. If any infringements are determined to exist, the Company may seek or extend licenses or settlements. In addition, 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 relations, personal injury, environmental matters and product liability. While the Company cannot accurately predict the ultimate outcome of these other matters, at this time management believes that the likelihood of an outcome resulting in a material adverse effect on the Company's consolidated financial position, trends in results of operations or cash flows is remote.

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

No matters were submitted to a vote of the Company's security holders during the last quarter of the fiscal year ended October 29, 1994.

The following table sets forth (i) the name and age of each present executive officer of the Company; (ii) the position(s) presently held by each person named; and (iii) the principal occupations held by each person named for at least the past five years.

| EXECUTIVE OFFICER | AGE | POSITION | BUSINESS EXPERIENCE |
|---------------------|-----|--|---|
| Ray Stata | 60 | Chairman of the Board and Chief Executive Officer | Chairman of the Board and Chief Executive Officer since 1973; President from 1971 to November 1991. |
| Jerald G. Fishman | 49 | President, Chief Operating Officer and Director | President, Chief Operating Officer and Director since November 1991; Executive Vice President from 1988 to November 1991; Group Vice President - Components from 1982 to 1988. |
| William A. Martin | 35 | 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. |
| Brian P. McAloon | 44 | Vice President, Sales | Vice President, Sales since May 1992; 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 | 47 | 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. |

There is no family relationship among the named officers.

PART II

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

The Company's Common Stock is listed on the New York Stock Exchange under the symbol ADI. The table below sets forth the high and low prices of the Common Stock during the two most recent fiscal years.

| | | 1994 | | | 1993 | | |
|-------------------|-------|------|---------|--------|-------|----------|--|
| PERIOD | HIGH | | LOW | | HIGH | LOW | |
| | | | | | | | |
| First Quarter \$ | 17.50 |) 5 | \$ 12.8 | \$8 \$ | 11.63 | \$ 7.75 | |
| Second Quarter \$ | 20.75 | 5 5 | 16.3 | \$ | 14.25 | \$ 10.38 | |
| Third Quarter \$ | 20.88 | 3 | 16.3 | \$ | 14.88 | \$ 11.88 | |
| Fourth Quarter \$ | 24.50 |) 5 | \$ 17.6 | 3 \$ | 18.63 | \$ 13.13 | |

On November 30, 1994, the Company's Board of Directors authorized a three-for-two stock split effected in the form of a 50% stock dividend distributed on January 4, 1995 to stockholders of record December 12, 1994. All stock prices in the table above have been restated to reflect the split.

The Company's \$60,000,000 credit agreement restricts the aggregate of all cash dividend payments declared or made subsequent to October 29, 1994 to an amount not exceeding \$85,147,000 plus 50% of the consolidated net income of the Company for the period from October 30, 1994 through the end of the Company's then most recent fiscal quarter. Although prior credit agreements may not have restricted the payment of dividends, the Company has never paid any cash dividends on its Common Stock.

The approximate number of holders of record of the Company's Common Stock at December 30, 1994 was 4,417. This number does not include shareholders for whom shares are held in a "nominee" or "street" name.

ITEM 6. SELECTED FINANCIAL DATA

| (thousands except per share amounts) | 1994 | 1993 | 1992 | 1991 | 1990(2) |
|--|-----------|-----------|-----------|-----------|-----------|
| Statement of Operations data: | | | | | |
| Net sales | \$773,474 | \$666,319 | \$567,315 | \$537,738 | \$485,214 |
| Net income (loss) Net income (loss) per | 74,496 | 44, 457 | 14,935 | 8,203 | (12,913) |
| share (1) | .96 | .59 | .21 | .12 | (.18) |
| Balance Sheet data: | | | | | |
| Total assets | \$815,871 | \$678,492 | \$561,867 | \$503,317 | \$487,188 |
| Long term obligations | 80,061 | 100,297 | 70,632 | 36,819 | 24,129 |

- (1) All references to per share amounts have been restated to reflect the three-for-two stock split effected in the form of a 50% stock dividend distributed on January 4, 1995 to stockholders of record December 12, 1994.
- (2) In the fourth quarter of fiscal 1990, the Company acquired Precision Monolithics, Inc. (PMI). The Company's results include the results of operations of PMI since August 8, 1990, the date of the acquisition.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

RESULTS OF OPERATIONS

FISCAL 1994 COMPARED TO FISCAL 1993

Net sales of \$773.5 million for fiscal 1994 increased 16% from net sales of \$666.3 million for fiscal 1993. The sales increase was due principally to higher sales volumes of both standard linear IC and system-level IC products which together grew approximately 20% year-over-year to comprise approximately 90% of total sales for fiscal 1994.

Standard linear IC sales rose \$54.3 million or approximately 14% to \$455.3 million in fiscal 1994. This increase was primarily due to the combination of increased penetration of the distribution channel coupled with well accepted new product offerings. As a percentage of total sales, standard linear products accounted for 59% in fiscal 1994 compared to 60% in fiscal 1993.

Sales of system-level IC products grew \$59.6 million or approximately 34% to \$234.6 million in fiscal 1994. This growth was attributable largely to increased demand for applications in personal computers and wireless communications products, and the Company's broader participation in these growing markets.

Sales of assembled products declined approximately 7% from fiscal 1993 to fiscal 1994 and as a percentage of total sales decreased from 14% to 11% over the same period. Despite the revenue declines in assembled products over the past few years and lower gross margins associated with these products, this product grouping remained profitable in 1994.

Sales to North American customers increased 18% over 1993 levels to \$343.9 million with much of this increase coming from the distributor channel as sales through North American distributors increased 36% from the prior year. Sales to international customers grew 15% led by sales increases of approximately 27% and 35% in Japan and Southeast Asia, respectively. Sales growth in Japan was mainly attributable to increased demand for standard linear IC products, aided in part by the translation of yen-denominated sales to a weaker average U.S. dollar. The sales increase in Southeast Asia represented continued strength in sales of personal computer products. European sales of \$197.9 million for fiscal 1994 were flat compared to the prior year due to weaker European industrial economies as compared to fiscal 1993. Sales growth in Europe resumed in the fourth quarter of fiscal 1994, growing again after weakness in the first nine months of the year as the European economy showed improvement, particularly Germany. As a percentage of total net sales, North American and international sales remained at 44% and 56%, respectively, which are comparable to fiscal 1993.

Gross margin improved to 49.0% of sales for fiscal 1994 compared to 47.3% for fiscal 1993. This increase resulted principally from a significant improvement in gross margin for system-level IC products as variable manufacturing costs declined and fixed costs were allocated over greater production volumes. Gross margin for the Company's standard linear IC products remained at a high level and gross margin on all IC products, which include both standard linear and system-level ICs, was approximately 50% of sales. Overall gross margin for fiscal 1995 will depend primarily on the gross margin from system-level IC products and the relative mix of sales between standard linear and system-level ICs. During fiscal 1995, the Company does not anticipate overall gross margin to improve at the same rate of improvement as achieved in fiscal 1994.

Research and development expenses for fiscal 1994 increased 13.6% from fiscal 1993 as the Company continued to invest in new product development. As a percentage of sales, R&D expenses were 13.8% compared to 14.1% for the prior year. R&D expenses for fiscal 1995 are expected to increase approximately 15% to 20% over fiscal 1994 levels as the Company expands its investments in communications, digital signal processing and micromachining technology.

Selling, marketing, general and administrative (SMG&A) expenses grew 7.4% compared to fiscal 1993, increasing at a lower rate than sales. As a result, SMG&A as a percentage of sales decreased to 22.0% for fiscal 1994 from 23.8% for fiscal 1993. The increase in SMG&A expenses related mostly to increased strategic advertising and marketing expenses associated with many new product launches and additional incentive expense associated with the Company's improved performance.

In total, operating expenses were reduced to 35.8% of sales, down from 37.9% one year ago, consistent with the Company's emphasis on maintaining tight control over all costs in order to gain better operating leverage on increases in revenues. A key factor in controlling operating expenses has been holding worldwide employment relatively flat at levels approximately equal to that of 1990, while revenues have grown significantly since that time.

Operating income reached 13.2% of sales for fiscal 1994, an increase of nearly four percentage points from 9.4% of sales for fiscal 1993. This performance gain reflected the higher sales level, improvement in gross margin as a percent of sales and a slower rate of expense growth versus sales.

Nonoperating expenses decreased \$2.3 million, benefiting from increased interest income on a higher level of invested cash as net interest expense was reduced from \$5.8 million in fiscal 1993 to \$2.0 million in fiscal 1994. Due to the funding of fiscal 1995 planned capital expenditures with cash on hand and expected operating cash flows, the Company expects interest income to decline in fiscal 1995.

The effective income tax rate increased to 23% in fiscal 1994 from 20% in fiscal 1993 due to a shift in the mix of worldwide income. In the first quarter of fiscal 1994, the Company adopted Statement of Financial Accounting Standards No. 109, "Accounting for Income Taxes" (FAS 109). The impact of adopting FAS 109 was not material to the Company's consolidated financial statements. See Note 1(k), "Income Taxes," in the Notes to Consolidated Financial Statements for information concerning the adoption of FAS 109.

The growth in sales, improved operating performance and lower nonoperating expenses resulted in a 68% rise in net income to \$74.5 million or 9.6% of sales compared to \$44.5 million or 6.7% of sales in fiscal 1993.

The Company has not yet adopted Statement of Financial Accounting Standards No. 112, "Employers' Accounting for Postemployment Benefits" and Statement of Financial Accounting Standards No. 115, "Accounting for Certain Investments in Debt and Equity Securities." Adoption of these statements which is required in fiscal year 1995 is not expected to have a material impact on the Company's consolidated financial statements.

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

FISCAL 1993 COMPARED TO FISCAL 1992

Net sales rose 17% to \$666.3 million for fiscal 1993, compared to fiscal 1992 sales of \$567.3 million. Sales growth in fiscal 1993 was principally attributable to increased sales volumes. Overall market demand for integrated circuits remained strong throughout fiscal 1993, with the Company benefiting from this demand both in its broad-based, standard-function linear IC business and in its application specific, system-level IC business. Total IC sales, including both standard linear IC and system-level IC products, increased \$113 million or 24% in fiscal 1993 to comprise 87% of total sales. Sales of assembled products declined approximately 14% in fiscal 1993.

Sales of standard linear IC products increased \$38 million or approximately 10% in fiscal 1993. As a percentage of sales, standard linear IC products accounted for 60% in fiscal 1993 compared to 64% in fiscal 1992. Increased distribution sales, which represented approximately 40% of total standard linear IC sales, and new product offerings led to much of the growth in sales of standard linear IC products.

Sales of system-level ICs grew by more than 70% to \$175 million, or 26% of total sales. This growth was fueled by increasing success in fast growing sectors of the communications and computer markets in fiscal 1993.

Assembled product sales declined by \$14 million or approximately 14% in fiscal 1993. Assembled products continued to decline as a percentage of total revenues as well, falling to 14% of total sales in fiscal 1993. Despite the 14% decline in revenues of assembled products, this product grouping was profitable for fiscal 1993.

Sales in North America grew approximately 8% over the prior year to \$292.1 million. The distributor channel in North America was a major contributor to this growth with sales through distributors increasing approximately 24% in fiscal 1993. Sales to all international customers increased 26% with sales in Europe, Japan and export sales to Southeast Asia increasing 17%, 20% and 74%, respectively. Much of the sales growth in Southeast Asia resulted from design-ins achieved in the U.S. and Western Europe for applications in personal computers. Sales growth in Europe was fueled largely by strong sales of system-level ICs used in the GSM digital cellular phone network. Demand showed renewed strength in Japan from the depressed levels in fiscal 1992 with the fiscal 1993 sales increase mainly attributable to increased

sales of standard linear IC products. A weaker average dollar exchange rate year-to-year also contributed to some of the Japanese sales improvement. As a percentage of total net sales, North American sales decreased from 47% in fiscal 1992 to 44% in fiscal 1993 and international sales increased from 53% in fiscal 1992 to 56% in fiscal 1993. This shift reflected a significant increase in sales to customers in Southeast Asia.

Gross margin improved slightly to 47.3% of sales in fiscal 1993 from 46.8% in fiscal 1992 due to continued control of manufacturing costs.

R&D expenses for fiscal 1993 grew approximately 7% over the prior year but as a percentage of sales decreased to 14.1%, down from 15.5% of sales for fiscal 1992. This improvement was the result of continuing efforts to focus R&D on the most promising opportunities where the Company can build a sustainable competitive advantage and earn high return factors.

SMG&A expenses grew 5% in absolute dollars in fiscal 1993, increasing at a much lower rate than sales. As a result, the SMG&A to sales ratio declined from 26.7% for fiscal 1992 to 23.8% for fiscal 1993. The 5% growth in SMG&A expenses principally reflected normal increases for salaries and benefits and increased incentive expense associated with the Company's performance.

Operating income for fiscal 1993 was \$62.7 million or 9.4% of sales, more than double the \$26.2 million or 4.6% of sales for fiscal 1992. The significant improvement in operating income was the result of increased sales, improved gross margin performance and tight operating expense controls which allowed the Company to gain strong operating leverage on increased revenues.

Interest expense for fiscal 1993 increased to \$7.2 million from \$6.0 million in fiscal 1992. This increase resulted from a higher level of total borrowings in fiscal 1993 which included the issuance of \$80 million of long-term debt during the year. Interest expense net of interest income was \$5.8 million for fiscal 1993 compared to \$5.1 million for fiscal 1992 as the increased interest expense on a higher level of debt was offset to some degree by interest income earned on a higher level of invested cash resulting from increased cash flows from operations combined with the excess proceeds from the \$80 million offering.

The effective income tax rate decreased slightly to 20% in fiscal 1993 from 21% in fiscal 1992. The tax provisions for both fiscal 1993 and fiscal 1992 were driven largely by the high proportion of income earned by the Company's Irish operation for which earnings are taxed at a lower rate.

Net income was \$44.5 million, or three times the \$14.9 million earned in fiscal 1992. As a percentage of sales, net income was 6.7% in fiscal 1993 versus 2.6% in fiscal 1992.

LIQUIDITY AND CAPITAL RESOURCES

At October 29, 1994, cash and cash equivalents and short-term investments totaled \$181.8 million, an increase of \$101.1 million from \$80.7 million at the end of fiscal 1993. Increased cash and cash equivalents and short-term investments resulted from a significant improvement in cash provided from operations compared to fiscal 1993. During fiscal 1994, the Company invested \$72.7 million in short-term investments including commercial paper, certificates of deposit and bankers' acceptances with maturities greater than three months and less than one year.

Cash provided by operating activities was \$183.3 million or 23.7% of sales for fiscal 1994 compared to \$89.5 million or 13.4% of sales for fiscal 1993. The increase in operating cash flows in fiscal 1994 was mainly attributable to higher net income together with a decrease in inventories and an increase in accounts payable, which were offset in part by growth in accounts receivable.

Accounts receivable of \$162.3 million at the end of fiscal 1994 increased \$16.7 million or 11.4% from \$145.7 million at the end of fiscal 1993. The primary factors contributing to the increase in accounts receivable were the 14% growth in fourth quarter sales between the two years and the translation of local currency denominated receivables to a weaker U.S. dollar, particularly in Japan. These increases were offset in part by improved collection of receivables. Despite the increase in accounts receivable in dollars year-to-year, accounts receivable as a percentage of annualized fourth quarter sales decreased slightly to 20.0% at the end of fiscal 1994 compared to 20.3% at the end of fiscal 1993.

Inventories declined \$19.7 million during fiscal 1994 to \$130.7 million. As a percentage of annualized fourth quarter sales, inventories were reduced from 21.0% to 16.1% which the Company believes is an appropriate level.

The increase in accounts payable compared to fiscal 1993 primarily reflected fourth quarter fiscal 1994 expenditures associated with the expansion of the Company's Irish facility as described below.

Net additions to property, plant and equipment of \$90.9 million in fiscal 1994 were funded with internally generated cash flow from operations. Nearly half of these expenditures occurred in the fourth quarter as expansion of the Company's wafer fabrication facilities in Limerick, Ireland commenced. This expansion will include the addition of 6-inch submicron wafer fabrication capability intended primarily to meet the future demands associated with the Company's growth. Capital expenditures for fiscal 1995 are currently expected to be approximately \$150 million, including approximately \$65 million of capital expenditures associated with the Limerick wafer fabrication expansion. The Company expects to finance its planned fiscal 1995 capital additions with cash, cash equivalents and short-term investments on hand, coupled with internally generated cash flow from operations.

At October 29, 1994, substantially all of the Company's lines of credit were unused, including its four-year, \$60 million credit facility. In the first quarter of fiscal 1995, the Company's 7.18%, \$20.0 million loan matured. Upon maturity, this loan was repaid in full with cash and cash equivalents on hand.

The Company believes that its strong financial condition, existing sources of liquidity, available capital resources and cash expected to be generated from operations leave it well positioned to obtain the funds required to meet its current and future business requirements.

LITIGATION

As set forth in "Business-Legal Proceedings," the Company is engaged in patent infringement litigation with Texas Instruments, Inc. ("TI") and antitrust litigation with Maxim Integrated Products, Inc. ("Maxim"). See Item 3, "Business - Legal Proceedings" for additional information concerning these lawsuits.

If it is determined that the Company has violated the cease and desist order entered by the ITC in February 1992, as modified in July 1993, the ITC could seek to impose penalties of up to \$100,000 per day or equal to twice the value of the goods determined to be sold in violation of the order. If, in the district court action, it is found that certain plastic encapsulation processes used by the Company infringe TI's patents or that the Company did not obtain from PMI valid license rights to import up to \$94 million annually of circuits using TI's patented process, the court could award TI substantial damages. Even if the district court upholds the validity of the PMI license, if it finds infringement by the Company, TI could seek damages for sales of allegedly infringing products between February 1989 and the November 1990 merger with PMI.

The dismissal of Maxim's claims has been appealed. The Company believes it has meritorious defenses to Maxim's antitrust allegations and intends to vigorously defend the suit. If the dismissal is overturned on appeal and Maxim's claims are upheld in a subsequent trial on the merits, in addition to potential damage awards the Company may be required to modify its relationships with its distributors.

Although the Company believes it should prevail in the matters described above, the Company is unable to determine their ultimate outcome or estimate the ultimate amount of liability, if any, at this time. An adverse resolution of these matters could have a material adverse effect on the Company's consolidated financial position or on its consolidated results of operations or cash flows in the period in which the matters are resolved.

FACTORS AFFECTING FUTURE RESULTS

The Company's future results remain difficult to predict and may be affected by a number of factors including business conditions within the semiconductor industry and the world economies as a whole, competitive pressures and cyclical market patterns. In addition, the Company's revenue growth is driven by a continuing flow of new products; more than 40% of the orders received by the Company in fiscal 1994 were for products introduced within the preceding five years. The success of many of these products and the Company's growth opportunities are dependent on successful penetration of new high volume computer, communication, and automotive segments of the electronics market where the Company has less experience and competition is substantial. No assurance can be given that new products can be developed, or if developed, will be successful; that market demand or customer acceptance will be realized; that demand if achieved will be sustained; that competitors will not force prices to an unacceptably low level or take market share from the Company;

or that the Company can achieve or maintain profits in these markets. Also, some of the customers in these markets are less well established which could subject the Company to increased credit risk. Because of these and other factors, past financial performance should not be considered an indicator of future performance. Investors should not use historical trends to anticipate future results and should be aware that the Company's stock price frequently experiences significant volatility.

ANALOG DEVICES, INC.

ANNUAL REPORT ON FORM 10-K

YEAR ENDED OCTOBER 29, 1994

ITEM 8

FINANCIAL STATEMENTS AND SUPPLEMENTARY FINANCIAL INFORMATION

ANALOG DEVICES, INC. INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

| | PAGE |
|---|------|
| CONSOLIDATED FINANCIAL STATEMENTS INCLUDED IN ITEM 8: | |
| Report of Independent Auditors | 23 |
| Consolidated Statements of Income for the years ended October 29, 1994, October 30, 1993 and October 31, 1992 | 24 |
| Consolidated Balance Sheets as of October 29, 1994, October 30, 1993 and October 31, 1992 | 25 |
| Consolidated Statements of Stockholders' Equity for the years ended October 29, 1994, October 30, 1993 and October 31, 1992 | 26 |
| Consolidated Statements of Cash Flows for the years ended October 29, 1994, October 30, 1993 and October 31, 1992 | 27 |
| Notes to Consolidated Financial Statements | 28 |
| Supplementary Financial Information (Quarterly Financial Information/1994 and 1993 - Unaudited) | 43 |

The Board of Directors and Stockholders Analog Devices, Inc.

We have audited the accompanying consolidated balance sheets of Analog Devices, Inc. as of October 29, 1994, October 30, 1993 and October 31, 1992, and the related consolidated statements of income, stockholders' equity and cash flows for each of the three years in the period ended October 29, 1994. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Analog Devices, Inc. at October 29, 1994, October 30, 1993 and October 31, 1992, and the consolidated results of its operations and its cash flows for each of the three years in the period ended October 29, 1994, in conformity with generally accepted accounting principles.

As discussed in Note 6 to the consolidated financial statements, claims and actions have been brought against Analog Devices, Inc. and the ultimate outcome of these claims and actions cannot presently be determined. Accordingly, no provision for any liability, if any, that may result has been made in the financial statements.

ERNST & YOUNG LLP

Boston, Massachusetts November 29, 1994

ANALOG DEVICES, INC. CONSOLIDATED STATEMENTS OF INCOME

| (thousands ex | ctober 29, 1994, October 30, 1993 and October 31, 1992 cept per share amounts) | 1994 | 1993 | 1992 |
|---------------|---|---------------------------------|---------------------------------|-------------------------------|
| REVENUE | Net sales | \$ 773,474 | \$ 666,319 | \$ 567,315 |
| COSTS AND | Cost of sales | 394,448 | 350,852 | 301,678 |
| EXPENSES | Gross margin | 379,026 | 315,467 | 265,637 |
| | Operating expenses: Research and development Selling, marketing, general | 106,869 | 94,107 | 88,172 |
| | and administrative | 170,341 | 158,675 | 151,293 |
| | | 277,210 | 252,782 | 239,465 |
| | Operating income | 101,816 | 62,685 | 26,172 |
| | Nonoperating (income) expenses: Interest expense | 7,149 (5,165) 2,921 | 7,184 (1,417) 1,393 | 5,976 (867) 2,098 |
| | | 4,905 | 7,160 | 7,207 |
| EARNINGS | Income before income taxes | 96,911 | 55,525 | 18,965 |
| | Provision for (benefit from) income taxes: Payable currently Deferred (prepaid) | 30,720 (8,305) 22,415 | 13,342 (2,274) 11,068 | 5,693 (1,663) 4,030 |
| | Net income | \$ 74,496 ====== | \$ 44,457 ======= | \$ 14,935 ======= |
| | Shares used to compute earnings per share | 77,271 ======= | 75,695 ====== | 71,624 |
| | Earnings per share of common stock | \$.96 ======= | \$.59 ======= | \$.21 ======= |

ANALOG DEVICES, INC. CONSOLIDATED BALANCE SHEETS

October 29, 1994, October 30, 1993 and October 31, 1992 (thousands except share amounts)

| CURRENT Cash and cash equivalents | \$ 109,113 | \$ 80,668 | |
|---|--------------------|--------------------|--------------------|
| (\$2,395 in 1993 and \$2,138 in 1992) | 72,652 | - | \$ 17,730 - |
| | 162,337 | 145,663 | 111,732 |
| Inventories | 130,726 | 150,422 | 142,453 |
| Prepaid income taxes Prepaid expenses | 25,587 5,042 | 22,207 4,240 | 20,549 4,502 |
| | | | |
| Total current assets | 505,457 | 403,200 | 296,966 |
| PROPERTY, Land and buildings | 111,857 | 81,110 | 77,909 |
| PLANT AND Machinery and equipment | 477,339 | 451,248 | 402,722 |
| EQUIPMENT, Office equipment | 36,613 | 33,170 | 28,441 |
| AT COST Leasehold improvements | 33,070 | 26,429 | 22,231 |
| | 658,879 | 591,957 | 531,303 |
| Less accumulated depreciation and amortization | 377,064 | 343,527 | 293,880 |
| Less accumulated depreciation and amoreization | | | |
| Net property, plant and equipment | 281,815 | 248,430 | 237,423 |
| OTHER Intangible assets, net | 10 262 | 21 206 | 22 207 |
| OTHER Intangible assets, net | 19,262 9,337 | 21,306 5,556 | 23,387 4,091 |
| • | | | |
| Total other assets | 28,599 | 26,862 | 27,478 |
| | \$ 815,871 | \$ 678,492 | \$ 561,867 |
| LIANTITITES AND STOCKHOLDERS! FOUTTY | ======= | ======= | ======= |
| LIABILITIES AND STOCKHOLDERS' EQUITY | | | |
| CURRENT Short-term borrowings and current portion of | | | |
| LIABILITIES long-term debt | \$ 22,917 | \$ 2,006 | \$ 2,376 |
| Obligations under capital leases | 236 | 335 | 313 |
| Accounts payable Deferred income on shipments to domestic distributors | 74,506 18,881 | 48,779 16,417 | 43,315 13,094 |
| Income taxes payable | 29,425 | 15,405 | 1,655 |
| Accrued liabilities | 60,221 | 49,893 | 38,809 |
| | | | |
| Total current liabilities | 206,186 | 132,835 | 99,562 |
| NONCURRENT Long-term debt | 80,000 | 100,000 | 70,000 |
| LIABILITIES Noncurrent obligations under capital leases | 61 | 297 | 632 |
| Deferred income taxes | 3,225 | 8,540 | 12,657 |
| Other noncurrent liabilities | 4,484 | 4,802 | 3,999 |
| | | | |
| Total noncurrent liabilities | 87,770 | 113,639 | 87,288 |
| Commitments and Contingencies | | | |
| STOCKHOLDERS' Preferred stock, \$1.00 par value, 500,000 shares | | | |
| EQUITY authorized, none outstanding | - | - | - |
| (50,924,637 in 1993 and 50,192,060 in 1992) | 12,542 | 8,488 | 8,366 |
| Capital in excess of par value, net of deferred compen- | 1/1 150 | 142 502 | 100 714 |
| sation of \$4,757 (\$3,223 in 1993 and \$5,078 in 1992) Retained earnings | 141,159 362,194 | 143,502 287,698 | 133,714 243,241 |
| Cumulative translation adjustment | 6,020 | 5,473 | 4,772 |
| dundrative translation adjustment in international | | | |
| | 521,915 | 445,161 | 390,093 |
| lace charge in traceury at cost, none in 1994 | | | |
| Less shares in treasury, at cost, none in 1994 (1,727,396 in 1993 and 2,067,226 in 1992) | <u>-</u> | 13,143 | 15,076 |
| (1,727,396 in 1993 and 2,067,226 in 1992) | - | | |
| | \$ 521,915 | \$ 432,018 | \$ 375,017 |
| (1,727,396 in 1993 and 2,067,226 in 1992) | | | |

ANALOG DEVICES, INC. CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

| Years ended October 29, 1994, October 30, 1993 and October 31, 1992 (thousands) | | | | CAPITAL IN EXCESS OF | RETAINED | CUMULATIVE TRANSLATION | TREASURY STOCK | |
|---|--|---------------|-------------|----------------------|-----------|---------------------------|----------------|----------------|
| | | SHARES | AMOUNT | PAR VALUE | EARNINGS | ADJUSTMENT | SHARES | AMOUNT |
| | Balance, November 2, 1991 | 49,840 | \$ 8,307 | \$130,899 | \$228,306 | \$4,696 | (2,368) | \$(17,763) |
| ACTIVITY IN FISCAL 1992 | Net income - 1992 Proceeds from sales of shares through employee stock plans and other Currency translation adjustment | 352 | 59 | 2,815 | 14,935 | 76 | 301 | 2,687 |
| | Balance, October 31, 1992 | 50,192 | 8,366 | 133,714 | 243,241 | | (2,067) | (15,076) |
| ACTIVITY IN FISCAL 1993 | Net income - 1993 Proceeds from sales of shares through employee stock plans and other Currency translation adjustment | 733 | 122 | 9,788 | 44,457 | 701 | 340 | 1,933 |
| | Balance, October 30, 1993 | 50,925 | 8,488 | 143,502 | 287,698 | 5,473 | (1,727) | (13,143) |
| ACTIVITY IN FISCAL 1994 | Net income - 1994 Proceeds from sales of shares through employee stock plans, tax benefit of \$2.2 | | | | 74,496 | | | |
| | and other Three-for-two stock split Currency translation adjustment | 470 23,857 | 78 3,976 | 11,293 (13,636) | | 547 | 501 1,226 | 3,483 9,660 |
| | Balance, October 29, 1994 | 75,252 | \$12,542 | \$141,159 | \$362,194 | \$6,020 | | \$ - |

ANALOG DEVICES, INC. CONSOLIDATED STATEMENTS OF CASH FLOWS

| (thousands) | October 29, 1994, October 30, 1993 and October 31, 1992 | 1994 | 1993 | 1992 |
|-------------------------|---|---|---|--|
| OPERATIONS | Cash flows from operations: Net income | \$ 74,496 | \$ 44,457 | \$ 14,935 |
| | to net cash provided by operations: Depreciation and amortization Deferred income taxes Other noncash expenses (Increase) in accounts receivable (Increase) decrease in inventories (Increase) in prepaid income taxes (Increase) decrease in prepaid expenses (Increase) decrease in other assets Increase in accounts payable, deferred income and accrued liabilities Increase (decrease) in income taxes payable Increase (decrease) in other liabilities | 61,284 (5,398) 2,195 (7,661) 20,756 (626) (598) (3,269) 28,939 14,063 (839) | 59,813 (4,130) 2,779 (35,598) (6,268) (1,718) 224 (1,406) 16,617 13,922 803 | 54,950 1,003 4,057 (15,307) (24,690) (2,634) (2,213) 721 5,523 (3,317) 434 |
| | Total adjustments | 108,846 | 45,038 | 18,527 |
| | Net cash provided by operations | 183,342 | 89,495 | 33,462 |
| INVESTMENTS | Cash flows from investments: Additions to property, plant and equipment, net Purchase of short-term investments | (90,856) (72,652) | (67,155) - | (65,654) - |
| | Net cash used for investments | (163,508) | (67,155) | (65,654) |
| FINANCING ACTIVITIES | Cash flows from financing activities: Proceeds from employee stock plans | 9,821 485 (335) - - | 9,995 (29,895) (313) 80,000 (20,194) | 3,243 (7,020) (376) - (12,194) 50,000 |
| | Net cash provided by financing activities | 9,971 | 39,593 | 33,653 |
| | Effect of exchange rate changes on cash | (1,360) | 1,005 | (263) |
| | Net increase in cash and cash equivalents Cash and cash equivalents at beginning of year | 28,445 80,668 | 62,938 17,730 | 1,198 16,532 |
| | Cash and cash equivalents at end of year | \$ 109,113 ====== | \$ 80,668 ====== | \$ 17,730 ====== |
| SUPPLE- MENTAL | Cash paid during the year for: Income taxes | \$ 12,965 ====== | \$ 4,084 ====== | \$ 7,709 ====== |
| INFORMATION | Interest | \$ 6,923 ====== | \$ 6,771 ====== | \$ 5,468 ====== |

ANALOG DEVICES, INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

YEARS ENDED OCTOBER 29, 1994, OCTOBER 30, 1993 AND OCTOBER 31, 1992 (ALL TABULAR AMOUNTS IN THOUSANDS EXCEPT PER SHARE AMOUNTS)

1. 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. All intercompany balances and transactions are eliminated. The Company's fiscal year ends on the Saturday closest to the last day in October. Fiscal years 1994, 1993 and 1992 were each 52-week years.

B. CASH, CASH EQUIVALENTS AND SHORT-TERM INVESTMENTS

Cash and cash equivalents are highly liquid investments with a maturity of three months or less at the time of acquisition. Cash and cash equivalents are stated at cost which approximates fair value.

Short-term investments consist of commercial paper, certificates of deposit and bankers' acceptances with maturities greater than three months and less than one year at the time of acquisition. The short-term investments are stated at cost which approximates fair value due to the short maturity of these instruments.

The Company is required to adopt Statement of Financial Accounting Standards No. 115, "Accounting for Certain Investments in Debt and Equity Securities," (FAS 115) in fiscal 1995. Adoption of FAS 115 is not expected to have a material impact on the Company's consolidated financial statements.

C. INVENTORIES

Inventories are valued at the lower of cost (first-in, first-out method) or market. Inventories at October 29, 1994, October 30, 1993 and October 31, 1992 were as follows:

| | 1994 | 1993 | 1992 |
|--|-------------------------------|-------------------------------|-------------------------------|
| Raw materials Work in process Finished goods | \$ 15,277 69,771 45,678 | \$ 18,645 80,418 51,359 | \$ 26,239 73,604 42,610 |
| Total inventories | \$130,726 | \$150,422 | \$142,453 |

A director of the Company is also a director of a raw material supplier. Total purchases from this supplier approximated \$28,435,000 in 1994, \$37,990,000 in 1993 and \$21,984,000 in 1992. Accounts payable to this supplier at October 29, 1994, October 30, 1993 and October 31, 1992 approximated \$1,090,000, \$3,639,000 and \$3,655,000, respectively. Another director of the Company was also a director of a raw material supplier through June 1993. Total purchases from this supplier approximated \$1,510,000 in 1993 and \$5,216,000 in 1992. Accounts payable to this supplier at October 31, 1992 approximated \$397,000. The Company believes that the terms of these purchases were comparable to those available from other suppliers.

D. PROPERTY, PLANT AND EQUIPMENT

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 Machinery & Equipment Office Equipment

Up to 25 years 3-10 years 3-8 years

ANALOG DEVICES, INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

Total depreciation and amortization of property, plant and equipment was \$59,240,000, \$57,732,000 and \$52,858,000 in 1994, 1993 and 1992, respectively.

E. INTANGIBLE ASSETS

Intangible assets at October 29, 1994 consist of goodwill, patents and other intangibles. Goodwill is being amortized on a straight-line basis over a fifteen-year period. Patents and other intangibles are being amortized on a straight-line basis over their estimated economic lives which range from four to fifteen years. Amortization expense for all intangible assets was \$2,044,000, \$2,081,000 and \$2,092,000 in 1994, 1993 and 1992, respectively. Accumulated amortization for all intangible assets was \$8,636,000, \$6,657,000 and \$4,706,000 at October 29, 1994, October 30, 1993 and October 31, 1992, respectively.

F. 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 a separate component of stockholders' equity. 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.

G. FOREIGN CURRENCY INSTRUMENTS AND INTEREST RATE AGREEMENTS

The Company enters into forward foreign exchange contracts, foreign currency option contracts and currency swap agreements to offset certain operational and balance sheet exposures from 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. These foreign exchange contract, option and swap transactions are entered into to support normal recurring purchases, product sales and financing transactions, and accordingly, are not speculative in nature.

Forward foreign exchange contracts are utilized to manage the risk associated with currency fluctuations on certain firm purchase commitments, firm sales commitments and certain non-U.S. dollar denominated asset and liability positions. The forward foreign exchange contracts that relate to firm purchase and sales commitments are designated as effective hedges of firm foreign currency commitments, and accordingly, the gains and losses on these contracts are deferred and included in the measurement of the related foreign currency transaction. Gains and losses on forward foreign exchange contracts designated to hedge foreign currency assets and liabilities are recognized in income as the exchange rates change and offset the foreign currency gains and losses on the related transactions. The face amounts of forward foreign exchange contracts outstanding at October 29, 1994, October 30, 1993 and October 31, 1992 were \$136.4 million, \$107.9 million and \$107.4 million, respectively. Forward foreign exchange contracts outstanding at October 29, 1994 have maturities of up to 14 months.

The Company also may periodically purchase foreign currency option contracts to hedge certain probable anticipated, but not firmly committed, foreign currency transactions related to the sale of product during the ensuing twelve months. These foreign currency option contracts are designated as effective hedges of such transactions, and accordingly, the costs and any gains associated with these option contracts are deferred and included in the measurement of the related foreign currency transaction. When the dollar strengthens significantly against the foreign currencies, the decline in value of future foreign currency cash flows is partially offset by the gains in the value of purchased currency options designated as hedges. Conversely, when the dollar weakens, the increase in the value of future foreign currency cash flows is reduced only by the premium paid to acquire the options. The face amounts of foreign currency option contracts outstanding at October 29, 1994, October 30, 1993 and October 31, 1992 were \$28.6 million, \$29.0 million and \$27.3 million, respectively. Purchased foreign currency options outstanding at October 29, 1994 have maturities of up to 6 months.

ANALOG DEVICES, INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

Currency swap agreements are utilized to hedge the net investment in certain foreign subsidiaries. Realized and unrealized gains and losses on such agreements related to the net foreign investment being hedged are recognized in the cumulative translation adjustment component of stockholders' equity. The face amount of currency swap agreements outstanding at October 29, 1994 was \$10.0 million. Currency swap agreements outstanding at October 29, 1994 have maturities of up to one year.

The Company enters into interest rate swap and cap agreements to partially modify the interest characteristics of its financing arrangements from a fixed to a floating rate basis. These agreements involve the receipt of fixed rate amounts in exchange for floating rate interest payments over the life of the agreement without an exchange of the underlying principal amounts. The differential to be paid or received is accrued as interest rates change and recognized as an adjustment to interest expense related to the financing arrangement. The related amount payable to or receivable from counterparties is included in liabilities or assets. The notional principal amounts of interest rate swap and cap agreements outstanding at October 29, 1994 and October 30, 1993 were \$50.5 million and \$40.0 million, respectively. Interest rate swap and cap agreements outstanding at October 29, 1994 have maturities of up to 12 years.

The cash requirements of the above-described foreign currency instruments and interest rate swap and cap agreements approximate their fair value. Cash flows associated with these financial instruments are classified consistent with the cash flows from the transactions being hedged.

The foreign currency instruments and interest rate swap and cap agreements involve, to a varying degree, elements of market and interest rate risk not recognized in the consolidated financial statements. While the contract or notional amounts are often used to express the volume of the above-described instruments, the amounts potentially subject to credit risk are generally limited to the amounts, if any, by which the counterparties' obligations under the agreements exceed the obligations of the Company to the counterparties. The Company controls credit risk through credit approvals, limits and monitoring procedures including the use of high credit quality counterparties.

H. CONCENTRATIONS OF CREDIT RISK

Financial instruments which 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, and to an increasing degree, computers and peripherals, telecommunications and high performance consumer electronics. The Company has adopted credit policies and standards to accommodate growth into these markets. The Company believes that any risk of accounting loss with respect to trade accounts receivable is limited due to the diversity of its products, end customers and geographic sales areas. 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. Due to the Company's credit evaluation and collection process, bad debt losses have been insignificant.

ANALOG DEVICES, INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

I. FAIR VALUE OF FINANCIAL INSTRUMENTS

The following disclosure of the estimated fair value of financial instruments is made in accordance with the requirements of Statement of Financial Accounting Standards No. 107, "Disclosures About Fair Value of Financial

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.

| | OCTOBER 29, 1994 | | OCTOBER 30, 1993 | |
|---|----------------------|----------------------|------------------|----------------|
| | CARRYING | FAIR | CARRYING | FAIR |
| | Amount | Value | Amount | Value |
| Assets: | | | | |
| Cash and cash equivalents Short-term investments | \$ 109,113 72,652 | \$ 109,113 72,652 | \$ 80,668 - | \$ 80,668 - |
| Liabilities: | | | | |
| Short-term borrowings Long-term debt, including | (2,917) | (2,917) | (2,006) | (2,006) |
| current portion | (100,000) | (93,800) | (100,000) | (102,400) |
| Foreign Currency Instruments and Interest Rate Agreements: Interest rate swap | | | | |
| and cap agreements Forward foreign currency | 5 | (3,065) | 98 | 89 |
| exchange contracts Foreign currency option | (1,458) | 641 | 727 | 25 |
| contracts | 308 | 41 | 460 | 468 |
| Currency swap agreement | (853) | (840) | - | - |

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.

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 estimated based on current interest rates available to the Company for debt instruments with similar terms, degree of risk and remaining maturities.

Interest rate swap and cap agreements-The fair value of interest rate swap and cap agreements are 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 contacts-The estimated fair value of forward foreign currency exchange contracts is based on the estimated amount at which they could be settled based on market exchange rates.

ANALOG DEVICES, INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Foreign currency option contracts and currency swap agreement-The fair values of foreign currency option contracts and currency swap agreement are obtained from dealer quotes. These values represent the estimated amount the Company would receive or pay to terminate the agreements.

J. REVENUE RECOGNITION

Revenue from product sales to end users is recognized upon shipment. A portion of the Company's sales are made to domestic distributors under agreements allowing for price protection and certain rights of return on merchandise unsold by the distributors. Because of the uncertainty associated with pricing concessions and future returns, the Company defers recognition of such sales and related gross margin until the merchandise is sold by the distributors. For sales to international distributors, the Company recognizes the sale upon shipment to the distributor, but provides specific reserves for possible returns and allowances.

K. INCOME TAXES

In February 1992, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 109, "Accounting for Income Taxes" (FAS 109). FAS 109 requires a change from the deferred method of accounting for income taxes under APB Opinion 11 to the asset and liability method of accounting for income taxes. Under the asset and liability method of FAS 109, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. Under FAS 109, the effect of a change in tax rates on deferred tax assets and liabilities is recognized in income in the period that includes the enactment date.

Effective October 31, 1993 the Company adopted FAS 109. The adoption of FAS 109 was not material to the consolidated financial statements. As permitted by FAS 109, prior years' financial statements have not been restated.

Pursuant to the deferred method under APB Opinion 11, which was applied at October 30, 1993 and in prior fiscal years, deferred income taxes are recognized for income and expense items that are reported in different years for financial reporting purposes and income tax purposes using the tax rate applicable for the year of calculation. Under the deferred method, deferred taxes are not adjusted for subsequent changes in tax rates.

L. STOCK SPLIT

On November 30, 1994, the Company's Board of Directors authorized a three-for-two stock split effected in the form of a 50% stock dividend distributed on January 4, 1995 to stockholders of record December 12, 1994. The split was accomplished through the issuance of common stock and the reissuance of treasury stock. All references to share and per share amounts have been restated to reflect the split.

M. EARNINGS PER SHARE OF COMMON STOCK

Primary earnings per common share are computed based on the weighted average number of common shares outstanding during the year, adjusted for incremental shares assumed issued for dilutive common stock equivalents. Fully diluted earnings per share do not differ materially from primary earnings per share.

N. RECLASSIFICATIONS

Certain amounts reported in previous years have been reclassified to conform to the 1994 presentation.

ANALOG DEVICES, INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS--(CONTINUED)

2. INDUSTRY AND GEOGRAPHIC SEGMENT INFORMATION

INDUSTRY

The Company operates predominantly in one industry segment: the design, manufacture and marketing of a broad line of high-performance linear, mixed-signal and digital integrated circuits that address a wide range of real-world signal processing applications.

GEOGRAPHIC INFORMATION

The Company operates in three major geographic areas. information on the Company's geographic operations is set forth in the table below. the predominant countries comprising European operations are England, France, Germany and Ireland. The predominant country comprising Asian operations is Japan. For segment reporting purposes, sales generated by North American operations in the table include export sales of \$96,700,000, \$71,542,000 and \$41,010,000 in 1994, 1993 and 1992, respectively; sales generated by European operations include export sales of \$1,267,000 in 1992. Transfers between geographic areas are based on market comparables and are consistent with prevailing tax regulations. Operating income reflects the allocation of corporate expenses of \$19,718,000, \$17,174,000 and \$14,901,000 in 1994, 1993 and 1992, respectively, to the appropriate geographic area based upon their beneficial and causal relationship to each area. Corporate identifiable assets consist of cash equivalents, short-term investments and intangible assets.

| GEOGRAPHIC SEG | MENT INFORMATION | 1994 | 1993 | 1992 |
|-------------------------------|--|---|---|--|
| Sales | NORTH AMERICA, INCLUDING EXPORT EUROPE | \$440,609 198,000 134,865 | \$363,671 196,310 106,338 | \$309,110 169,330 88,875 |
| | TOTAL SALES | \$773,474 ====== | \$666,319 ====== | \$567,315 ====== |
| Transfers Between Areas | NORTH AMERICA, INCLUDING EXPORT EUROPE | \$192,442 110,801 19,603 | \$161,081 94,948 12,569 | \$129,030 64,630 - |
| | TOTAL TRANSFERS BETWEEN AREAS | \$322,846 ====== | \$268,598 ====== | \$193,660 ====== |
| Operating Income | NORTH AMERICA, INCLUDING EXPORT EUROPE | \$ 52,706 47,170 1,940 \$101,816 ====== | \$ 26,546 35,205 934 \$ 62,685 ====== | \$ 5,679 18,516 1,977 \$ 26,172 |
| Identifiable Assets | NORTH AMERICA, INCLUDING EXPORT EUROPE | \$354,881 176,755 95,988 188,247 | \$367,347 147,979 78,215 84,951 | \$333,256 143,042 48,182 37,387 |
| | TOTAL ASSETS | \$815,871 ====== | \$678,492 ====== | \$561,867 ====== |

3. ACCRUED LIABILITIES

Accrued liabilities at October 29, 1994, October 30, 1993 and October 31, 1992 consisted of the following:

| | 1994 | 1993 | 1992 |
|---|--------------------|--------------------|--------------------|
| Accrued compensation and benefits Other | \$33,908 26,313 | \$31,652 18,241 | \$23,007 15,802 |
| Total accrued liabilities | \$60,221 | \$49,893 | \$38,809 |

4. DEBT AND CREDIT FACILITIES

6 5/8% NOTES

ON March 11, 1993, the Company completed a public offering of \$80 million of seven-year 6 5/8% notes due March 1, 2000 with semiannual interest payments on March 1 and September 1. The net proceeds of the offering were approximately \$79 million after payment of the underwriting discounts and expenses of the offering which were deferred and are being amortized to interest expense over the term of the Notes. Approximately \$60.0 million of the net proceeds was used to repay in full outstanding U.S. dollar borrowings under the Company's revolving credit agreement. Simultaneous with the sale of the Notes, the Company entered into an interest rate swap and cap agreement for the term of the Notes having a notional principal amount of \$40 million whereby the effective net interest rate on \$40 million of the Notes will be the six-month libor rate (up to a maximum of 7%) plus 1.4%. For the year ended October 29, 1994, the net effective interest rate on \$40 million of the Notes was 6.6% after giving effect to the interest rate swap agreement.

FIXED RATE TERM LOAN

The Company has an unsecured, three-year term loan with a bank in the amount of \$20,000,000 at a fixed interest rate of 7.18% per annum. Under this agreement, the Company is generally subject to the same financial covenants as are contained in the Revolving Credit Agreement described below. The Company was in compliance with all covenants under this agreement at October 29, 1994. This loan was repaid in full at maturity on November 14, 1994.

REVOLVING CREDIT AGREEMENT AND LINES OF CREDIT

The Company has a revolving credit agreement with several banks which commits them to lend up to \$60,000,000. The terms of the credit agreement provide that interest on U.S. dollar borrowings may not exceed the greater of the prime rate or the federal funds rate plus .50%. Under this agreement, the Company also has the option to borrow both U.S. dollars and foreign currencies at interest rates tied to various money market instruments, customarily below the prime rate. Under the credit agreement, the Company is currently required to pay fees of .05 of 1% per annum on the unused portion of the lending commitment and .15 of 1% per annum on the total amount of the committed facility. All borrowings under the credit agreement are due no later than September 8, 1998. Borrowing from banks not participating in the agreement is permitted as long as the Company maintains certain required financial ratios. The credit agreement requires the Company to maintain stated minimum net worth and current ratio levels, plus a stated maximum ratio of total liabilities to net worth. In addition, the credit agreement restricts the aggregate of all cash dividend payments declared or made subsequent to October 29, 1994 to an amount not exceeding \$85,147,000 plus 50% of the consolidated net income of the Company for the period from October 30, 1994 through the end of the Company's then most recent fiscal quarter. At October 29, 1994, the Company was in compliance with all covenants under the credit agreement. There are no compensating balance requirements under the credit agreement. In addition to the credit agreement, the Company also has various unsecured, uncommitted money market lines of credit with its credit agreement and other banks which provide for short-term horrowings.

ANALOG DEVICES, INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS--(CONTINUED)

The weighted average interest rates of U.S. dollar borrowings under the credit agreement and the uncommitted money market lines of credit were 4.0% and 4.3% during 1993 and 1992, respectively. The weighted average interest rate of U.S. dollar borrowings under the credit agreement and the uncommitted money market lines of credit was 4.1% at October 31, 1992. There were no variable rate U.S. dollar borrowings under the credit agreement or the uncommitted money market lines of credit during 1994 nor were there any such borrowings outstanding at October 29, 1994 or October 30, 1993. The weighted average interest rates of foreign currency borrowings under foreign lines of credit were 8.7%, 10.9% and 12.4% during 1994, 1993 and 1992, respectively. The weighted average interest rates of foreign currency borrowings were 7.4%, 11.8% and 11.7% at October 29, 1994, October 30, 1993 and October 31, 1992, respectively. There were \$2.9 million of foreign currency borrowings outstanding at October 29, 1994, which were at prevailing money market rates for the respective currencies. Borrowings under the Company's credit agreement and lines of credit are generally due within six months. In 1992, however, a portion of these borrowings were classified as long-term debt based on the Company's intention to refinance a portion of these borrowings on a long-term basis and the ability to refinance these borrowings under the credit agreement.

Long-term debt, including current maturities, at October 29, 1994, October 30, 1993 and October 31, 1992 consisted of the following:

| 1994 | 1993 | 1992 |
|---------------------|--|----------------------------|
| \$ 80,000 20,000 | \$ 80,000 20,000 | \$ - 20,000 |
| - - - | - - - | 30,000 20,000 194 |
| 100,000 | 100,000 | 70,194 |
| 20,000 \$ 80.000 | - | 194 \$70,000 |
| | \$ 80,000 20,000 - - - - 100,000 | \$ 80,000 \$ 80,000 20,000 |

Aggregate principal payments on long-term debt and short-term borrowings for the following fiscal years are: 1995-\$22.9 million; 2000-\$80.0 million.

5. LEASE COMMITMENTS

The Company leases certain of its facilities and equipment under various operating and capital leases which expire at various dates through 2010. The lease agreements frequently include renewal and purchase provisions and require the Company to pay taxes, insurance and maintenance costs.

Total rental expense under operating leases was \$9,985,000, \$8,853,000 and \$9,268,000 in 1994, 1993 and 1992, respectively.

The following is a schedule of future minimum lease payments under capital leases and rental payments required under long-term operating leases at October 29, 1994:

| FISCAL YEARS | OPERATING LEASES | CAPITAL LEASES |
|---|---------------------|-------------------|
| | | |
| 1995 | \$ 7,893 | \$280 |
| 1996 | 4,444 | 47 |
| 1997 | 3,004 | - |
| 1998 | 2,618 | - |
| 1999 | 2,530 | - |
| Later Years | 19,231 | - |
| Total | \$39,720 ====== | \$327 |
| Less amount representing interest | | (30) |
| Present value of minimum lease payments | | \$297 ==== |

Net property, plant and equipment includes the following for capital leases:

| | 1994 | 1993 | 1992 |
|-------------------------------|----------|----------|----------|
| Land and buildings | \$ 1,828 | \$ 1,828 | \$ 1,828 |
| Machinery and equipment | 829 | 829 | 10,012 |
| Less accumulated amortization | 2,657 | 2,657 | 11,840 |
| | (2,468) | (2,231) | (11,173) |
| Net capital leases | \$ 189 | \$ 426 | \$ 667 |

6. COMMITMENTS AND CONTINGENCIES

The Company is a defendant in a lawsuit brought by Texas Instruments, Incorporated (TI) claiming damages for the Company's alleged infringement of certain patents related to plastic encapsulation of semiconductor devices. The lawsuit relates to sales of plastic encapsulated products sold between February 1989 and August 1994 when the patents expired. In January 1994, the International Trade Commission (ITC) brought an enforcement proceeding against the Company alleging that the Company had violated the terms of the Commission's February 1992 cease and desist order (as modified in July 1993) relating to the importation of plastic encapsulated products into the United States from the Company's foreign subsidiaries. If the Company is found to be in violation of the orders, it may be subject to substantial penalties. The Company has denied the essential allegations in the complaints and believes that it has meritorious defenses in each of these actions which it intends to vigorously pursue. The Company also has a lawsuit pending against TI in which the Company alleges that TI infringed one of its patents relating to digital signal processing products, and TI has filed counterclaims.

The Company is a defendant in a lawsuit brought by Maxim Integrated Products, Inc. ("Maxim") seeking an injunction against, and claiming damages for, alleged antitrust violations and unfair competition in connection with distribution arrangements between the Company and certain distributors. Maxim alleged that certain distributors ceased doing business with Maxim as a result of the distribution arrangements between the distributors and the Company, resulting in an improper restriction to Maxim's access to channels by which it distributes its products. Maxim asserted actual and consequential damages in the amount of \$14.1 million and unspecified claims for restitution and punitive damages. Under applicable law, Maxim would receive three times the amount of any actual damages suffered as a result of any antitrust violation. On September 7, 1994, Maxim's claim was dismissed for lack of evidence. Maxim has appealed this ruling and briefing of the appeal is scheduled to be concluded by March 7, 1995.

Although the Company believes it should prevail in the matters described in the previous two paragraphs, the Company is unable to determine their ultimate outcome or estimate the ultimate amount of liability, if any, at this time. An adverse resolution of these matters could have a material adverse effect on the Company's consolidated financial position or on its consolidated results of operations or cash flows in the period in which the matters are resolved.

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 relations, personal injury, environmental matters and product liability. The Company has also received and made inquiries with regard to other possible patent infringement claims. These inquiries have been referred to counsel and are in various stages of discussion. If any infringements are determined to exist, the Company may seek or extend licenses or settlements. While the Company cannot accurately predict the ultimate outcome of the matters referred to in this paragraph, at this time management believes that the likelihood of an outcome resulting in a material adverse effect on the Company's consolidated financial position, trends in results of operations or cash flows is remote.

The Company's wholly owned manufacturing facility in the Republic of Ireland has received operating and capital grants. A liability to repay up to \$19.2 million of the grants received by the Company would arise in the unlikely event the Company should liquidate its Irish operation prior to the commitment periods noted in the grant agreements which expire at various dates through 1999.

Under the terms of the lease agreement related to the Company's headquarters facility in Norwood, Massachusetts, the Company has agreed to assume the note related to the property in the case of default by the lessor. Assumption of the note, which was \$10.5 million at October 29, 1994, would entitle the Company to a first lien on the property. In addition, the Company may be subject to an incremental rent payment if the Company were to either default on the lease or not exercise its option to extend the lease at the end of the current fifteen-year term. This payment would be the present value of the balance of the lessor's debt related to the property in excess of \$6.5 million at the end of the current lease term. As of October 29, 1994, the Company's unrecorded financial risk of loss under this agreement was \$1.5 million in the unlikely event of default.

7. STOCKHOLDERS' EQUITY

COMMON STOCK

In December 1994, the Board of Directors authorized an amendment to the Company's Articles of Organization to increase the authorized number of shares of common stock from 150,000,000 to 300,000,000 subject to stockholder approval in March 1995.

STOCK PLANS

The 1988 Stock Option Plan provides for the issuance of nonstatutory and incentive stock options to purchase up to 10,350,000 shares of common stock. Under this plan, options may be granted to key employees of the Company and its subsidiaries at a price not less than 100% of the fair market value of the underlying stock on the date of grant. The Company's 1980 Stock Option Plan was terminated upon adoption of the 1988 Stock Option Plan; however, options to purchase common stock remain outstanding under this plan.

Under the 1992 Director Option Plan, each nonemployee director receives nonstatutory options to purchase 15,000 shares of common stock at an exercise price equal to the fair market value on the date of grant. A total of 150,000 shares of common stock may be issued under this plan. In December 1994, the Board of Directors authorized the 1994 Director Option Plan under which each nonemployee director will receive options to purchase 5,250 shares of common stock annually at an exercise price equal to the fair market value on the date of grant. These options vest ratably over a three-year period. A total of 200,000 shares of common stock are reserved for issuance under the plan which is subject to stockholder approval in March 1995. Upon adoption of the 1994 Director Option Plan by the stockholders, no additional options will be granted under the 1992 Director Option Plan.

While the Company may grant options to employees which become exercisable at different times or within different periods, the Company has generally granted options which are exercisable in annual installments of 33.3% each during the third, fourth and fifth years after the date of grant.

Transactions under the Company's stock option plans are summarized in the table below:

| | CHAREC | OPTIO | NS OUTST | ANDING | |
|---|--|------------------------------|----------|--|-----------------------------|
| STOCK OPTION ACTIVITY | SHARES AVAILABLE FOR GRANT | NUMBER | | OPTION PRICE PER SHARE | AGGREGATE PRICE |
| Balance, November 2, 1991 | 1,765 | 5,217 | \$2.90 | to \$12.25 | \$30,282 |
| Options granted Options exercised Options cancelled (1) | (1,735) - 268 | 1,735 (252) (381) | \$2.90 | to \$6.83 to \$5.35 to \$10.50 | 11,171 (898) (2,238) |
| Balance, October 31, 1992 | 298 | 6,319 | \$3.92 | to \$ 12.25 | 38,317 |
| Additional shares authorized for 1988 Stock Option Pla Shares authorized For 1992 Director Option Plan Options granted Options exercised Options cancelled (1) Shares cancelled upon termination of 1989 Director Stock Option Plan | 7, 250 150 (174) - 330 (45) | - 174 (1,066) (384) | \$3.92 | to \$16.09 to \$10.50 to \$10.50 | 1,669 (7,695) (2,224) |
| Balance, October 30, 1993 | 5,809 | 5,043 | \$3.92 | to \$16.09 | 30,067 |
| Options granted Options exercised Options cancelled (1) | (2,061) - 123 | 2,061 (683) (124) | \$3.92 | to \$20.00 to \$12.25 to \$17.17 | 30,482 (4,250) (844) |
| Balance, October 29, 1994 | 3,871 | 6,297 | \$3.92 | to \$20.00 | \$55,455 |
| Options exercisable at October 29, 1994 | | 1,404 | \$3.92 | to \$10.50 | \$8,010 |

(1) Options cancelled which were originally issued from the 1988 Stock Option Plan are available for subsequent grants. The remaining options cancelled in 1994, 1993 and 1992 were issued from the 1980 Stock Option Plan which has been terminated.

The Company has a stock purchase plan 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 523,800 shares in 1994 (754,500 and 513,500 in 1993 and 1992, respectively) for \$6.0 million (\$4.2 million and \$2.8 million in 1993 and 1992, respectively). At October 29, 1994, 1,422,000 common shares remained available for issuance under the plan.

Under the 1991 Restricted Stock Plan, a maximum of 1,050,000 shares of common stock may be awarded by the Company to key employees for nominal consideration. This plan succeeded the Company's 1978 Restricted Stock Plan which provided for the issuance of up to 3,686,400 shares of common stock. Shares awarded from both plans are restricted as to transfer, usually for a period of five years and, under certain conditions, may be subject to repurchase by the Company at the original purchase price per share. Shares awarded under the Company's restricted stock plans, net of cancellations, for 1994, 1993 and 1992 were 243,000, 21,000 and 231,000, respectively. The fair market value of the shares at the date of award was accounted for as deferred compensation and is being amortized over the restricted period. During 1994, 1993 and 1992, \$1,851,000, \$1,716,000 and \$1,887,000, respectively, of such compensation was charged to expense. At October 29, 1994, there were 275,250 shares of common stock available for issuance under the 1991 Restricted Stock Plan.

WARRANTS

In 1990, the Company issued warrants for the purchase of 1,500,000 shares of common stock. Each warrant entitles the holder to purchase one share of the Company's common stock at an exercise price of \$8 per share, subject to certain adjustments, anytime prior to the expiration of the warrants on August 7, 1997. At October 29, 1994, all of the warrants were outstanding.

As of October 29, 1994, a total of 13,365,000 common shares were reserved for issuance under the company's stock plans and warrant agreement.

PREFERRED STOCK

The Company has 500,000 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. The Company had previously authorized 35,000 shares of such Preferred Stock as Series A Convertible Preferred Stock, of which 28,066 shares were sold in prior years. As of June 14, 1990, all of these shares had been fully converted to common stock.

COMMON STOCK PURCHASE RIGHTS

In 1988, the Board of Directors adopted a Shareholder Rights Plan which provides for a dividend distribution of one common stock purchase right for each share of common stock outstanding on February 12, 1988. Under certain circumstances, each right entitles the holder to purchase from the Company one share of common stock at an exercise price of \$40 per share.

The rights are not exercisable and cannot be transferred separately from the common stock until ten days after a person acquires 20% or more or makes a tender offer for 30% or more of the Company's common stock. If, after the rights become exercisable, (i) any person becomes the owner of 20% or more of the Company's common stock, or (ii) the Company is the surviving entity in a merger with a 20% or more stockholder, or (iii) a 20% or more stockholder engages in certain "self-dealing" transactions with the Company, each right not owned by such person will entitle its holder to purchase, at the right's exercise price, common stock having a value of two times the exercise price of the right. In addition, if the Company is either (i) acquired in a merger or other business combination in which the Company is not the surviving entity, or (ii) sells or transfers 50% or more of its assets or earning power to another party, each right will entitle its holder to purchase, upon exercise, common stock of the acquiring Company having a value equal to two times the exercise price of the right.

The rights expire on February 12, 1998 but may be redeemed by the Company for \$.0133 per right at any time prior to the tenth day following a person's acquisition of 20% or more of the Company's common stock. So long as the rights are not separately transferable, the Company will issue one right with each new share of common stock issued.

8. RETIREMENT PLANS

The Company and its subsidiaries have various savings and retirement plans covering substantially all employees. The Company maintains defined contribution plans for the benefit of its eligible United States employees. These plans provide 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 contribution, if any, up to a maximum of 2% of each participant's total eligible compensation. The Company also has various defined benefit pension and other retirement plans for certain foreign employees that are consistent with local statutes and practices. The total expense related to all of the Company's retirement plans in 1994, 1993 and 1992 was \$12.6 million, \$11.9 million and \$10.9 million, respectively, which primarily consists of costs related to domestic defined contribution plans. Also included in total expense is pension expense related to foreign defined benefit plans of \$2.5 million for 1994, \$3.0 million for 1993 and \$2.8 million for 1992. Summary data related to these foreign plans at October 29, 1994 is as follows: accumulated benefit obligation, substantially vested, of \$18.4 million; projected benefit obligation of \$31.0 million; plan assets at fair value of \$28.5 million; discount rates ranging from 5.5% to 15%; compensation increase rates ranging from 4.5% to 12% and expected rate of return on assets ranging from 5% to 15%.

In November 1992, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 112, "Employers' Accounting for Postemployment Benefits" (FAS 112), which will become effective during fiscal year 1995. FAS 112 requires that postemployment benefits, primarily salary continuation and insurance continuation, be accrued for at the time the benefit is earned by the employee. Adoption of FAS 112 is not expected to have a material impact on the Company's consolidated financial statements.

9. INCOME TAXES

As discussed in Note 1(k), the Company adopted FAS 109 as of October 31, 1993.

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

| | LIABILITY METHOD DEFERR | | ED METHOD | |
|--|-------------------------|----------|-----------|--|
| | 1994 | 1993 | 1992 | |
| U.S. federal statutory tax rate | 35.0% | 34.8% | 34% | |
| Income tax provision reconciliation: | | | | |
| Tax at statutory rate | \$33,919 | \$19,322 | \$ 6,448 | |
| Irish income subject to lower tax rate | (7,299) | (7,951) | (5,762) | |
| Change in valuation allowance | (4, 265) | - | - | |
| State income taxes, net of federal benefit | 1,076 | 437 | 78 | |
| Research and development tax credits | (1,074) | 347 | - | |
| Foreign Sales Corporation | (731) | - | - | |
| Amortization of goodwill | `503´ | 500 | 489 | |
| Net foreign tax in excess of (less than) | | | | |
| U.S. federal statutory tax rate | 247 | (203) | (338) | |
| Foreign tax credits (utilized) unutilized | - | (1,444) | , , | |
| Other, net | 39 | 60 | (86) | |
| Total income tax provision | \$22,415 | \$11,068 | \$ 4,030 | |

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

| | 1994 | 1993 | 1992 |
|---------------------------------------|--------------------|--------------------|---------------------|
| Pretax income: Domestic Foreign | \$35,621 61,290 | \$ 8,228 47,297 | \$(9,985) 28,950 |
| | \$96,911 | \$55,525 | \$18,965 |

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

| | 1994 | 1993 | 1992 |
|---|-----------------------------|--------------------------|--------------------------|
| Current: Federal Foreign State | \$18,479 10,576 1,665 | \$ 3,884 8,788 670 | \$ 2,383 3,181 129 |
| Total current | \$30,720 | \$13,342 | \$ 5,693 ====== |
| Deferred (prepaid): Federal Foreign | \$(7,601) (704) | \$(2,313) 39 | \$(2,201) 538 |
| Total deferred (prepaid) | \$(8,305) | \$(2,274) | \$(1,663) |

The significant components of the Company's deferred tax assets and liabilities as of October 29, 1994 are as follows:

| | 1994 |
|--|--|
| Deferred tax assets: Inventory reserves Capital loss carryover Deferred income on shipments to domestic distributors Reserves for employee benefits Restricted stock Alternative Minimum Tax carryover Intercompany profits in foreign inventories Reserve for bad debts Foreign tax credits Other | \$ 12,261 8,513 5,254 2,890 2,123 1,764 1,709 1,650 1,522 3,314 |
| Total gross deferred tax assets Valuation allowance for deferred tax assets | 41,000 (10,035) |
| Total deferred tax assets | \$ 30,965 |
| Deferred tax liabilities: Depreciation | \$ (8,603) |
| Total gross deferred liabilities | \$ (8,603) |
| Net deferred tax assets | \$ 22,362 ======= |

The valuation allowance at the beginning of fiscal 1994 was \$14,300. The net change in the valuation allowance for the year ended October 29, 1994 was a decrease of \$4,265 from the utilization of general business and foreign tax credits. The valuation allowance as of October 29, 1994 relates primarily to capital loss carryovers and tax credits.

The components of the provision for deferred income taxes for the fiscal years ended October 30, 1993 and October 31, 1992 are as follows:

| | 1993 | 1992 |
|---|-----------|-----------|
| Components of deferred (prepaid) tax provision (benefit): | | |
| Tax depreciation in excess of (less than) book depreciation | \$(2,064) | \$(2,428) |
| General business tax credits | 1,814 | (244) |
| Inventory reserves | 878 | (3,982) |
| Deferred income on shipments to domestic distributors | (716) | (2,877) |
| Restricted stock | 583 | (230) |
| Net decrease (increase) in intercompany profits in | | . , |
| foreign inventories | (431) | 926 |
| Foreign tax credits | (429) | 4,977 |
| Reserves for employee benefits | (154) | (274) |
| Restructuring reserves | | 1,854 |
| Other, net | (1,755) | 615 |
| Total provision for deferred (prepaid) income taxes | \$(2,274) | \$(1,663) |

The Company's practice is to reinvest indefinitely the earnings of certain international subsidiaries. Applicable U.S. Federal and state income taxes, net of related foreign tax credits, are provided only on amounts planned to be remitted. Accordingly, no U.S. Federal and state income taxes have been provided for approximately \$221,893,000 of unremitted earnings of international subsidiaries.

ANALOG DEVICES, INC. SUPPLEMENTARY FINANCIAL INFORMATION (UNAUDITED)

Quarterly financial information for 1994 and 1993 (thousands of dollars except as noted):

| | 4Q94 | 3Q94 | 2Q94 | 1094 | 4Q93 | 3Q93 | 2Q93 | 1Q93 |
|---|----------------------|----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--------------------|
| Net sales | 203,301 | 197,058 | 192,027 | 181,088 | 179,000 | 173,104 | 162,912 | 151,303 |
| Cost of sales | 101,457 | 99,890 | 98,508 | 94,593 | 94,166 | 91,378 | 86,330 | 78,978 |
| Gross margin % of sales | 101,844 50% | 97,168 49% | 93,519 49% | 86,495 48% | 84,834 47% | 81,726 47% | 76,582 47% | 72,325 48% |
| Operating expenses: Research and development Selling, marketing, general and administrative | 29,048 43,807 | 27, 205 43, 333 | 26,360 42,204 | 24,256 40,997 | 24,954 41,075 | 24,307 40,184 | 23,094 38,745 | 21,752 38,671 |
| Total operating expenses % of sales | 72,855 36% | 70,538 36% | 68,564 36% | 65,253 36% | 66,029 37% | 64,491 37% | 61,839 38% | 60,423 40% |
| Operating income % of sales | 28,989 14% | 26,630 14% | 24, 955 13% | 21, 242 12% | 18,805 11% | 17,235 10% | 14,743 9% | 11,902 8% |
| Nonoperating expenses (income): Interest expense Other | 1,694 (1,222) | 1,796 (891) | 1,829 (103) | 1,830 (28) | 1,886 (172) | 2,005 (31) | 1,766 (36) | 1,527 215 |
| Total nonoperating expenses | 472 | 905 | 1,726 | 1,802 | 1,714 | 1,974 | 1,730 | 1,742 |
| Income before income taxes % of sales | 28,517 14% | 25,725 13% | 23,229 12% | 19,440 11% | 17,091 10% | 15,261 9% | 13,013 8% | 10,160 7% |
| Provision for income taxes | 6,844 | 6,046 | 5,345 | 4,180 | 3,076 | 3,099 | 2,861 | 2,032 |
| Net income % of sales Per share | 21,673 11% .28 | 19,679 10% .25 | 17,884 9% .23 | 15,260 8% .20 | 14,015 8% .18 | 12,162 7% .16 | 10,152 6% .14 | 8,128 5% .11 |
| Shares used to compute earnings per share | 78,075 | 77, 485 | 77,071 | 76,455 | 76,303 | 76,270 | 75,747 | 74,455 |

45

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 hereof, and the remainder is contained in the Company's Proxy Statement for the Annual Meeting of Stockholders to be held on March 14, 1995 (the "1995 Proxy Statement") under the caption "Election of Directors" and is incorporated herein by reference.

ITEM 11. EXECUTIVE COMPENSATION

The response to this item is contained in the Company's 1995 Proxy Statement under the captions "Directors' Compensation," "Executive Compensation", "Severance and Other Agreements" and "Approval of the 1994 Director Option Plan," and is incorporated herein by reference. Information relating to a delinquent filing of a Form 4 by an executive officer of the Company is contained in the Company's 1995 Proxy Statement under the caption "Delinquent Filing of Forms 4."

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The response to this item is contained in the Company's 1995 Proxy Statement under the caption "Security Ownership of Certain Beneficial Owners and Management" and is incorporated herein by reference.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

The response to this item is contained in the Company's 1995 Proxy Statement under the caption "Transactions with Directors," and is incorporated herein by reference.

PART IV

ITEM 14. EXHIBITS, FINANCIAL STATEMENT SCHEDULES, AND REPORTS ON Form 8-K

(A) 1. FINANCIAL STATEMENTS

The following consolidated financial statements are included in Item 8:

- Consolidated Statements of Income for the years ended October 29, 1994, October 30, 1993 and October 31, 1992 Consolidated Balance Sheets as of October 29, 1994, October 30,
- 1993 and October 31, 1992
- Consolidated Statements of Stockholders' Equity for the years
- ended October 29, 1994, October 30, 1993 and October 31, 1992 Consolidated Statements of Cash Flows for the years ended October 29, 1994, October 30, 1993 and October 31, 1992

(A) 2. FINANCIAL STATEMENT SCHEDULES

No Financial Statement Schedules have been presented 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.

(A) 3. LISTING OF EXHIBITS

| EXHIBIT NO. | DESCRIPTION |
|----------------|---|
| 3-1 | Restated Articles of Organization of Analog Devices, Inc., as amended, filed as an exhibit to the Company's Form 10-K for the fiscal year ended October 31, 1992 and incorporated herein by reference. |
| 3-2 | By-Laws of Analog Devices, Inc. as amended, filed as an exhibit to the Company's Form 10-K for the fiscal year ended October 31, 1992 and incorporated herein by reference. |
| 4-1 | Rights Agreement, as amended, between Analog Devices, Inc. and The First National Bank of Boston, as Rights Agent, filed as an exhibit to a Form 8 filed on June 27, 1989 amending the Registration Statement on Form 8-A relating to Common Stock Purchase Rights, and incorporated herein by reference. |
| 4-2 | Indenture dated as of March 1, 1993 between Analog Devices, Inc. and The First National Bank of Boston, filed herewith. |
| 10-1 | Bonus Plan of Analog Devices, Inc., filed herewith. |
| 10-2 | 1978 Restricted Stock Plan of Analog Devices, Inc., as amended, filed as an exhibit to the Company's Form 10-K for the fiscal year ended November 3, 1990 and incorporated herein by reference. |
| 10-3 | 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 2, 1991 and incorporated herein by reference. |
| 10-4 | 1980 Stock Option Plan of Analog Devices, Inc., as amended, filed as an exhibit to the Company's Form 10-K for the fiscal year ended October 29, 1988 and incorporated herein by reference. |

| | EXHIBIT NO. | DESCRIPTION |
|---|----------------|--|
| * | 10-5 | 1988 Stock Option Plan of Analog Devices, Inc., as amended, filed as an exhibit to the Company's Form 10-K for the fiscal year ended October 31, 1992 and incorporated herein by reference. |
| * | 10-6 | 1989 Director Stock Option Plan of Analog Devices, Inc., as amended, filed as an exhibit to the Company's Form 10-K for the fiscal year ended November 2, 1991 and incorporated herein by reference. |
| * | 10-7 | 1992 Director Option Plan of Analog Devices, Inc., filed as an exhibit to the Company's Form 10-K for the fiscal year ended October 31, 1992 and incorporated herein by reference. |
| * | 10-8 | 1994 Director Option Plan of Analog Devices, Inc., filed herewith. |
| | 10-9 | Lease agreement dated February 13, 1970 between Analog Devices, Inc. and the trustees of Campanelli Investment Trust, relating to the premises at 30 Perwal Street, Westwood, Massachusetts, filed herewith. |
| | 10-10 | 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 Form 10-K for the fiscal year ended October 31, 1992 and incorporated herein by reference. |
| | 10-11 | 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 Form 10-Q for the fiscal quarter ended April 30, 1994 and incorporated herein by reference. |
| | 10-12 | 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 Form 10-Q for the fiscal quarter ended April 30, 1994 and incorporated herein by reference. |
| | 10-13 | 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 Form 10-K for the fiscal year ended October 31, 1992 and incorporated herein by reference. |
| | 10-14 | 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 Form 10-K for the fiscal year ended November 3, 1990 and incorporated herein by reference. |
| | 10-15 | 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 Form 10-K for the fiscal year ended November 3, 1990 and incorporated herein by reference. |
| | 10-16 | Credit Agreement dated as of March 12, 1993 among Analog Devices, Inc. and Morgan Guaranty Trust Company of New York, Bank of America National Trust and Savings Association, Continental Bank, N.A., The First National Bank of Boston and Morgan Guaranty Trust Company of New York, as Agent, filed as an exhibit to the Company's Form 10-Q for the fiscal quarter ended May 1, 1993 and incorporated herein by reference. |
| | 10-17 | Amendment No. 1 dated as of May 18, 1993 to the Company's Credit Agreement dated March 12, 1993, filed as an exhibit to the Company's Form 10-Q for the fiscal quarter ended July 31, 1993 and incorporated herein by reference. |

| NO. | DESCRIPTION |
|-------|--|
| 10-18 | Amendment No. 2 dated as of September 8, 1994 to the Company's Credit Agreement dated March 12, 1993, filed herewith. |
| 10-19 | Term loan agreement dated as of November 12, 1991 between Analog Devices, Inc. and the First National Bank of Boston, filed as an exhibit to the Company's Form 10-K for the fiscal year ended November 2, 1991 and incorporated herein by reference. |
| 10-20 | Form of Employee Retention Agreement, as amended, filed as an exhibit to the Company's Form 10-K for the fiscal year ended October 31, 1992 and incorporated herein by reference. |
| 10-21 | Employee Change in Control Severance Policy of Analog Devices, Inc., as amended, filed as an exhibit to the Company's 10-K for the fiscal year ended October 30, 1993 and incorporated herein by reference. |
| 10-22 | Senior Management Change in Control Severance Policy of Analog Devices, Inc., as amended, filed as an exhibit to the Company's 10-K for the fiscal year ended October 30, 1993 and incorporated herein by reference. |
| 10-23 | Warrant Agreement dated as of August 8, 1990 between Analog Devices, Inc. and Bourns, Inc., filed as an exhibit to the Company's Form 10-K for the fiscal year ended November 3, 1990 and incorporated herein by reference. |
| 10-24 | Description of Consulting Agreement between Analog Devices, Inc. and John L. Doyle, filed as an exhibit to the Company's Form 10-K for the fiscal year ended November 2, 1991 and incorporated herein by reference. |
| 10-25 | Letter Agreement between Analog Devices, Inc. and Jerald G. Fishman dated December 15, 1994 relating to acceleration of Stock options and restricted Stock awards upon termination of employment, filed herewith. |
| 21 | Subsidiaries of the Company, filed herewith. |
| 23 | Consent of Ernst & Young, filed herewith. |
| 27 | Financial Data Schedule |

* Management contract or compensation plan or arrangement required to be filed as an exhibit pursuant to item 14(c) of Form 10-K.

(B) REPORTS ON FORM 8-K

The Company filed no reports on Form 8-K with the Securities and Exchange Commission during the fiscal quarter ended October 29, 1994.

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. (Registrant)

By: /s/ Ray Stata By: /s/ Joseph E. McDonough

Chairman of the Board and Chief Executive Officer (Principal Executive Officer) Joseph E. McDonough Vice President-Finance and Chief Financial Officer (Principal Financial and Accounting Officer)

Date: January 24, 1995 Date: January 24, 1995

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.

| | NAME | TITLE | DATE |
|-----|--------------------|--|------------------|
| /s/ | Ray Stata | Chairman of the Board and Chief Executive Officer | January 24, 1995 |
| | Ray Stata | 3.120. 2.0001210 01.120. | |
| /s/ | Jerald G. Fishman | President, Chief Operating Officer | January 24, 1995 |
| | Jerald G. Fishman | and Director | |
| /s/ | Morris Chang | Director | January 24, 1995 |
| | Morris Chang | | |
| /s/ | John L. Doyle | Director | January 24, 1995 |
| | John L. Doyle | | |
| | | Director | |
| | Samuel H. Fuller | | |
| /s/ | Philip L. Lowe | Director | January 24, 1995 |
| | Philip L. Lowe | | |
| /s/ | Gordon C. McKeague | Director | January 24, 1995 |
| | Gordon C. McKeague | | |
| /s/ | Joel Moses | Director | January 24, 1995 |
| | Joel Moses | | |
| /s/ | Lester C. Thurow | Director | January 24, 1995 |
| | Lester C. Thurow | | |

ANALOG DEVICES, INC.

AND

THE FIRST NATIONAL BANK OF BOSTON, Trustee

Indenture

Dated as of March 1, 1993

6-5/8% NOTES DUE 2000

TABLE OF CONTENTS

Page

| PARTIES | | 1 |
|--------------|--|---|
| RECITALS | | |
| | Authorization of Indenture Form of Face of Security Form of Reverse of Security Form of Trustee's Certificate of Authentication Compliance with Legal Requirements Purpose of and Consideration for Indenture | 1 2 5 5 |
| | ARTICLE ONE | |
| | DEFINITIONS. | |
| SECTION 1.1. | Certain Terms Defined Attributable Debt. Board of Directors. Board Resolution. Business Day. Cash. Change in Control. Consolidated Net Tangible Assets. Corporate Trust Office. Depository. Event of Default. Exempted Debt. Funded Indebtedness. Global Security or Global Securities. Holder, holder of securities, Securityholder. Indebtedness. Indenture. Issuer Issuer Order. Marketable Securities. Officers' Certificate Opinion of Counsel. Original issue date Outstanding. Responsible Officer. Security or Securities. Senior Funded Indebtedness. | 66 67 77 77 77 77 77 77 77 77 77 77 77 7 |

| | | | Page |
|--------------------|------|--|----------------|
| | | Subsidiary Trustee Trust Indenture Act of 1939 | 10 10 10 |
| | | ARTICLE TWO | |
| | | ISSUE, EXECUTION, FORM AND REGISTRATION OF SECURITIES. | |
| SECTION | 2.1. | Authentication and Delivery of | |
| 05055011 | 0.0 | Securities | 11 |
| SECTION SECTION | | Execution of Securities | 11 11 |
| SECTION | | Form, Denomination and Date of | 11 |
| 02011011 | 2.7. | Securities; Payments of Interest | 12 |
| SECTION | 2.5. | Registration, Transfer and Exchange | 13 |
| SECTION | 2.6. | Mutilated, Defaced, Destroyed, Los | |
| | | and Stolen Securities | 14 |
| SECTION | 2.7. | Cancellation of Securities; | |
| OFOTTON | | Destruction Thereof | 15 |
| SECTION SECTION | | Temporary Securities Securities Issuable in Global Form | 15 16 |
| SECTION | 2.9. | Securities issuable in Global Form | 10 |
| | | ARTICLE THREE | |
| | | COVENANTS OF THE ISSUER AND THE TRUSTEE. | |
| SECTION | 3.1. | Payment of Principal and Interest | 18 |
| SECTION | 3.2. | Offices for Payments, etc | 18 |
| SECTION | 3.3. | Appointment to Fill a Vacancy in | |
| | | Office of Trustee | 18 |
| SECTION | | Paying Agents | 18 |
| SECTION | | Certificate to Trustee | 19 |
| SECTION | | Securityholders' Lists | 20 20 |
| SECTION SECTION | | Reports by the Issuer | 20 20 |
| SECTION | | Limitation on Liens | 20 |
| Section | | Limitation on Sale and Leaseback | 23 |
| Section | | Change in Control | 23 |
| | | J | |

Page

ARTICLE FOUR

REMEDIES OF THE TRUSTEE AND SECURITYHOLDERS ON EVENT OF DEFAULT.

| SECTION | 4.1. | Event of Default Defined; Acceleration of Maturity; Waiver of Default | 26 |
|---------|-------|---|----|
| SECTION | 4.2. | Collection of Indebtedness by Trustee; | 27 |
| SECTION | 4 3 | Trustee May Prove Debt | 30 |
| SECTION | | Suits for Enforcement | 31 |
| SECTION | | | 31 |
| | | Restoration of Rights on Abandonment of Proceedings | 31 |
| SECTION | 4.6. | Limitations on Suits by Securityholders | 31 |
| SECTION | 4.7. | Powers and Remedies Cumulative; Delay or Omission Not Waiver of Default | 32 |
| SECTION | 1 0 | Control by Securityholders | 33 |
| SECTION | | Waiver of Past Defaults | 33 |
| SECTION | 4.9. | waiver of Past Defaults | 33 |
| | | ARTICLE FIVE | |
| | | CONCERNING THE TRUSTEE. | |
| SECTION | 5.1. | Duties and Responsibilities of the | |
| | | Trustee; During Default; Prior to Default | 34 |
| SECTION | F 2 | Certain Rights of the Trustee | 35 |
| | | | 35 |
| SECTION | 5.3. | Trustee Not Responsible for Recitals, | |
| | | Disposition of Securities or | |
| | | Application of Proceeds Thereof | 36 |
| SECTION | 5.4. | Trustee and Agents May Hold | |
| | | Securities; Collections, etc | 37 |
| SECTION | | Moneys Held by Trustee | 37 |
| SECTION | 5.6. | Compensation and Indemnification | |
| | | of Trustee and Its Prior Claim | 37 |
| SECTION | 5.7. | Right of Trustee to Rely on Officers' Certificate, etc | 38 |
| SECTION | 5.8. | Persons Eligible for Appointment | • |
| | | as Trustee | 38 |
| SECTION | 5.9. | Resignation and Removal; Appointment | - |
| | | of Successor Trustee | 38 |
| CECTTON | | | |
| SECTION | 5.10. | | |
| SECTION | 5.10. | Acceptance of Appointment by Successor Trustee | 40 |

| | | | Page |
|--------------------|-------|--|----------|
| SECTION | 5.11. | Merger, Conversion, Consolidation or Succession to Business of Trustee | 40 |
| | | ARTICLE SIX | |
| | | CONCERNING THE SECURITYHOLDERS. | |
| SECTION | 6.1. | Evidence of Action Taken by Securityholders | 41 |
| SECTION | 6.2. | Proof of Execution of Instruments and of Holding of Securities; | |
| | | Record Date | 41 |
| SECTION SECTION | | Holders to Be Treated as Owners Securities Owned by Issuer Deemed Not | 42 |
| SECTION | 0.4. | Outstanding | 42 |
| SECTION | 6.5. | Right of Revocation of Action Taken | 43 |
| | | ARTICLE SEVEN | |
| | | SUPPLEMENTAL INDENTURES. | |
| | | | |
| SECTION | 7.1. | Supplemental Indentures Without Consent of Securityholders | 43 |
| SECTION | 7.2. | Supplemental Indentures With Consent | |
| CECTION | 7 0 | of Securityholders | 44 46 |
| SECTION SECTION | | Effect of Supplemental Indenture Documents to Be Given to Trustee | 46 46 |
| SECTION | | Notation on Securities in Respect of | 40 |
| SECTION | 7.5. | Supplemental Indentures | 46 |
| | | ARTICLE EIGHT | |
| | | , <u></u> | |
| | | CONSOLIDATION, MERGER, SALE OR CONVEYANCE. | |
| SECTION | 8.1. | Covenant Not to Merge, Consolidate, Sell or Convey Property Except | |
| | | Under Certain Conditions | 47 |
| SECTION | | Successor Corporation Substituted | 47 |
| SECTION | 8.3. | Opinion of Counsel to Trustee | 48 |

| Page |
|------|
| |

ARTICLE NINE

SATISFACTION AND DISCHARGE OF INDENTURE; UNCLAIMED MONEYS.

| SECTION | 9.1. | Indenture | 48 |
|----------|-----------|---|----|
| SECTION | 9 2 | Application by Trustee of Funds | 40 |
| 020.20 | 0.2. | Deposited for Payment of Securities | 49 |
| SECTION | 9.3. | Repayment of Moneys Held by Paying | |
| | | Agent | 49 |
| SECTION | 9.4. | Return of Moneys Held by Trustee and | |
| | | Paying Agent Unclaimed for | |
| | | Three Years | 50 |
| | | | |
| | | ARTICLE TEN | |
| | | MISCELLANEOUS PROVISIONS. | |
| SECTION | 10.1. | Incorporators, Stockholders, Officers | |
| | | and Directors of Issuer Exempt from | |
| | | Individual Liability | 50 |
| SECTION | 10.2. | Provisions of Indenture for the Sole | |
| | | Benefit of Parties and | |
| CECTION | 10.2 | Securityholders | 50 |
| SECTION | 10.3. | Successors and Assigns of Issuer Bound by Indenture | 50 |
| SECTION | 10.4. | Notices and Demands on Issuer, | 50 |
| 020.20 | | Trustee and Securityholders | 51 |
| SECTION | 10.5. | Officers' Certificates and Opinions | |
| | | of Counsel; Statements to Be | |
| | | Contained Therein | 51 |
| SECTION | 10.6. | Payments Due on Saturdays, Sundays | |
| CECTION | 10.7 | and Holidays | 53 |
| SECTION | 10.7. | Conflict of Any Provision of Indenture with Trust Indenture | |
| | | Act of 1939 | 53 |
| SECTION | 10.8. | Massachusetts Law to Govern | 53 |
| SECTION | | Counterparts | 53 |
| SECTION | 10.10. | Effect of Headings | 53 |
| | | | |
| TESTIMO | MITIM | | 54 |
| ILSTINO | 11011 | | 54 |
| | | | |
| SIGNATU | RES | | 54 |
| | | | |
| ACKNOWLI | EDGMENTS. | | 55 |
| | | | |

THIS INDENTURE, dated as of March 1, 1993 between ANALOG DEVICES, INC., a Massachusetts corporation (the "Issuer"), and THE FIRST NATIONAL BANK OF BOSTON, a national banking association duly incorporated and existing under the laws of the United States of America (the "Trustee"),

WITNESSETH:

WHEREAS, the Issuer has duly authorized the issue of its 6-5/8% Notes Due 2000 (the "Securities") and, to provide, among other things, for the authentication, delivery and administration thereof, the Issuer has duly authorized the execution and delivery of this Indenture; and

WHEREAS, the Securities and the Trustee's certificate of authentication shall be in substantially the following form:

[FORM OF FACE OF SECURITY]

\$

No.

ANALOG DEVICES, INC. 6-5/8% NOTES DUE 2000

ANALOG DEVICES, INC., a Massachusetts corporation (the "Issuer", which term includes any successor under the Indenture hereinafter referred to), for value received hereby promises to pay to or registered Dollars at the Issuer's office assigns the principal sum of or agency for said purpose, maintained pursuant to said Indenture, on March 1, 2000, in such coin or currency of the United States of America as at the time of payment shall be legal tender for the payment of public and private debts, and to pay interest, semi-annually on March 1 and September 1 of each year, on said principal sum in like coin or currency at the rate per annum set forth above at said office or agency from the March 1 or the September 1, as the case may be, next preceding the date of this Security to which interest on the Securities has been paid or duly provided for, unless the date hereof is a date to which interest on the Securities has been paid or duly provided for, in which case from the date of this Security, or unless no interest has been paid or duly provided for on the Securities, in which case from March 1, 1993 until payment of said principal sum has been made or duly provided for. Notwithstanding the foregoing, if the date hereof is after February 15 or August 15, as the case may be, and before the following March 1 or September 1, this Security shall bear interest from such March 1 or September 1; PROVIDED, that if the Issuer shall default in the payment of interest due on

such March 1 or September 1, then this Security shall bear interest from the next preceding March 1 or September 1 to which interest on the Securities has been paid or duly provided for, or, if no interest has been paid or duly provided for on the Securities since the original issue date of this Security, from March 1, 1993. The interest so payable on any March 1 or September 1 will, except as otherwise provided in the Indenture referred to on the reverse hereof, be paid to the person in whose name this Security is registered at the close of business on the February 15 or August 15 preceding such March 1 or September 1, whether or not such day is a business day; PROVIDED that interest may be paid, at the option of the Issuer, by mailing a check therefor payable to the registered holder entitled thereto at his last address as it appears on the Security register.

Reference is made to the further provisions set forth on the reverse hereof. Such further provisions shall for all purposes have the same effect as though fully set forth at this place.

This Security shall not be valid or obligatory until the certificate of authentication hereon shall have been duly signed by the Trustee acting under the Indenture.

IN WITNESS WHEREOF, the Issuer has caused this instrument to be duly executed.

| | ANALOG | DEVICES, | INC. |
|---------|--------|----------|------|
| Dated: | By: | | |
| | | | |
| ATTEST: | | | |
| | | | |

(FORM OF REVERSE OF SECURITY)

ANALOG DEVICES, INC.

6-5/8% NOTES DUE 2000

This Security is one of a duly authorized issue of debt securities of the Issuer, limited to the aggregate principal amount of \$80,000,000 (except as otherwise provided in the Indenture mentioned below), issued or to be issued pursuant to an indenture dated as of March 1, 1993, (the "Indenture"), duly executed and delivered by the Issuer to The First National Bank of Boston, Trustee (herein called the "Trustee"). Reference is

hereby made to the Indenture and all indentures supplemental thereto for a description of the rights, limitations of rights, obligations, duties and immunities thereunder of the Trustee, the Issuer and the holders (the words "holders" or "holder" meaning the registered holders or registered holder) of the Securities.

In case an Event of Default, as defined in the Indenture, shall have occurred and be continuing, the principal of all the Securities may be declared due and payable, in the manner and with the effect, and subject to the conditions, provided in the Indenture. The Indenture provides that in certain events such declaration and its consequences may be waived by the holders of a majority in aggregate principal amount of the Securities then outstanding and that, prior to any such declaration, such holders may waive any past default under the Indenture and its consequences except a default in the payment of principal of or interest on any of the Securities. Any such consent or waiver by the holder of this Security (unless revoked as provided in the Indenture) shall be conclusive and binding upon such holder and upon all future holders and owners of this Security and any Security which may be issued in exchange or substitution herefor, whether or not any notation thereof is made upon this Security or such other Securities.

Upon a Change in Control, as defined in the Indenture, the Issuer will be required to offer to repurchase all or part of the Securities at 100% of their principal amount plus accrued interest.

The Indenture permits the Issuer and the Trustee, with the consent of the holders of not less than 66 2/3 percent in aggregate principal amount of the Securities at the time outstanding, evidenced as in the Indenture provided, to execute supplemental indentures adding any provisions to or changing in any manner or eliminating any of the provisions of the Indenture or of any supplemental indenture or modifying in any manner the rights of the holders of the Securities; provided that no such supplemental indenture shall (a) extend the final maturity of any Security, or reduce the principal amount thereof, or reduce the rate or extend the time of payment of interest thereon, or impair or affect the rights of any Securityholder to institute suit for the payment thereof without the consent of the holder of each Security so affected; or (b) reduce the aforesaid percentage of Securities, the consent of the holders of the holders of all Securities then outstanding.

No reference herein to the Indenture and no provision of this Security or of the Indenture shall alter or impair the obligation

of the Issuer, which is absolute and unconditional, to pay the principal of and interest on this Security at the place, times, and rate, and in the currency, herein prescribed.

The Securities are issuable only as registered Securities without coupons in denominations of \$1,000 and any multiple of \$1,000.

At the office or agency of the Issuer referred to on the face hereof and in the manner and subject to the limitations provided in the Indenture, Securities may be exchanged for a like aggregate principal amount of Securities of other authorized denominations.

Upon due presentment for registration of transfer of this Security at the above-mentioned office or agency of the Issuer, a new Security or Securities of authorized denominations, for a like aggregate principal amount, will be issued to the transferee as provided in the Indenture. No service charge shall be made for any such transfer, but the Issuer may require payment of a sum sufficient to cover any tax or other governmental charge that may be imposed in relation thereto.

The Issuer, the Trustee, and any authorized agent of the Issuer or the Trustee, may deem and treat the registered holder hereof as the absolute owner of this Security (whether or not this Security shall be overdue and notwithstanding any notation of ownership or other writing hereon made by anyone other than the Issuer or the Trustee or any authorized agent of the Issuer or the Trustee), for the purpose of receiving payment of, or on account of, the principal hereof and, subject to the provisions on the face hereof, interest hereon and for all other purposes, and neither the Issuer nor the Trustee nor any authorized agent of the Issuer or the Trustee shall be affected by any notice to the contrary.

No recourse shall be had for the payment of the principal of or the interest on this Security, for any claim based hereon, or otherwise in respect hereof, or based on or in respect of the Indenture or any indenture supplemental thereto, against any incorporator, shareholder, officer or director, as such, past, present or future, of the Issuer or of any successor corporation, either directly or through the Issuer or any successor corporation, whether by virtue of any constitution, statute or rule of law or by the enforcement of any assessment or penalty or otherwise, all such liability being, by the acceptance hereof and as part of the consideration for the issue hereof, expressly waived and released.

[FORM OF TRUSTEE'S CERTIFICATE OF AUTHENTICATION]

This is one of the Securities described in the within-mentioned $\ensuremath{\mathsf{Indenture}}$.

THE FIRST NATIONAL BANK OF BOSTON, as Trustee

Authorized Officer

OPTION TO ELECT REPURCHASE UPON A CHANGE IN CONTROL

If you wish to elect to have this Note repurchased, in whole or in part, by the Issuer pursuant to Section 3.11 of the Indenture, check this box: $[\]$

AND WHEREAS, all things necessary to make the Securities, when executed by the Issuer and authenticated and delivered by the Trustee as in this Indenture provided, the valid, binding and legal obligations of the Issuer, and to constitute these presents a valid indenture and agreement according to its terms, have been done;

NOW, THEREFORE:

In consideration of the premises and the purchases of the Securities by the holders thereof, the Issuer and the Trustee mutually covenant and agree for the equal and proportionate benefit of the respective holders from time to time of $% \left(1\right) =\left(1\right) +\left(1\right) =\left(1\right) +\left(1\right) +\left(1\right) =\left(1\right) +\left(1\right) +\left($

ARTICLE ONE

DEFINITIONS.

SECTION 1.1 CERTAIN TERMS DEFINED. The following terms (except as otherwise expressly provided or unless the context otherwise clearly requires) for all purposes of this Indenture and of any indenture supplemental hereto shall have the respective meanings specified in this Section. All other terms used in this Indenture which are defined in the Trust Indenture Act of 1939 or the definitions of which in the Securities Act of 1933 are referred to in the Trust Indenture Act of 1939 (except as herein otherwise expressly provided or unless the context otherwise clearly requires), shall have the meanings assigned to such terms in said Trust Indenture Act and in said Securities Act as in force at the date of this Indenture. All accounting terms used herein and not expressly defined shall have the meanings given to them in accordance with GENERALLY ACCEPTED ACCOUNTING PRINCIPLES, and the term "generally accepted accounting principles" shall mean such accounting principles which are generally accepted at the date or time of any computation or at the date hereof. The words "HEREIN", "HEREOF" and "HEREUNDER" and other words of similar import refer to this Indenture as a whole and not to any particular Article, Section or other subdivision. The terms defined in this Article include the plural as well as the singular.

"ATTRIBUTABLE DEBT" when used in connection with a sale and leaseback transaction referred to below shall mean, as of any particular time, the lesser of (a) the fair value of the assets subject to such arrangement or (b) the aggregate of present values (discounted at a rate per annum equal to the interest borne by the Securities and compounded semi-annually) of the obligations of the Issuer or any Subsidiary for net rental payments during the remaining term of all leases (including any period for which such lease has been extended or may, at the option of the lessor, be extended). The term "net rental payments" under any lease of any period shall mean the sum of the rental and other payments required to be paid in such period by the lessee thereunder, not including, however, any amounts required to be paid by such lessee (Whether or not designated as rental or additional rental) on account of maintenance and repairs, reconstruction, insurance, taxes, assessments, water rates or similar charges required to be paid by such lessee thereunder or any amounts required to be paid by such lessee thereunder contingent upon the amount of sales,

maintenance and repairs, reconstruction, insurance, taxes, assessments, water rates or similar charges.

"BOARD OF DIRECTORS" means either the Board of Directors of the Issuer or any committee of such Board duly authorized to act hereunder.

"BOARD RESOLUTION" means a copy of a resolution certified by the Clerk or an Assistant Clerk of the Issuer to have been duly adopted by the Board of Directors and to be in full force and effect on the date of such certification, and delivered to the Trustee.

"BUSINESS DAY" means a day which in the city (or in any of the cities, if more than one) where amounts are payable in respect of the Securities, as specified on the face of the form of Security recited above, is neither a legal holiday nor a day on which banking institutions are authorized by law or regulation to close.

"CASH" means all items classified as cash and cash equivalents on the most recently available balance sheet of the Issuer and its Subsidiaries, in accordance with generally accepted accounting principles.

"CHANGE IN CONTROL" means any event or condition specified as such in Section 3.11.

"CONSOLIDATED NET TANGIBLE ASSETS" means the aggregate amount of assets after deducting therefrom (a) all Cash and Marketable Securities, (b) all current liabilities (excluding any thereof constituting Funded Indebtedness by reason of being renewable or extendible) and (c) all goodwill, tradenames, trademarks, patents, unamortized debt discount and expense and other like intangibles, all as set forth on the most recent balance sheet of the Issuer and its Subsidiaries and computed in accordance with generally accepted accounting principles.

"CORPORATE TRUST OFFICE" means the office of the Trustee at which the corporate trust business of the Trustee shall, at any particular time, be principally administered, which office is, at the date as of which this Indentures is dated, located at Blue Hills Office Park, 150 Royall Street, Canton, Massachusetts 02021, Attention: Corporate Trust Division, Mail Stop 45-02-15.

"DEPOSITORY" means, unless otherwise specified by the Issuer pursuant to Section 2.9, with respect to Securities issuable or issued as a Global Security, The Depository Trust Company, New York, New York, or any successor thereto registered as a clearing

agency under the Securities Exchange Act of 1934, as amended, or other applicable statute or regulation.

"EVENT OF DEFAULT" means any event or condition specified as such in Section 4.1 which shall have continued for the period of time, if any, therein designated.

"EXEMPTED DEBT" means the sum of the following items outstanding as of the date Exempted Debt is to be determined: (a) Indebtedness of the Issuer and its Subsidiaries incurred after the date of the Indenture and secured by liens not permitted to be created or assumed pursuant to Section 3.9 of the Indenture, and (b) Attributable Debt of the Issuer and its Subsidiaries in respect of every sale and leaseback transaction entered into after the date of the Indenture, other than those leases expressly permitted by Section 3.10

"FUNDED INDEBTEDNESS" means all Indebtedness having a maturity of more than 12 months from the date as of which the amount thereof is to be determined or having a maturity of less than 12 months but by its terms being renewable or extendible beyond 12 months from such date at the option of the borrower.

"GLOBAL SECURITY" means a Security which is executed by the Issuer and authenticated and delivered by the Trustee to the Depository or pursuant to the Depository's instruction, all in accordance with this Indenture or any indenture supplemental hereto or Board Resolution which shall be registered in the name of the Depository or its nominee and which shall represent, and shall be denominated in an amount equal to the aggregate principal amount of, all of the Outstanding Securities or any portion thereof, in either case having the same terms, including, without limitation, the same original issue date, date or dates on which principal is due, and interest rate or method of determining interest.

"HOLDER", "HOLDER OF SECURITIES", "SECURITYHOLDER" or other similar terms means the registered holder of any Security.

"INDEBTEDNESS" means all items classified as indebtedness on the most recently available balance sheet of the Issuer and its Subsidiaries, in accordance with generally accepted accounting principles.

"INDENTURE" means this instrument as originally executed and delivered or, if amended or supplemented as herein provided, as so amended or supplemented.

"ISSUER" means (except as otherwise provided in Article Five) Analog Devices, Inc., a Massachusetts corporation, and, subject to Article Eight, its successors and assigns.

"ISSUER ORDER" means a written instruction signed in the name of the Issuer by its Chairman of the Board, a Vice Chairman, its President or a Vice President, and by its Treasurer, an Assistant Treasurer, its Clerk or an Assistant Clerk, and delivered to the Trustee.

"MARKETABLE SECURITIES" means all items classified as marketable securities on the most recently available balance sheet of the Issuer and its Subsidiaries, in accordance with generally accepted accounting principles.

"OFFICERS' CERTIFICATE" means a certificate signed by the Chairman of the Board of Directors or the President or any Vice President (whether or not designated by a number or numbers or a word or words added before or after the title "Vice President") and by the Treasurer or the Clerk or any Assistant Clerk of the Issuer and delivered to the Trustee. Each such certificate shall comply with Section 314 of the Trust Indenture Act of 1939 and include the statements provided for in Section 10.5.

"OPINION OF COUNSEL" means an opinion in writing signed by legal counsel who may be an employee of or counsel to the Issuer or who may be other counsel satisfactory to the Trustee. Each such opinion shall comply with Section 314 of the Trust Indenture Act and include the statements provided for in Section 10.5, if and to the extent required hereby.

"ORIGINAL ISSUE DATE" of any Security (or portion thereof) means the earlier of (a) the date of such Security or (b) the date of any Security (or portion thereof) for which such Security was issued (directly or indirectly) on registration of transfer, exchange or substitution.

"OUTSTANDING", when used with reference to Securities, shall, subject to the provisions of Section 6.4, mean, as of any particular time, all Securities authenticated and delivered by the Trustee under this Indenture, except

- (a) Securities theretofore cancelled by the Trustee or delivered to the Trustee for cancellation;
- (b) Securities, or portions thereof, for the payment of which moneys in the necessary amount shall have been deposited in trust with the Trustee or with any paying agent (other than the Issuer) or shall have been set aside,

segregated and held in trust by the Issuer (if the Issuer shall act as its own paying agent); and

(c) Securities in substitution for which other Securities shall have been authenticated and delivered, or which shall have been paid, pursuant to the terms of Section 2.6 (unless proof satisfactory to the Trustee is presented that any of such Securities is held by a person in whose hands such Security is a legal, valid and binding obligation of the Issuer).

"RESPONSIBLE OFFICER" when used with respect to the Trustee means any officer in the Corporate Trust Office of the Trustee or any other officer of the Trustee customarily performing functions similar to those performed by the persons who at the time shall be such officers, respectively, or to whom any corporate trust matter is referred because of his knowledge of and familiarity with the particular subject.

"SECURITY" or "SECURITIES" means any Note or Notes, as the case may be, authenticated and delivered under this Indenture (including, without limitation, any Global Security).

"SENIOR FUNDED INDEBTEDNESS" means any Funded Indebtedness of the Company that is not subordinated in right of payment to any other Indebtedness of the Company.

"SUBSIDIARY" means any corporation (i) of which at least a majority of the outstanding stock having the voting power to elect a majority of the Board of Directors of such corporation (irrespective of whether or not at the time stock of any other class or classes of such corporation shall have or might have voting power by reason of the happening of any contingency) is at the time directly or indirectly owned or controlled by the Issuer, or by one or more of the Subsidiaries, or by the Issuer and one or more Subsidiaries and (ii) whose financial statements are consolidated with those of the Issuer in accordance with generally accepted accounting principles.

"TRUSTEE" means the entity identified as "Trustee" in the first paragraph hereof and, subject to the provisions of Article Five, shall also include any successor trustee.

"TRUST INDENTURE ACT OF 1939" (except as otherwise provided in Sections 7.1 and 7.2) means the Trust Indenture Act of 1939 as in force at the date as of which this Indenture was originally executed.

ARTICLE TWO

ISSUE, EXECUTION, FORM AND REGISTRATION OF SECURITIES

SECTION 2.1 AUTHENTICATION AND DELIVERY OF SECURITIES. Upon the execution and delivery of this Indenture, or from time to time thereafter, Securities in an aggregate principal amount not in excess of the amount specified in the form of Security hereinabove recited (except as otherwise provided in Section 2.6) may be executed by the Issuer and delivered to the Trustee for authentication, and the Trustee shall thereupon authenticate and deliver said Securities to or upon the written order of the Issuer, signed by both (a) its Chairman of the Board of Directors, or any Vice Chairman of the Board of Directors, or its President or any Vice President (whether or not designated by a number or numbers or a word or words added before or after the title "Vice President") and (b) by its Treasurer or any Assistant Treasurer or its Clerk or any Assistant Clerk without any further action by the Issuer.

SECTION 2.2 EXECUTION OF SECURITIES. The Securities shall be signed on behalf of the Issuer by both (a) its Chairman of the Board of Directors or any Vice Chairman of the Board of Directors or its President or any Vice President (whether or not designated by a number or numbers or a word or words added before or after the title "Vice President") and (b) by its Treasurer or any Assistant Treasurer or its Clerk or any Assistant Clerk. Such signatures may be the manual or facsimile signatures of the present or any future such officers. Typographical and other minor errors or defects in any such reproduction of any such signature shall not affect the validity or enforceability of any Security which has been duly authenticated and delivered by the Trustee.

In case any officer of the Issuer who shall have signed any of the Securities shall cease to be such officer before the Security so signed shall be authenticated and delivered by the Trustee or disposed of by the Issuer, such Security nevertheless may be authenticated and delivered or disposed of as though the person who signed such Security had not ceased to be such officer of the Issuer; and any Security may be signed on behalf of the Issuer by such persons as, at the actual date of the execution of such Security, shall be the proper officers of the Issuer, although at the date of the execution and delivery of this Indenture any such person was not such officer.

SECTION 2.3 CERTIFICATE OF AUTHENTICATION. Only such Securities as shall bear thereon a certificate of authentication

substantially in the form hereinbefore recited, executed by the Trustee by manual signature of one of its authorized officers, shall be entitled to the benefits of this Indenture or be valid or obligatory for any purpose. Such certificate by the Trustee upon any Security executed by the Issuer shall be conclusive evidence that the Security so authenticated has been duly authenticated and delivered hereunder and that the holder is entitled to the benefits of this Indenture.

SECTION 2.4 FORM, DENOMINATION AND DATE OF SECURITIES; PAYMENTS OF INTEREST. The Securities and the Trustee's certificates of authentication shall be substantially in the form recited above. The Securities shall be issuable as registered securities without coupons and in denominations provided for in the form of Security above recited. The Securities shall be numbered, lettered, or otherwise distinguished in such manner or in accordance with such plans as the officers of the Issuer executing the same may determine with the approval of the Trustee.

The Securities shall be printed, lithographed or engraved or produced by any combination of these methods on steel engraved borders or may be produced in any other manner permitted by the rules of any securities exchange or market on which the securities may be listed, all as determined by the officers executing such Securities, as evidenced by their execution of such Securities.

Any of the Securities may be issued with appropriate insertions, omissions, substitutions and variations, and may have imprinted or otherwise reproduced thereon such legend or legends, not inconsistent with the provisions of this Indenture, as may be required to comply with any law or with any rules or regulations pursuant thereto, or with the rules of any securities market in which the Securities are admitted to trading, or to conform to general usage.

Each Security shall be dated the date of its authentication, shall bear interest from the applicable date and shall be payable on the dates specified on the face of the form of Security recited above.

The person in whose name any Security is registered at the close of business on any record date with respect to any interest payment date shall be entitled to receive the interest, if any, payable on such interest payment date notwithstanding any transfer or exchange of such Security subsequent to the record date and prior to such interest payment date, except if and to the extent the Issuer shall default in the payment of the interest due on such interest payment date, in which case such defaulted interest shall be paid to the persons in whose names outstanding Securities

are registered at the close of business on a subsequent record date (which shall be not less than five business days prior to the date of payment of such defaulted interest) established by notice given by mail by or on behalf of the Issuer to the holders of Securities not less than 15 days preceding such subsequent record date. The term "record date" as used with respect to any interest payment date (except a date for payment of defaulted interest) shall mean if such interest payment date is the first day of a calendar month, the fifteenth day of the next preceding calendar month and shall mean, if such interest payment date is the fifteenth day of a calendar month, the first day of such calendar month, whether or not such record date is a business day.

SECTION 2.5 REGISTRATION, TRANSFER AND EXCHANGE. The Issuer will keep at each office or agency to be maintained for the purpose as provided in Section 3.2 a register or registers in which, subject to such reasonable regulations as it may prescribe, it will register, and will register the transfer of, Securities as in this Article provided. Such register shall be in written form in the English language or in any other form capable of being converted into such form within a reasonable time. At all reasonable times such register or registers shall be open for inspection by the Trustee.

Subject to Section 2.9, upon due presentation for registration of transfer of any Security at each such office or agency, the Issuer shall execute and the Trustee shall authenticate and deliver in the name of the transferee or transferees a new Security or Securities in authorized denominations for a like aggregate principal amount.

Subject to Section 2.9, any Security or Securities may be exchanged for a Security or Securities in other authorized denominations, in an equal aggregate principal amount. Securities to be exchanged shall be surrendered at each office or agency to be maintained by the Issuer for the purpose as provided in Section 3.2, and the Issuer shall execute and the Trustee shall authenticate and deliver in exchange therefor the Security or Securities which the Securityholder making the exchange shall be entitled to receive, bearing numbers not contemporaneously outstanding.

All Securities presented for registration of transfer, exchange or payment shall (if so required by the Issuer or the Trustee) be duly endorsed by, or be accompanied by a written instrument or instruments of transfer in form satisfactory to the Issuer and the Trustee duly executed by, the holder or his attorney duly authorized in writing.

The Issuer may require payment of a sum sufficient to cover any tax or other governmental charge that may be imposed in connection with any exchange or registration of transfer of Securities. No service charge shall be made for any such transaction.

All securities issued upon any transfer or exchange of Securities shall be valid obligations of the Issuer, evidencing the same debt, and entitled to the same benefits under this Indenture, as the Securities surrendered upon such transfer or exchange.

SECTION 2.6 MUTILATED, DEFACED, DESTROYED, LOST AND STOLEN SECURITIES. In case any temporary or definitive Security shall become mutilated, defaced or be apparently destroyed, lost or stolen, the Issuer in its discretion may execute, and upon the written request of any officer of the Issuer, the Trustee shall authenticate and deliver, a new Security, bearing a number not contemporaneously outstanding, in exchange and substitution for the mutilated or defaced Security, or in lieu of and substitution for the Security so apparently destroyed, lost or stolen. In every case the applicant for a substitute Security shall furnish to the Issuer and to the Trustee and any agent of the Issuer or the Trustee such security or indemnity as may be required by them to indemnify and defend and to save each of them harmless and, in every case of destruction, loss or theft, evidence to their satisfaction of the apparent destruction, loss or theft of such Security and of the ownership thereof.

Upon the issuance of any substitute Security, the Issuer may require the payment of a sum sufficient to cover any tax or other governmental charge that may be imposed in relation thereto and any other expenses (including the fees and expenses of the Trustee) connected therewith. In case any Security which has matured or is about to mature, shall become mutilated or defaced or be apparently destroyed, lost or stolen, the Issuer may, instead of issuing a substitute Security, pay or authorize the payment of the same (without surrender thereof except in the case of a mutilated or defaced Security), if the applicant for such payment shall furnish to the Issuer and to a the Trustee and any agent of the Issuer or the Trustee such security or indemnity as any of them may require to save each of them harmless from all risks, however remote, and, in every case of apparent destruction, loss or theft, the applicant shall also furnish to the Issuer and the Trustee and any agent of the Issuer or the Trustee evidence to their satisfaction of the apparent destruction, loss or theft of such Security and of the ownership thereof.

Every substitute Security issued pursuant to the provisions of this Section by virtue of the fact that any Security is apparently destroyed, lost or stolen shall constitute an additional contractual obligation of the Issuer, whether or not the apparently destroyed, lost or stolen Security shall be at any time enforceable by anyone and shall be entitled to all the benefits of (but shall be subject to all the limitations of rights set forth in) this Indenture equally and proportionately with any and all other Securities duly authenticated and delivered hereunder. All Securities shall be held and owned upon the express condition that, to the extent permitted by law, the foregoing provisions are exclusive with respect to the replacement or payment of mutilated, defaced, or apparently destroyed, lost or stolen Securities and shall preclude any and all other rights or remedies notwithstanding any law or statute existing or hereafter enacted to the contrary with respect to the replacement or payment of negotiable instruments or other securities without their surrender.

SECTION 2.7 CANCELLATION OF SECURITIES; DESTRUCTION THEREOF. All Securities surrendered for payment, redemption, registration of transfer or exchange, if surrendered to the Issuer or any agent of the Issuer or the Trustee, shall be delivered to the Trustee for cancellation or, if surrendered to the Trustee, shall be cancelled by it; and no Securities shall be issued in lieu thereof except as expressly permitted by any of the provisions of this Indenture. The Trustee shall destroy cancelled Securities held by it and deliver a certificate of destruction to the Issuer. If the Issuer shall acquire any of the Securities, such acquisition shall not operate as a redemption or satisfaction of the indebtedness represented by such Securities unless and until the same are delivered to the Trustee for cancellation.

SECTION 2.8 TEMPORARY SECURITIES. Pending the preparation of definitive Securities, the Issuer may execute and the Trustee shall authenticate and deliver temporary Securities (printed, lithographed, typewritten or otherwise reproduced, in each case in form satisfactory to the Trustee). Temporary Securities shall be issuable as registered Securities without coupons, of any authorized denomination, and substantially in the form of the definitive Securities but with such omissions, insertions and variations as may be appropriate for temporary Securities, all as may be determined by the Issuer with the concurrence of the Trustee. Temporary Securities may contain such reference to any provisions of this Indenture as may be appropriate. Every temporary Security shall be executed by the Issuer and be authenticated by the Trustee upon the same conditions and in substantially the same manner, and with like effect, as the definitive Securities. Without unreasonable delay the Issuer

shall execute and shall furnish definitive Securities and thereupon temporary Securities may be surrendered in exchange therefor without charge at each office or agency to be maintained by the Issuer for the purpose pursuant to Section 3.2, and the Trustee shall authenticate and deliver in exchange for such temporary Securities a like aggregate principal amount of definitive Securities of authorized denominations. Until so exchanged the temporary Securities shall be entitled to the same benefits under this Indenture as definitive Securities.

SECTION 2.9. SECURITIES ISSUABLE IN GLOBAL FORM. (a) If the Company shall establish that the Securities may be issued in global form, the Company shall execute and the Trustee shall, in accordance with this Article Two and the Issuer Order, authenticate and deliver one or more Global Securities which (i) shall represent, and shall be denominated in an amount equal to, the aggregate principal amount of all of the Securities to be issued hereunder, (ii) shall be registered in the name of the Depository for such Global Security or its nominee, (iii) shall be delivered by the Trustee to the Depository or pursuant to the Depository's instructions, (iv) shall be substantially in the form of the form of Security specified pursuant to Section 2.4, with such changes therein as may be necessary to reflect that such Security is a Global Security, and (v) each of which shall bear a legend substantially to the following effect: "Unless and until it is exchanged in whole or in part for Securities in definitive form, this Security may not be transferred except as a whole by the Depository to a nominee of the Depository, or by a nominee of the Depository to the Depository or another nominee of the Depository, or by the Depository or any such nominee to a successor Depository or a nominee of such successor Depository. Unless this certificate is presented by an authorized representative of the Depository to the Issuer or its agent for registration of transfer, exchange or payment, and any certificate issued is registered in the name of the Depository or its nominee and any payment is made to the Depository or its nominee, ANY TRANSFER, PLEDGE OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL since the registered owner hereof has an interest herein.'

(b) Notwithstanding any provisions of this Section 2.9 or of Section 2.5, unless and until a Global Security is exchanged for Securities in definitive form, a Global Security may be transferred, in whole, but not in part, and in the manner provided in Section 2.5, only by the Depository to a nominee of such Depository or by a nominee of such Depository to such Depository or another nominee to a successor Depository selected or approved by the Issuer or to a nominee of such successor Depository or in the manner specified in Section 2.9(c).

- (c) If at any time the Depository for any Securities represented by one or more Global Securities notifies the Issuer that it is unwilling or unable to continue as Depository of such Securities or if at any time the Depository shall no longer be eligible as provided in the definition of the term "Depository" in Article One and a successor Depository is not appointed by the Issuer within 90 days after the Issuer receives such notice or becomes aware of such condition, as the case may be, this Section 2.9 shall no longer be applicable to the Securities and the Issuer will execute, and the Trustee will authenticate and deliver, Securities in definitive form without coupons, in authorized denominations, and in an aggregate principal amount equal to the principal amount of the Global Security or Securities then outstanding in exchange for such Global Security or Securities. In addition, the Issuer may at any time and in its sole discretion determine that the Securities shall no longer be represented by Global Securities and that the provisions of this Section 2.9 shall no longer apply to the Securities. In such event the Issuer will execute, and the Trustee, upon receipt of an Issuer Order evidencing such determination by the Issuer, will authenticate and deliver, Securities in definitive form without coupons, in authorized denominations in exchange for and in an aggregate principal amount equal to the principal amount of the Global Security or Securities then Outstanding. Upon the exchange of the Securities for such Securities in definitive form without coupons, in authorized denominations, such Global Security or Securities shall be cancelled by the Trustee. Such Securities in definitive form issued in exchange for the Global Security or Securities pursuant to this Section 2.9(c) shall be registered in such names, and in such authorized denominations as the Depository, pursuant to instructions from its direct or indirect participants or otherwise, shall instruct the Trustee. The Trustee shall deliver such Securities to the persons in whose name such Securities are so registered.
- (d) As long as the Securities Outstanding are represented by one or more Global Securities, the Issuer shall pay or cause to be paid the principal of, and interest on, such Global Securities to the Holder thereof or a single nominee of the Holder, or, at the option of the Issuer, to such other persons as the Holder thereof may designate on the date such payments are due.

SECTION 3.1 PAYMENT OF PRINCIPAL AND INTEREST. The Issuer covenants and agrees that it will duly and punctually pay or cause to be paid the principal of, and interest on, each of the Securities at the place or places, at the respective times and in the manner provided in the Securities. Each instalment of interest on the Securities may be paid by mailing checks for such interest payable to or upon the written order of the holders of Securities entitled thereto as they shall appear on the registry books of the Issuer.

SECTION 3.2 OFFICES FOR PAYMENTS, ETC. So long as any of the Securities remain outstanding, the Issuer will maintain in the Borough of Manhattan, New York, New York, and in any other city in which the Corporate Trust Office of the Trustee may be located, the following: (a) an office or agency where the Securities may be presented for payment, (b) an office or agency where the Securities may be presented for registration of transfer and for exchange as in this Indenture provided and (c) an office or agency where notices and demands to or upon the Issuer in respect of the Securities or of this Indenture may be served. The Issuer will give to the Trustee written notice of the location of any such office or agency and of any change of location thereof. The Issuer hereby initially designates the Corporate Trust Office of the Trustee as one office or agency for each such purpose and Banc Boston Trust Company of New York as another such office or agency. In case the Issuer shall fail to maintain any such office or agency or shall fail to give such notice of the location or of any change in the location thereof, presentations and demands may be made and notices may be served at the Corporate Trust Office.

SECTION 3.3 APPOINTMENT TO FILL A VACANCY IN OFFICE OF TRUSTEE. The Issuer, whenever necessary to avoid or fill a vacancy in the office of Trustee, will appoint, in the manner provided in Section 5.9, a Trustee, so that there shall at all times be a Trustee hereunder.

SECTION 3.4 PAYING AGENTS. Whenever the Issuer shall appoint a paying agent other than the Trustee, it will cause such paying agent to execute and deliver to the Trustee an instrument in which such agent shall agree with the Trustee, subject to the provisions of this Section,

(a) that it will hold all sums received by it as such agent for the payment of the principal of or interest on the Securities (whether such sums have been paid to it by the

Issuer or by any other obligor on the Securities) in trust for the benefit of the holders of the Securities or of the Trustee,

- (b) that it will give the Trustee notice of any failure by the Issuer (or by any other obligor on the Securities) to make any payment of the principal of or interest on the Securities when the same shall be due and payable, and
- (c) pay any such sums so held in trust by it to the Trustee upon the Trustee's written request at any time during the continuance of the failure referred to in clause (b) above.

The Issuer will, prior to each due date of the principal of or interest on the Securities, deposit with the paying agent a sum sufficient to pay such principal or interest, and (unless such paying agent is the Trustee) the Issuer will promptly notify the Trustee of any failure to take such action.

If the Issuer shall act as its own paying agent, it will, on or before each due date of the principal of or interest on the Securities, set aside, segregate and hold in trust for the benefit of the holders of the Securities a sum sufficient to pay such principal or interest so becoming due. The Issuer will promptly notify the Trustee of any failure to take such action.

Anything in this Section to the contrary notwithstanding, the Issuer may at any time, for the purpose of obtaining a satisfaction and discharge of this Indenture or for any other reason, pay or cause to be paid to the Trustee all sums held in trust by the Issuer or any paying agent hereunder, as required by this Section, such sums to be held by the Trustee upon the trusts herein contained.

Anything in this Section to the contrary notwithstanding, the agreement to hold sums in trust as provided in this Section are subject to the provisions of Sections 9.3 and 9.4.

SECTION 3.5 CERTIFICATE TO TRUSTEE. The Issuer will furnish to the Trustee on or before January 31 in each year (beginning with 1994) a brief certificate (which need not comply with Section 10.5) from the principal executive, financial or accounting officer of the Company as to his or her knowledge of the Company's compliance with all conditions and covenants under the Indenture as of the end of the preceding fiscal year (such compliance to be determined without regard to any period of grace or requirement of notice provided under the Indenture).

SECTION 3.6 SECURITYHOLDERS' LISTS. If and so long as the Trustee shall not be the Security registrar, the Issuer will furnish or cause to be furnished to the Trustee a list in such form as the Trustee may reasonably require of the names and addresses of the holders of the Securities pursuant to Section 312 of the Trust Indenture Act of 1939 (a) semi-annually not more than 15 days after each record date for the payment of semi-annual interest on the Securities, as hereinabove specified, as of such record date, and (b) at such other times as the Trustee may request in writing, within 30 days after receipt by the Issuer of any such request as of a date not more than 15 days prior to the time such information is furnished.

SECTION 3.7 REPORTS BY THE ISSUER. The Issuer covenants to file with the Trustee, within 15 days after the Issuer is required to file the same with the Commission, copies of the annual reports and of the information, documents, and other reports which the Issuer may be required to file with the Commission pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934.

SECTION 3.8 REPORTS BY THE TRUSTEE. (a) On or about each July 15, the Trustee shall transmit to Holders such reports, if any, dated as of May 15, concerning the Trustee of its actions under this Indenture as may be required pursuant to the Trust Indenture Act of 1939 in the manner provided pursuant thereto.

(b) A copy of each such report shall, at the time of such transmission to Holders, be filed by the Trustee with each stock exchange upon which any Securities are listed, with the Securities and Exchange Commission and with the Issuer. The Issuer will notify the Trustee when any Securities are listed on any stock exchange.

SECTION 3.9 LIMITATIONS ON LIENS. The Issuer will not create or assume, and will not permit any Subsidiary to create or assume, any Indebtedness for money borrowed which is secured by a mortgage, pledge, security interest or lien ("liens") of or upon any assets, whether now owned or hereafter acquired, of the Issuer or any such Subsidiary without equally and ratably securing the Securities by a lien ranking ratably with and equal to (or at the Issuer's option prior to) such secured Indebtedness. The foregoing restriction, however, will not apply to:

- (a) liens on any assets of any corporation existing at the time such corporation becomes a Subsidiary;
- (b) liens on any assets existing at the time of acquisition of such assets by the Issuer or a Subsidiary, or

liens to secure the payment of all or any part of the purchase price of such assets upon the acquisition of such assets by the Issuer or a Subsidiary or to secure any indebtedness incurred or guaranteed by the Issuer or a Subsidiary prior to, at the time of, or within 18 months after such acquisition (or in the case of real property, the completion of construction (including any improvements on an existing asset or property)) or commencement of full operation of such asset, whichever is later which indebtedness is incurred or guaranteed for the purpose of financing all or any part of the purchase price thereof or, in the case of real property, construction or improvements thereon; PROVIDED, HOWEVER, that in the case of any such acquisition, construction or improvement, the lien shall not apply to any assets theretofore owned by the Issuer or a Subsidiary, other than, in the case of any such construction or improvement, any real property on which the property so constructed, or the improvement, is located;

- (c) liens on any assets to secure indebtedness of a Subsidiary to the Issuer or to another Subsidiary;
- (d) liens on any assets of a corporation existing at the time such corporation is merged into or consolidated with the Issuer or a Subsidiary or at the time of a purchase, lease or other acquisition of the assets of a corporation or firm as an entirety or substantially as an entirety by the Issuer or a Subsidiary;
- (e) liens on any assets of the Issuer or a Subsidiary in favor of the United States of America or any State thereof, or any department, agency or instrumentality or political subdivision of the United States of America or any State thereof, or in favor of any other country, or any political subdivision thereof, to secure partial, progress, advance or other payments pursuant to any contract or statute or to secure any indebtedness incurred or guaranteed for the purpose of financing all or any part of the purchase price (or, in the case of real property, the cost of construction), of the assets subject to such liens (including, but not limited to, liens incurred in connection with pollution control, industrial revenue or similar financings);
- (f) any extension, renewal or replacement (or successive extensions, renewals or replacements) in whole or in part of any lien referred to in the foregoing clauses (a) to (e), inclusive; PROVIDED, HOWEVER, that the principal amount of indebtedness secured thereby shall not exceed the principal amount of indebtedness so secured at the time of

such extension, renewal or replacement and that such extension, renewal or replacement shall be limited to all or part of the assets which secured the lien so extended, renewed or replaced (plus improvements and construction on such real property);

- (g) liens imposed by law, such as mechanics', work- men's, repairmen's, materialmen's, carriers', warehousemen's, vendors' or other similar liens arising in the ordinary course of business, or governmental (federal, state or municipal) liens arising out of contracts for the sale of products or services by the Issuer or any Subsidiary, or deposits or pledges to obtain the release of any of the foregoing liens;
 - (h) pledges, liens or deposits under worker's compensation laws or similar legislation and liens or judgments thereunder which are not currently dischargeable, or in connection with bids, tenders, contracts (other than for the payment of money) or leases to which the Issuer or any Subsidiary is a party, or to secure public or statutory obligations of the Issuer or any Subsidiary, or in connection with obtaining or maintaining self-insurance or to obtain the benefits of any law, regulation or arrangement pertaining to the unemployment insurance, old age pensions, social security or similar matters, or to secure surety, appeal or customs bonds to which the Issuer or any Subsidiary is a party, or in litigation or other proceedings such as, but not limited to, interpleader proceedings, and other similar pledges, liens or deposits made or incurred in the ordinary course of business;
 - (i) liens created by or resulting from any litigation or other proceeding which is being contested in good faith by appropriate proceedings, including liens arising out of judgments or awards against the Issuer or any Subsidiary with respect to which the Issuer or such Subsidiary is in good faith prosecuting an appeal or proceedings for review or for which the time to make an appeal has not yet expired; or final unappealable judgment liens which are satisfied within 30 days of the date of judgment; or liens incurred by the Issuer or any Subsidiary for the purpose of obtaining a stay or discharge in the course of any litigation or other proceeding to which the Issuer or such Subsidiary is a party; or
 - (j) liens for taxes or assessments or governmental charges or levies not yet due or delinquent, or which can thereafter be paid without penalty, or which are being contested in good faith by appropriate proceedings;

landlord's liens on property held under lease; and any other liens or charges incidental to the conduct of the business of the Issuer or any Subsidiary or the ownership of the assets of any of them which were not incurred in connection with the borrowing of money or the obtaining of advances or credit and which do not, in the opinion of the Issuer, materially impair the use of such assets in the operation of the business of the Issuer or such Subsidiary or the value of such assets for the purposes of such business.

Notwithstanding the restrictions set forth in the preceding paragraph, the Issuer or any Subsidiary will be permitted to create or assume any Indebtedness which is secured by a lien not permitted by the foregoing subsections (a) through (j) without equally and ratably securing the Securities, provided that at the time of such creation or assumption, and after giving effect thereto, Exempted Debt does not exceed the aggregate sum of (i) 20% of Consolidated Net Tangible Assets, (ii) Cash and (iii) Marketable Securities

SECTION 3.10 LIMITATION ON SALE AND LEASE-BACK. The Issuer will not, nor will it permit any Subsidiary to, enter into any sale and leaseback transaction with respect to any assets, other than any such transaction involving a lease for a term of not more than three years or involving a sale and leaseback between the Company and any Subsidiary or between two or more Subsidiaries, unless either (a) the Issuer or such Subsidiary would be entitled to incur Indebtedness secured by a lien on the assets to be leased, in an amount at least equal to the Attributable Debt with respect to such sale and leaseback transaction, without equally and ratably securing the Securities, pursuant to clauses (a) through (j) inclusive of Section 3.9, or (b) the proceeds of the sale of the assets to be leased are at least equal to the fair value of such assets (as determined by the Board of Directors of the Issuer) and the proceeds are applied to the purchase or acquisition (or, in the case of property, the construction) of assets or to the retirement (other than at maturity or pursuant to a mandatory sinking fund or redemption provision) of Senior Funded Indebtedness. This limitation, however, will not apply if at the time the Issuer or any Subsidiary enters into such sale and leaseback transaction, and after giving effect thereto, Exempted Debt does not exceed the aggregate sum of (i) 20% of Consolidated Net Tangible Assets, (ii) Cash and (iii) Marketable Securities.

SECTION 3.11 CHANGE IN CONTROL.

(a) If at any time (i) any person or any persons acting together which would constitute a "group" for purposes of Section 13 or 14 of the Securities Exchange Act of 1934 (a "Group") shall

beneficially own (as defined in Rule 13d-3 promulgated pursuant to the Securities Exchange Act of 1934) 50% or more of the outstanding shares of the common stock of the Issuer or (ii) during any period of 12 consecutive calendar months, individuals who at the beginning of such period were directors of the Issuer shall cease to constitute a majority of the Board of Directors (other than as a result of the death of one or more such individuals) (each such occurrence, a "Change in Control"), each Securityholder shall have the right, at such Securityholder's option, to require that the Issuer repurchase all or any portion of such Securityholder's Securities at a purchase price in cash equal to 100% of the principal amount thereof plus accrued and unpaid interest, if any, to the date of purchase, in accordance with the provisions of paragraph (b) of this Section 3.11.

- (b) Within 30 days after the occurrence of any Change in Control, the Issuer shall mail a notice (the "Change in Control Notice") to the Trustee and each Holder stating:
 - (1) that a Change in Control has occurred and that such holder has the right to require the Issuer to repurchase all or any portion of such Holder's Securities at a purchase price in cash equal to 100% of the principal amount of the Securities, plus accrued and unpaid interest, if any, to the date of purchase;
 - (2) the circumstances and relevant facts regarding such Change in Control (including but not limited to information with respect to pro forma historical income, cash flow and capitalization after giving effect to such Change in Control);
 - (3) the purchase date (which shall be a date at least 30 days but not more than 60 days after the date on which the Change in Control Notice is mailed by the Issuer);
 - (4) that, to be effective, any Holder's election to have Securities purchased must be received by the paying agent (if any, or the Trustee if no paying agent has been appointed), by first class mail, certified or registered with return receipt requested, postage prepaid, at its address specified in the Change in Control Notice on or prior to the date (which shall be specified in such Change in Control Notice from the Issuer to the Holders) that is 10 days prior to the purchase date;
 - (5) that, for any Security to be purchased, the Issuer must receive at the office of the paying agent (if any, or the Trustee if no paying agent has been appointed)

not later than three Business Days prior to the purchase date, such Security, with the form thereon entitled "Option to Elect Repurchase" duly executed and completed;

- (6) that any Security not tendered or not accepted for payment will continue to accrue interest;
- (7) that any Security accepted for payment shall cease to accrue interest after the purchase date;
- (8) that Holders will be entitled to withdraw their election if the paying agent (if any, or the Trustee if no paying agent has been appointed) receives, not later than three Business Days prior to the purchase date a telegram, telex, facsimile transmission or letter setting forth the name of the Holder, the principal amount of the Securities the Holder delivered or is expected to deliver for redemption and a statement that Holder is withdrawing his election to have Securities purchased.

At the Issuer's request, the Trustee shall give such notice in the Issuer's name and at the Issuer's expense; provided, however, that the Issuer shall deliver to the Trustee, at least 15 days prior to the date upon which notice must be mailed to Holders (unless a shorter time shall be acceptable to the Trustee), an Officer's Certificate setting forth the information to be stated in such notice as provided in this Section 3.11. No failure of the Issuer to give the foregoing notice shall limit any Securityholder's right to exercise a purchase right.

(c) In the event a purchase right shall be exercised in accordance with the terms hereof, the Issuer shall pay or cause to be paid the price payable with respect to the Securities as to which the purchase right had been exercised in cash to the Securityholder. In the event that a purchase right is exercised with respect to less than the entire principal amount of a surrendered Security, the Issuer shall execute and deliver to the Trustee and the Trustee shall authenticate for issuance in the name of the Securityholder a Security or Securities in the aggregate principal amount of the unpurchased portion of such surrendered Security.

ARTICLE FOUR

REMEDIES OF THE TRUSTEE AND SECURITYHOLDERS ON EVENT OF DEFAULT

SECTION 4.1 EVENT OF DEFAULT DEFINED; ACCELERATION OF MATURITY; WAIVER OF DEFAULT. In case one or more of the following Events of Default (whatever the reason for such Event of Default and whether it shall be voluntary or involuntary or be effected by operation of law or pursuant to any judgment, decree or order of any court or any order, rule or regulation of any administrative or governmental body) shall have occurred and be continuing, that is to say:

- (a) default in the payment of any installment of interest upon any of the Securities as and when the same shall become due and payable, and continuance of such default for a period of 30 days; or
- (b) default in the payment of all or any part of the principal on any of the Securities as and when the same shall become due and payable either at maturity, by declaration or otherwise; or
- (c) failure on the part of the Issuer duly to observe or perform any other of the covenants or agreements on the part of the Issuer in the Securities or in this Indenture for a period of 90 days after the date on which written notice specifying such failure, stating that such notice is a "Notice of Default" hereunder and demanding that the Issuer remedy the same, shall have been given by registered or certified mail, return receipt requested, to the Issuer by the Trustee, or to the Issuer and the Trustee by the holders of at least 25% in aggregate principal amount of the Securities at the time outstanding: or
- (d) a court having jurisdiction in the premises shall enter a decree or order for relief in respect of the Issuer in an involuntary case under any applicable bankruptcy, insolvency or other similar law now or hereafter in effect, or appointing a receiver, liquidator, assignee, custodian, trustee, sequestrator or similar official of the Issuer or for any substantial part of its property or ordering the winding up or liquidation of its affairs, and such decree or order shall remain unstayed and in effect for a period of 60 consecutive days; or
- (e) the issuer shall commence a voluntary case under any applicable bankruptcy, insolvency or other similar law

now or hereafter in effect, or consent to the entry of an order for relief in an involuntary case under any such law, or consent to the appointment or taking possession by a receiver, liquidator, assignee, custodian, trustee, sequestrator (or similar official) of the Issuer or for any substantial part of its property, or make any general assignment for the benefit of creditors;

then, and in each and every such case, unless the principal of all of the Securities shall have already become due and payable, either the Trustee or the holders of not less than 25% in aggregate principal amount of the Securities then outstanding hereunder, by notice in writing to the Issuer (and to the Trustee if given by Securityholders), may declare the entire principal of all the Securities and the interest accrued thereon to be due and payable immediately, and upon any such declaration the same shall become immediately due and payable. This provision, however, is subject to the condition that (i) if, at any time after the principal of the Securities shall have been so declared due and payable, and before any judgment or decree for the payment of the monies due shall have been obtained or entered as hereinafter provided, the Issuer shall pay or shall deposit with the Trustee a sum sufficient to pay all matured installments of interest upon all the Securities and the principal of any and all Securities which shall have become due otherwise than by acceleration (with interest upon such principal and, to the extent that payment of such interest is enforceable under applicable law, on overdue installments of interest, at the same rate as the rate of interest specified in the Securities, to the date of such payment or deposit) and such amount as shall be sufficient to cover reasonable compensation to the Trustee and each predecessor Trustee, their respective agents, attorneys and counsel, and all other expenses and liabilities incurred, and all advances made, by the Trustee and each predecessor Trustee except as a result of negligence or bad faith, and (ii) if any and all Events of Default under the Indenture, other than the non-payment of the principal of Securities which shall have become due by acceleration, shall have been cured, waived or otherwise remedied as provided herein -- then and in every such case the holders of a majority in aggregate principal amount of the Securities then outstanding, by written notice to the Issuer and to the Trustee, may waive all defaults and rescind and annul such declaration and its consequences, but no such waiver or rescission and annulment shall extend to or shall affect any subsequent default or shall impair any right consequent thereon.

SECTION 4.2 COLLECTION OF INDEBTEDNESS BY TRUSTEE; TRUSTEE MAY PROVE DEBT. The Issuer covenants that (a) in case default shall be made in the payment of any installment of interest on any

of the Securities when such interest shall have become due and payable, and such default shall have continued for a period of 30 days or (b) in case default shall be made in the payment of all or any part of the principal of any of the Securities when the same shall have become due and payable, whether upon maturity or by declaration or otherwise -- then upon demand of the Trustee, the Issuer will pay to the Trustee for the benefit of the holders of the Securities the whole amount that then shall have become due and payable on all such Securities for principal or interest, as the case may be (with interest to the date of such payment upon the overdue principal and, to the extent that payment of such interest is enforceable under applicable law, on overdue installments of interest at the same rate as the rate of interest specified in the Securities); and in addition thereto, such further amount as shall be sufficient to cover the costs and expenses of collection, including reasonable compensation to the Trustee and each predecessor Trustee, their respective agents, attorneys and counsel, and any expenses and liabilities incurred, and all advances made, by the Trustee and each predecessor Trustee except as a result of its negligence or bad faith.

Until such demand is made by the Trustee, the Issuer may pay the principal of and interest on the Securities to the registered holders, whether or not the Securities be overdue.

In case the Issuer shall fail forthwith to pay such amounts upon such demand, the Trustee, in its own name and as trustee of an express trust, shall be entitled and empowered to institute any action or proceedings at law or in equity for the collection of the sums so due and unpaid, and may prosecute any such action or proceedings to judgment or final decree, and may enforce any such judgment or final decree against the Issuer or other obligor upon the Securities and collect in the manner provided by law out of the property of the Issuer or other obligor upon the Securities, wherever situated the moneys adjudged or decreed to be payable.

In case there shall be pending proceedings relative to the Issuer or any other obligor upon the Securities under Title 11 of the United States Code or any other applicable Federal or state bankruptcy, insolvency or other similar law, or in case a receiver, assignee or trustee in bankruptcy or reorganization, liquidator, sequestrator or similar official shall have been appointed for or taken possession of the Issuer or its property or such other obligor, or in case of any other comparable judicial proceedings relative to the Issuer or other obligor upon the Securities, or to the creditors or property of the Issuer or such other obligor, the Trustee, irrespective of whether the principal of the Securities shall then be due and payable as therein expressed or by declaration or otherwise and irrespective of

whether the Trustee shall have made any demand pursuant to the provisions of this Section, shall be entitled and empowered, by intervention in such proceedings or otherwise;

- (a) to file and prove a claim or claims for the whole amount of principal and interest owing and unpaid in respect of the Securities, and to file such other papers or documents as may be necessary or advisable in order to have the claims of the Trustee (including any claim for reasonable compensation to the Trustee and each predecessor Trustee, and their respective agents, attorneys and counsel, and for reimbursement of all expenses and liabilities incurred, and all advances made, by the Trustee and each predecessor Trustee, except as a result of negligence or bad faith) and of the Securityholders allowed in any judicial proceedings relative to the Issuer or other obligor upon the Securities, or to the creditors or property of the Issuer or such other obligor,
- (b) unless prohibited by applicable law and regulations, to vote on behalf of the holders of the Securities in any election of a trustee or a standby trustee in arrangement, reorganization, liquidation or other bankruptcy or insolvency proceedings or person performing similar functions in comparable proceedings, and
- (c) to collect and receive any moneys or other property payable or deliverable on any such claims, and to distribute all amounts received with respect to the claims of the Securityholders and of the Trustee on their behalf; and any trustee, receiver, or liquidator, custodian or other similar official is hereby authorized by each of the Securityholders to make payments to the Trustee, and, in the event that the Trustee shall consent to the making of payments directly to the Securityholders, to pay to the Trustee such amounts as shall be sufficient to cover reasonable compensation to the Trustee, each predecessor Trustee and their respective agents, attorneys and counsel, and all other expenses and liabilities incurred, and all advances made, by the Trustee and each predecessor Trustee except as a result of negligence or bad faith.

Nothing herein contained shall be deemed to authorize the Trustee to authorize or consent to or vote for or accept or adopt on behalf of any Securityholder any plan or reorganization, arrangement, adjustment or composition affecting the Securities or the rights of any Holder thereof, or to authorize the Trustee to vote in respect of the claim of any Securityholder in any such

proceeding except, as aforesaid, to vote for the election of a trustee in bankruptcy or similar person.

All rights of action and of asserting claims under this Indenture, or under any of the Securities, may be enforced by the Trustee without the possession of any of the Securities or the production thereof on any trial or other proceedings relative thereto, and any such action or proceedings instituted by the Trustee shall be brought in its own name as trustee of an express trust, and any recovery of judgment, subject to the payment of the expenses, disbursements and compensation of the Trustee, each predecessor Trustee and their respective agents and attorneys, shall be for the ratable benefit of the holders of the Securities.

In any proceedings brought by the Trustee (and also any proceedings involving the interpretation of any provision of this Indenture to which the Trustee shall be a party) the Trustee shall be held to represent all the holders of the Securities, and it shall not be necessary to make any holders of the Securities parties to any such proceedings.

SECTION 4.3 APPLICATION OF PROCEEDS. Any moneys collected by the Trustee pursuant to this Article shall be applied in the following order at the date or dates fixed by the Trustee and, in case of the distribution of such moneys on account of principal or interest, upon presentation of the several Securities and stamping (or otherwise noting) thereon the payment, or issuing Securities in reduced principal amounts in exchange for the presented Securities if only partially paid, or upon surrender thereof if fully paid:

FIRST: To the payment of costs and expenses and any other amounts due to the Trustee under Section 5.6, including reasonable compensation to the Trustee and each predecessor Trustee and their respective agents and attorneys and of all expenses and liabilities incurred, and all advances made, by the Trustee and each predecessor Trustee except as a result of negligence or bad faith;

SECOND: In case the principal of the Securities shall not have become and be then due and payable, to the payment of interest in default in the order of the maturity of the installments of such interest, with interest (to the extent that such interest has been collected by the Trustee) upon the overdue installments of interest at the same rate as the rate of interest specified in the Securities, such payments to be made ratably to the persons entitled thereto, without discrimination or preference;

THIRD: In case the principal of the Securities shall have become and shall be then due and payable, to the payment of the whole amount then owing and unpaid upon all the Securities for principal and interest, with interest upon the overdue principal, and (to the extent that such interest has been collected by the Trustee) upon overdue installments of interest at the same rate as the rate of interest specified in the Securities; and in case such moneys shall be insufficient to pay in full the whole amount so due and unpaid upon the Securities, then to the payment of such principal and interest, without preference or priority of principal over interest, or of interest over principal, or of any installment of interest or any other installment of interest, or of any Security over any other Security, ratably to the aggregate of such principal and accrued and unpaid interest; and

FOURTH: To the payment of the remainder, if any, to the Issuer or any other person lawfully entitled thereto.

SECTION 4.4 SUITS FOR ENFORCEMENT. In case an Event of Default has occurred, has not been waived and is continuing, the Trustee may in its discretion proceed to protect and enforce the rights vested in it by this Indenture by such appropriate judicial proceedings as the Trustee shall deem most effectual to protect and enforce any of such rights, either at law or in equity or in bankruptcy or otherwise, whether for the specific enforcement of any covenant or agreement contained in this Indenture or in aid of the exercise of any power granted in this Indenture or to enforce any other legal or equitable right vested in the Trustee by this Indenture or by law.

SECTION 4.5 RESTORATION OF RIGHTS ON ABANDONMENT OF PROCEEDINGS. In case the Trustee shall have proceeded to enforce any right under this Indenture and such proceedings shall have been discontinued or abandoned for any reason, or shall have been determined adversely to the Trustee, then and in every such case the Issuer and the Trustee shall be restored respectively to their former positions and rights hereunder, and all rights, remedies and powers of the Issuer, the Trustee and the Securityholders shall continue as though no such proceedings had been taken.

SECTION 4.6 LIMITATIONS ON SUITS BY SECURITYHOLDERS. No holder of any Security shall have any right by virtue or by availing of any provision of this Indenture to institute any action or proceeding at law or in equity or in bankruptcy or otherwise upon or under or with respect to this Indenture, or for the appointment of a trustee, receiver, liquidator, custodian or other similar official or for any other remedy hereunder, unless

such holder previously shall have given to the Trustee written notice of default and of the continuance thereof, as hereinbefore provided, and unless also the holders of not less than 25% in aggregate principal amount of the Securities then outstanding shall have made written request upon the Trustee to institute such action or proceedings in its own name as trustee hereunder and shall have offered to the Trustee such reasonable indemnity as it may require against the costs, expenses and liabilities to be incurred therein or thereby and the Trustee for 60 days after its receipt of such notice, request and offer of indemnity shall have failed to institute any such action or proceedings and no direction inconsistent with such written request shall have been given to the Trustee pursuant to Section 4.8; it being understood and intended, and being expressly covenanted by the taker and holder of every Security with every other taker and holder and the Trustee, that no one or more holders of Securities shall have any right in any manner whatever by virtue or by availing of any provision of this Indenture to affect, disturb or prejudice the rights of any other holder of Securities, or to obtain or seek to obtain priority over or preference to any other such holder or to enforce any right under this Indenture, except in the manner herein provided and for the equal, ratable and common benefit of all holders of Securities. For the protection and enforcement of the provisions of this Section, each and every Securityholder and the Trustee shall be entitled to such relief as can be given either at law or in equity.

SECTION 4.7 POWERS AND REMEDIES CUMULATIVE; DELAY OR OMISSION NOT WAIVER OF DEFAULT. Except as provided in Section 2.6, no right or remedy herein conferred upon or reserved to the Trustee or to the Securityholders is intended to be exclusive of any other right or remedy, and every right and remedy shall, to the extent permitted by law, be cumulative and in addition to every other right and remedy given hereunder or now or hereafter existing at law or in equity or otherwise. The assertion or employment of any right or remedy hereunder, or otherwise, shall not prevent the concurrent assertion or employment of any other appropriate right or remedy.

No delay or omission of the Trustee or of any holder of any of the Securities to exercise any right or power accruing upon any Event of Default occurring and continuing as aforesaid shall impair any such right or power or shall be construed to be a waiver of any such Event of Default or an acquiescence therein; and, subject to Section 4.6, every power and remedy given by this Indenture or by law to the Trustee or to the Securityholders may be exercised from time to time, and as often as shall be deemed expedient, by the Trustee or by the Securityholders.

SECTION 4.8 CONTROL BY SECURITYHOLDERS. The holders of a majority in aggregate principal amount of the Securities at the time outstanding shall have the right to direct the time, method, and place of conducting any proceeding for any remedy available to the Trustee, or exercising any trust or power conferred on the Trustee by this Indenture; PROVIDED that such direction shall not be otherwise than in accordance with law and the provisions of this Indenture and PROVIDED FURTHER that (subject to the provisions of Section 5.1) the Trustee shall have the right to decline to follow any such direction if the Trustee, being advised by counsel, shall determine that the action or proceeding so directed may not lawfully be taken or if the Trustee in good faith by its board of directors, the executive committee, or a trust committee of directors or responsible officers of the Trustee shall determine that the action or proceedings so directed would involve the Trustee in personal liability or if the Trustee in good faith shall so determine that the actions or forbearances specified in or pursuant to such direction shall be unduly prejudicial to the interests of holders of the Securities not joining in the giving of said direction, it being understood that (subject to Section 5.1) the Trustee shall have no duty to ascertain whether or not such actions or forbearances are unduly prejudicial to such holders.

Nothing in this Indenture shall impair the right of the Trustee in its discretion to take any action deemed proper by the Trustee and which is not inconsistent with such direction by Securityholders.

SECTION 4.9 WAIVER OF PAST DEFAULTS. Subject to and without limiting Section 4.1, the Holders of a majority in aggregate principal amount of the Securities at the time outstanding may on behalf of the holders of all the Securities waive any past default or Event of Default hereunder and its consequences, except a default (a) in the payment of principal of or interest on any of the Securities or (b) in respect of a covenant or provision hereof which cannot be modified or amended without the consent of the Holder of each Security affected. In the case of any such waiver, the Issuer, the Trustee and the holders of the Securities shall be restored to their former positions and rights hereunder, respectively; but no such waiver shall extend to any subsequent or other default or impair any right consequent thereon.

Upon any such waiver, such default shall cease to exist and be deemed to have been cured and not to have occurred, and any Event of Default arising therefrom shall be deemed to have been cured, and not to have occurred for every purpose of this Indenture; but no such waiver shall extend to any subsequent or

other default or Event of Default or impair any right consequent thereon.

ARTICLE FIVE

CONCERNING THE TRUSTEE

SECTION 5.1 DUTIES AND RESPONSIBILITIES OF THE TRUSTEE; DURING DEFAULT; PRIOR TO DEFAULT. The Trustee, prior to the occurrence of an Event of Default and after the curing or waiving of all Events of Default which may have occurred, undertakes to perform such duties and only such duties as are specifically set forth in this Indenture. In case an Event of Default has occurred (which has not been cured or waived) the Trustee shall exercise such of the rights and powers vested in it by this Indenture, and use the same degree of care and skill in their exercise, as a prudent man would exercise or use under the circumstances in the conduct of his own affairs.

No provision of this Indenture shall be construed to relieve the Trustee from liability for its own negligent action, its own negligent failure to act or its own willful misconduct, except that

- (a) prior to the occurrence of an Event of Default and after the curing or waiving of all such Events of Default which may have occurred:
 - (i) the duties and obligations of the Trustee shall be determined solely by the express provisions of this Indenture, and the Trustee shall not be liable except for the performance of such duties and obligations as are specifically set forth in this Indenture, and no implied covenants or obligations shall be read into this Indenture against the Trustee; and
 - (ii) in the absence of bad faith on the part of the Trustee, the Trustee may conclusively rely, as to the truth of the statements and the correctness of the opinions expressed therein, upon any statements, certificates or opinions furnished to the Trustee and conforming to the requirements of this Indenture; but in the case of any such statements, certificates or opinions which by any provision hereof are specifically required to be furnished to the Trustee, the Trustee shall be under a duty to examine the same to determine whether or not they conform to the requirements of this Indenture;

- (b) the Trustee shall not be liable for any error of judgment made in good faith by a Responsible Officer or Responsible Officers of the Trustee, unless it shall be proved that the Trustee was negligent in ascertaining the pertinent facts; and
- (c) the Trustee shall not be liable with respect to any action taken or omitted to be taken by it in good faith in accordance with the direction of the Holders of not less than a majority in principal amount of the Securities at the time outstanding relating to the time, method and place of conducting any proceeding for any remedy available to the Trustee, or exercising any trust or power conferred upon the Trustee, under this Indenture.

None of the provisions contained in this Indenture shall require the Trustee to expend or risk its own funds or otherwise incur personal financial liability in the performance of any of its duties or in the exercise of any of its rights or powers, if there shall be reasonable ground for believing that the repayment of such funds or adequate indemnity against such liability is not reasonably assured to it.

This Section 5.1 is in furtherance of and subject to Sections 315 and 316 of the Trust Indenture Act of 1939.

SECTION 5.2 CERTAIN RIGHTS OF THE TRUSTEE. In furtherance of and subject to the Trust Indenture Act of 1939, and subject to Section 5.1:

- (a) the Trustee may rely and shall be protected in acting or refraining from acting upon any resolution, Officers' Certificate or any other certificate, statement, instrument, opinion, report, notice, request, consent, order, bond, debenture, note, coupon, security or other paper or document believed by it to be genuine and to have been signed or presented by the proper party or parties;
- (b) any request, direction, order or demand of the Issuer mentioned herein shall be sufficiently evidenced by an Officers' Certificate (unless other evidence in respect thereof be herein specifically prescribed); and any resolution of the Board of Directors may be evidenced to the Trustee by a Board Resolution;
- (c) the Trustee may consult with counsel and any advice or Opinion of Counsel shall be full and complete authorization and protection in respect of any action taken,

suffered or omitted to be taken by it hereunder in good faith and in accordance with such advice or Opinion of Counsel;

- (d) the Trustee shall be under no obligation to exercise any of the trusts or powers vested in it by this Indenture at the request, order or direction of any of the Securityholders pursuant to the provisions of this Indenture, unless such Securityholders shall have offered to the Trustee reasonable security or indemnity against the costs, expenses and liabilities which might be incurred therein or thereby;
- (e) the Trustee shall not be liable for any action taken or omitted by it in good faith and believed by it to be authorized or within the discretion, rights or powers conferred upon it by this Indenture;
- (f) prior to the occurrence of an Event of Default hereunder and after the curing or waiving of all Events of Default, the Trustee shall not be bound to make any investigation into the facts or matters stated in any resolution, certificate, statement, instrument, opinion, report, notice, request, consent, order, approval, appraisal, bond, debenture, note, coupon, security, or other paper or document unless requested in writing so to do by the Holders of not less than a majority in aggregate principal amount of the Securities then outstanding; PROVIDED that, if the payment within a reasonable time to the Trustee of the costs, expenses or liabilities likely to be incurred by it in the making of such investigation is, in the opinion of the Trustee, not reasonably assured to the Trustee by the security afforded to it by the terms of this Indenture, the Trustee may require reasonable indemnity against such expenses or liabilities as a condition to proceeding; the reasonable expenses of every such examination shall be paid by the Issuer or, if paid by the Trustee or any predecessor Trustee, shall be repaid by the Issuer upon demand; and
- (g) the Trustee may execute any of the trusts or powers hereunder or perform any duties hereunder either directly or by or through agents or attorneys not regularly in its employ and the Trustee shall not be responsible for any misconduct or negligence on the part of any such agent or attorney appointed with due care by it hereunder.

SECTION 5.3 TRUSTEE NOT RESPONSIBLE FOR RECITALS, DISPOSITION OF SECURITIES OR APPLICATION OF PROCEEDS THEREOF. The recitals contained herein and in the Securities, except the Trustee's certificates of authentication, shall be taken as the statements of the Issuer, and the Trustee assumes no

responsibility for the correctness of the same. The Trustee makes no representation as to the validity or sufficiency of this Indenture or of the Securities. The Trustee shall not be accountable for the use or application by the Issuer of any of the Securities or of the proceeds thereof.

SECTION 5.4 TRUSTEE AND AGENTS MAY HOLD SECURITIES; COLLECTIONS, ETC. The Trustee or any agent of the Issuer or the Trustee, in its individual or any other capacity, may become the owner or pledgee of Securities with the same rights it would have if it were not the Trustee or such agent and may otherwise deal with the Issuer and receive, collect, hold and retain collections from the Issuer with the same rights it would have if it were not the Trustee or such agent.

SECTION 5.5 MONEYS HELD BY TRUSTEE. Subject to the provisions of Section 9.4 hereof, all moneys received by the Trustee shall, until used or applied as herein provided, be held in trust for the purposes for which they were received, but need not be segregated from other funds except to the extent required by mandatory provisions of law. Neither the Trustee nor any agent of the Issuer or the Trustee shall be under any liability for interest on any moneys received by it hereunder.

SECTION 5.6 COMPENSATION AND INDEMNIFICATION OF TRUSTEE AND ITS PRIOR CLAIM. The Issuer covenants and agrees to pay to the Trustee from time to time, and the Trustee shall be entitled to, reasonable compensation (which shall not be limited by any provision of law in regard to the compensation of a trustee of an express trust) and the Issuer covenants and agrees to pay or reimburse the Trustee and each predecessor Trustee upon its request for all reasonable expenses, disbursements and advances incurred or made by or on behalf of it in accordance with any of the provisions of this Indenture (including the reasonable compensation and the expenses and disbursements of its counsel and of all agents and other persons not regularly in its employ) except any such expense, disbursement or advance as may arise from its negligence or bad faith. The Issuer also covenants to indemnify the Trustee and each predecessor Trustee for, and to hold it harmless against, any loss, liability or expense incurred without negligence or bad faith on its part, arising out of or in connection with the acceptance or administration of this Indenture or the trusts hereunder and its duties hereunder, including the costs and expenses of defending itself against or investigating any claim of liability in the premisses. The obligations of the Issuer under this Section to compensate and indemnify the Trustee and each predecessor Trustee and to pay or reimburse the Trustee and each predecessor Trustee for expenses, disbursements and advances shall constitute additional indebtedness hereunder

shall survive the satisfaction and discharge of this Indenture. Such additional indebtedness shall be a senior claim to that of the Securities upon all property and funds held or collected by the Trustee as such, except funds held in trust for the benefit of the holders of particular Securities, and the Securities are hereby subordinated to such senior claim.

SECTION 5.7 RIGHT OF TRUSTEE TO RELY ON OFFICERS' CERTIFICATE, ETC. Subject to Section 5.1 and 5.2, whenever in the administration of the trusts of this Indenture the Trustee shall deem it necessary or desirable that a matter be proved or established prior to taking or suffering or omitting any action hereunder, such matter (unless other evidence in respect thereof be herein specifically prescribed) may, in the absence of negligence or bad faith on the part of the Trustee, be deemed to be conclusively proved and established by an Officers' Certificate delivered to the Trustee, and such certificate, in the absence of negligence or bad faith on the part of the Trustee, shall be full warrant to the Trustee for any action taken, suffered or omitted by it under the provisions of this Indenture upon the faith thereof.

SECTION 5.8 PERSONS ELIGIBLE FOR APPOINTMENT AS TRUSTEE. The Trustee hereunder shall at all times be a corporation having a combined capital and surplus of at least \$25,000,000, and which is eligible in accordance with the provisions of Section 310(a) of the Trust Indenture Act of 1939. If such corporation publishes reports of condition at least annually, pursuant to law or to the requirements of a Federal, State or District of Columbia supervising or examining authority, then for the purposes of this Section, the combined capital and surplus of such corporation shall be deemed to be its combined capital and surplus as set forth in its most recent report of condition so published.

SECTION 5.9 RESIGNATION AND REMOVAL; APPOINTMENT OF SUCCESSOR TRUSTEE.

(a) The Trustee may at any time resign by giving written notice of resignation to the Issuer and by mailing notice thereof by first-class mail to holders of Securities at their last addresses as they shall appear on the Security register. Upon receiving such notice of resignation, the Issuer shall promptly appoint a successor Trustee by written instrument in duplicate, executed by authority of the Board of Directors, one copy of which instrument shall be delivered to the resigning Trustee and one copy to the successor Trustee. If no successor Trustee shall have been so appointed and have accepted appointment within 30 days after the mailing of such notice of resignation, the resigning Trustee may petition any court of competent jurisdiction for the appointment of a successor Trustee, or any Securityholder who has been a bona fide holder of a Security or

Securities for at least six months may, on behalf of himself and all others similarly situated, petition any such court for the appointment of a successor Trustee. Such court may thereupon, after such notice, if any, as it may deem proper and prescribe, appoint a successor Trustee.

- (b) In case at any time any of the following shall occur:
- (i) the Trustee shall fail to comply with the provisions of Section 310(b) of the Trust Indenture Act of 1939, after written request therefor by the Issuer or by any Securityholder who has been a bona fide holder of a Security or Securities for at least six months; or
- (ii) the Trustee shall cease to be eligible in accordance with the provisions of Section 5.8 and shall fail to resign after written request therefor by the Issuer or by any such Securityholder; or
- (iii) the Trustee shall become incapable of acting, or shall be adjudged a bankrupt or insolvent, or a receiver or liquidator of the Trustee or of its property shall be appointed, or any public officer shall take charge or control of the Trustee or of its property or affairs for the purpose of rehabilitation, conservation or liquidation;

then, in any such case, the Issuer may remove the Trustee and appoint a successor Trustee by written instrument, in duplicate, executed by order of the Board of Directors of the Issuer, one copy of which instrument shall be delivered to the Trustee so removed and one copy to the successor Trustee, or, subject to Section 315(e) of the Trust Indenture Act of 1939, any Securityholder who has been a bona fide Holder of a Security or Securities for at least six months may on behalf of himself and all others similarly situated, petition any court of competent jurisdiction for the removal of the Trustee and the appointment of a successor Trustee. Such court may thereupon, after such appoint a successor Trustee.

(c) The Holders of a majority in aggregate principal amount of the Securities at the time outstanding may at any time remove the Trustee and appoint a successor Trustee by delivering to the Trustee so removed, to the successor trustee so appointed and to the Issuer the evidence provided for in Section 6.1 of the action in that regard taken by the Securityholders.

(d) Any resignation or removal of the Trustee and any appointment of a successor Trustee pursuant to any of the provisions of this Section 5.9 shall become effective upon acceptance of appointment by the successor Trustee as provided in Section 5.10.

SECTION 5.10 ACCEPTANCE OF APPOINTMENT BY SUCCESSOR TRUSTEE. Any successor Trustee appointed as provided in Section 5.9 shall execute and deliver to the Issuer and to its predecessor Trustee an instrument accepting such appointment hereunder, and thereupon the resignation or removal of the predecessor Trustee shall become effective and such successor Trustee, without any further act, deed or conveyance, shall become vested with all rights, powers, duties and obligations of its predecessor hereunder with like effect as if originally named as Trustee herein; but, neverthe- less, on the written request of the Issuer or of the successor Trustee, upon payment of its charges then unpaid, the Trustee ceasing to act shall, subject to Section 9.4, pay over to the successor Trustee all moneys at the time held by it hereunder and shall execute and deliver an instrument transferring to such successor Trustee all such rights, powers, duties and obligations. Upon request of any such successor Trustee, the Issuer shall execute any and all instruments in writing for more fully and certainly vesting in and confirming to such successor Trustee all such rights and powers. Any Trustee ceasing to act shall, nevertheless, retain a prior claim upon all property or funds held or collected by such Trustee to secure any amounts then due it pursuant to the provisions of Section 5.6.

Upon acceptance of appointment by a successor Trustee as provided in this Section 5.10, the Issuer shall mail notice thereof by first-class mail to the holders of Securities at their last addresses as they shall appear in the Security register. If the acceptance of appointment is substantially contemporaneous with the resignation, then the notice called for by the preceding sentence may be combined with the notice called for by Section 5.9. If the Issuer fails to mail such notice within 10 days after acceptance of appointment by the successor Trustee, the successor Trustee shall cause such notice to be mailed at the expense of the Issuer.

SECTION 5.11 MERGER, CONVERSION, CONSOLIDATION OR SUCCESSION TO BUSINESS OF TRUSTEE. Any corporation into which the Trustee may be merged or converted or with which it may be consolidated, or any corporation resulting from any merger, conversion or consolidation to which the Trustee shall be a party, or any corporation succeeding to the corporate trust business of the Trustee, shall be the successor of the Trustee hereunder (provided that such corporation shall be eligible under the provisions of

Section 5.8) without the execution or filing of any paper or any further act on the part of any of the parties hereto, anything herein to the contrary notwithstanding.

In case at the time such successor to the Trustee shall succeed to the trusts created by this Indenture any of the Securities shall have been authenticated but not delivered, any such successor to the Trustee may adopt the certificate of authentication of any predecessor Trustee and deliver such Securities so authenticated; and, in case at that time any of the Securities shall not have been authenticated, any successor to the Trustee may authenticate such Securities either in the name of any predecessor hereunder or in the name of the successor Trustee; and in all such cases such certificate shall have the full force which it is anywhere in the Securities or in this Indenture provided that the Certificate of the Trustee shall have; PROVIDED, that the right to adopt the certificate of authentication of any predecessor Trustee or to authenticate Securities in the name of any predecessor Trustee shall apply only to its successor or successors by merger, conversion or consolidation.

ARTICLE SIX

CONCERNING THE SECURITYHOLDERS.

SECTION 6.1 EVIDENCE OF ACTION TAKEN BY SECURITYHOLDERS. Any request, demand, authorization, direction, notice, consent, waiver or other action provided by this Indenture to be given or taken by Securityholders may be embodied in and evidenced by one or more instruments of substantially similar tenor signed by such Securityholders in person or by an agent duly appointed in writing; and, except as herein otherwise expressly provided, such action shall become effective when such instrument or instruments are delivered to the Trustee. Proof of execution of any instrument or of a writing appointing any such agent shall be sufficient for any purpose of this Indenture and (subject to Sections 5.1 and 5.2) conclusive in favor of the Trustee and the Issuer, if made in the manner provided in this Article.

SECTION 6.2 PROOF OF EXECUTION OF INSTRUMENTS AND OF HOLDING OF SECURITIES; RECORD DATE. Subject to Sections 5.1 and 5.2, the execution of any instrument by a Securityholder or his agent or proxy may be proved in accordance with such reasonable rules and regulations as may be prescribed by the Trustee or in such manner as shall be satisfactory to the Trustee. The holding of Securities shall be proved by the Security register or by a certificate of the registrar thereof. The Issuer may set a record date for purposes of determining the identity of holders of

Securities entitled to vote or consent to any action referred to in Section 6.1, which record date may be set at any time or from time to time by notice to the Trustee, for any date or dates (in the case of any adjournment or resolicitation) not more than 60 days nor less than five days prior to the proposed date of such vote or consent, and thereafter, notwithstanding any other provisions hereof, only holders of Securities of record on such record date shall be entitled to so vote or give such consent or to withdraw such vote or consent.

SECTION 6.3 HOLDERS TO BE TREATED AS OWNERS. The Issuer, the Trustee and any agent of the Issuer or the Trustee may deem and treat the person in whose name any Security shall be registered upon the Security register as the absolute owner of such Security (whether or not such Security shall be overdue and notwithstanding any notation of ownership or other writing thereon) for the purpose of receiving payment of or on account of the principal of and, subject to the provisions of this Indenture, interest on such Security and for all other purposes; and neither the Issuer nor the Trustee nor any agent of the Issuer or the Trustee shall be affected by any notice to the contrary. All such payments so made to any such person, or upon his order, shall be valid, and, to the extent of the sum or sums so paid, effectual to satisfy and discharge the liability for moneys payable upon any such Security.

No holder of any beneficial interest in any Global Security held on behalf of such holder by a Depository shall have any rights under this Indenture with respect to such Global Security, and such Depository may be treated by the Issuer, the Trustee and any agent of the Company or the Trustee as the owner of such Global Security for all purposes whatsoever. Notwithstanding the foregoing, nothing herein shall impair, as between a Depository and such holders of beneficial interests, the operation of customary practices governing the exercise of the rights of the Depository as holder of any Security.

SECTION 6.4 SECURITIES OWNED BY ISSUER DEEMED NOT OUTSTANDING. In determining whether the holders of the requisite aggregate principal amount of Securities have concurred in any direction, consent or waiver under this Indenture, Securities which are owned by the Issuer or any other obligor on the Securities or by any person directly or indirectly controlling or controlled by or under direct or indirect common control with the Issuer or any other obligor on the Securities shall be disregarded and deemed not to be outstanding for the purpose of any such determination, except that for the purpose of determining whether the Trustee shall be protected in relying on any such direction, consent or waiver only Securities which the Trustee knows are so

owned shall be so disregarded. Securities so owned which have been pledged in good faith may be regarded as outstanding if the pledgee establishes to the satisfaction of the Trustee the pledgee's right so to act with respect to such Securities and that the pledgee is not the Issuer or any other obligor upon the Securities or any person directly or indirectly controlling or controlled by or under direct or indirect common control with the Issuer or any other obligor on the Securities. In case of a dispute as to such right, the advice of counsel shall be full protection in respect of any decision made by the Trustee in accordance with such advice. Upon request of the Trustee, the Issuer shall furnish to the Trustee promptly an Officers' Certificate listing and identifying all Securities, if any, known by the Issuer to be owned or held by or for the account of any of the above-described persons; and, subject to Sections 5.1 and 5.2, the Trustee shall be entitled to accept such Officers' Certificate as conclusive evidence of the facts therein set forth and of the fact that all Securities not listed therein are outstanding for the purpose of any such determination.

SECTION 6.5 RIGHT OF REVOCATION OF ACTION TAKEN. At any time prior to (but not after) the evidencing to the Trustee, as provided in Section 6.1, of the taking of any action by the holders of the percentage in aggregate principal amount of the Securities specified in this Indenture in connection with such action, any holder of a Security the serial number of which is shown by the evidence to be included among the serial numbers of the Securities the holders of which have consented to such action may, by filing written notice at the Corporate Trust Office and upon proof of holding as provided in this Article, revoke such action so far as concerns such Security. Except as aforesaid any such action taken by the holder of any Security shall be conclusive and binding upon such holder and upon all future holders and owners of such Security and of any Securities issued in exchange or substitution therefor, irrespective of whether or not any notation in regard thereto is made upon any such Security. Any action taken by the holders of the percentage in aggregate principal amount of the Securities specified in this Indenture in connection with such action shall be conclusively binding upon the Issuer, the Trustee and the holders of all the Securities.

ARTICLE SEVEN

SUPPLEMENTAL INDENTURES.

SECTION 7.1 SUPPLEMENTAL INDENTURES WITHOUT CONSENT OF SECURITYHOLDERS. The Issuer, when authorized by a Board Resolution, and the Trustee may from time to time and at any time

enter into an indenture or indentures supplemental hereto for one or more of the following purposes:

- (a) to convey, transfer, assign, mortgage or pledge to the Trustee as security for the Securities any property or assets;
- (b) to evidence the succession of another corporation to the Issuer, or successive successions, and the assumption by the successor corporation of the covenants, agreements and obligations of the Issuer pursuant to Article Eight;
- (c) to add to the covenants of the Issuer such further covenants, restrictions, conditions or provisions as its Board of Directors and the Trustee shall consider to be for the protection of the holders of Securities, and to make the occurrence, or the occurrence and continuance, of a default in any such additional covenants, restrictions, conditions or provisions an Event of Default permitting the enforcement of all or any of the several remedies provided in this Indenture as herein set forth; PROVIDED, that in respect of any such additional covenant, restriction, condition or provision such supplemental indenture may provide for a particular period of grace after default (which period may be shorter or longer than that allowed in the case of other defaults) or may provide for an immediate enforcement upon such an Event of Default or may limit the remedies available to the Trustee upon such a Event of Default or may limit the right of the holders of a majority in aggregate principal amount of the Securities to waive such an Event of Default;
- (d) to cure any ambiguity or to correct or supplement any provision contained herein or in any supplemental indenture which may be defective or inconsistent with any other provision contained herein or in any supplemental indenture; or to make such other provisions in regard to matters or questions arising under this Indenture or under any supplemental indenture as the Board of Directors may deem necessary or desirable and which shall not adversely affect the interests of the holders of the Securities; and
- (e) to provide for the issuance under this Indenture of Securities in coupon form (including Securities registered as to principal only) and to provide for exchangeability of such Securities with Securities issued hereunder in fully registered form, and to make all appropriate changes for such purpose.

The Trustee is hereby authorized to join in the execution of any such supplemental indenture, to make any further appropriate agreements and stipulations which may be therein contained and to accept the conveyance, transfer, assignment, mortgage or pledge of any property thereunder, but the Trustee shall not be obligated to enter into any such supplemental indenture which affects the Trustee's own rights, duties or immunities under this Indenture or otherwise.

Any supplemental indenture authorized by the provisions of this Section may be executed without the consent of the holders of any of the Securities at the time outstanding, notwithstanding any of the provisions of Section 7.2.

SECTION 7.2 SUPPLEMENTAL INDENTURES WITH CONSENT OF SECURITYHOLDERS. With the consent (evidenced as provided in Article Six) of the Holders of not less than 66 2/3 percent in aggregate principal amount of the Securities at the time outstanding, the Issuer, when authorized by a Board Resolution, and the Trustee may, from time to time and at any time, enter into an indenture of indentures supplemental hereto for the purpose of adding any provisions to or changing in any manner or eliminating any of the provisions of this Indenture or of any supplemental indenture or of modifying in any manner the rights of the holders of the Securities; PROVIDED; that no such supplemental indenture shall (a) extend the final maturity of any Security, or reduce the principal amount thereof, or reduce the rate or extend the time of payment of interest thereon, or impair or affect the right of any Securityholder to institute suit for the payment thereof without the consent of the holder of each Security so affected, or (b) reduce the aforesaid percentage of Securities, the consent of the Holders of which is required for any such supplemental indenture, without the consent of the Holders of all Securities then outstanding.

Upon the request of the Issuer, accompanied by a copy of a Board Resolution authorizing the execution of any such supplemental indenture, and upon the filing with the Trustee of evidence of the consent of Securityholders and other documents, if any, required by Section 6.1 the Trustee shall join with the Issuer in the execution of such supplemental indenture unless such supplemental indenture affects the Trustee's own rights, duties or immunities under this Indenture or otherwise, in which case the Trustee may in its discretion, but shall not be obligated to, enter into such supplemental indenture.

It shall not be necessary for the consent of the Security- holders under this Section to approve the particular form of any

proposed supplemental indenture, but it shall be sufficient if such consent shall approve the substance thereof.

Promptly after the execution by the Issuer and the Trustee of any supplemental indenture pursuant to the provisions of this Section, the Issuer shall mail a notice thereof by first-class mail to the Holders of Securities at their addresses as they shall appear on the registry books of the Issuer, setting forth in general terms the substance of such supplemental indenture. Any failure of the Issuer to mail such notice, or any defect therein, shall not, however, in any way impair or affect the validity of any such supplemental indenture

SECTION 7.3 EFFECT OF SUPPLEMENTAL INDENTURE. Upon the execution of any supplemental indenture pursuant to the provisions hereof, this Indenture shall be and be deemed to be modified and amended in accordance therewith and the respective rights, limitations of rights, obligations, duties and immunities under this Indenture of the Trustee, the Issuer and the Holders of Securities shall thereafter be determined, exercised and enforced hereunder subject in all respects to such modifications and amendments, and all the terms and conditions of any such supplemental indenture shall be and be deemed to be part of the terms and conditions of this Indenture for any and all purposes.

SECTION 7.4 DOCUMENTS TO BE GIVEN TO TRUSTEE. The Trustee, subject to the provisions of Sections 5.1 and 5.2, may receive an Officers' Certificate and an Opinion of Counsel as conclusive evidence that any such supplemental indenture complies with the applicable provisions of this Indenture.

SECTION 7.5 NOTATION ON SECURITIES IN RESPECT OF SUPPLEMENTAL INDENTURES. Securities authenticated and delivered after the execution of any supplemental indenture pursuant to the provisions of this Article may bear a notation in form approved by the Trustee as to any matter provided for by such supplemental indenture or as to any action taken at any such meeting. If the Issuer or the Trustee shall so determine, new Securities so modified as to conform, in the opinion of the Trustee and the Board of Directors, to any modification of this Indenture contained in any such supplemental indenture may be prepared by the Issuer, authenticated by the Trustee and delivered in exchange for the Securities then outstanding.

ARTICLE EIGHT

CONSOLIDATION, MERGER, SALE OR CONVEYANCE

SECTION 8.1 COVENANT NOT TO MERGE, CONSOLIDATE, SELL OR CONVEY PROPERTY EXCEPT UNDER CERTAIN CONDITIONS. The Issuer shall not consolidate with or merge into any other corporation or corporations (whether or not affiliated with the Issuer or convey, transfer or lease its properties and assets substantially as an entirety to any other corporation or corporations (whether or not affiliated with the Issuer), and the Issuer shall not permit any other corporation or corporations (whether or not affiliated with the Issuer) to consolidate with or merge into the Issuer or convey, transfer or lease its properties and assets substantially as an entirety to the Issuer, unless:

- (a) In case the Issuer shall consolidate with or merge into another corporation or corporations or convey, transfer or lease its properties and assets substantially as an entirety to any other corporation or corporations, the corporation or corporations (if other than the Issuer) formed by such consolidation or into which the Issuer is merged or the other corporation or corporations which acquire by conveyance or transfer, or which lease, the properties and assets of the Issuer substantially as an entirety shall be organized and validly existing under the laws of any state of the United States and shall, except where such assumption is deemed to have occurred by the operation of law, expressly assume, by an indenture supplemental hereto, executed and delivered to the Trustee, in form satisfactory to the Trustee, the due and punctual payment of the principal of and any premium and interest on, all the Securities and the performance or observance of every covenant of this Indenture on the part of the Issuer to be performed or observed; and
- (b) Immediately after giving effect to such transaction and treating any indebtedness which becomes an obligation of the Issuer or any Subsidiary as a result of such transaction as having been incurred by the Issuer or such Subsidiary at the time of such transaction, no Event of Default, and no event which, after notice or lapse of time or both, would become an Event of Default, shall have happened and be continuing.

SECTION 8.2 SUCCESSOR CORPORATION SUBSTITUTED. In case of any such consolidation, merger, sale or conveyance, and following such an assumption by the successor corporation, such successor corporation shall succeed to and be substituted for the Issuer, with the same effect as if it has been named herein.

Such successor corporation may cause to be signed, and may issue either in its own name or in the name of the Issuer prior to such succession any or all of the Securities issuable hereunder which theretofore shall not have been signed by the Issuer and delivered to the Trustee; and, upon the order of such successor corporation, instead of the Issuer, and subject to all the terms, conditions and limitations in this Indenture prescribed, the Trustee shall authenticate and shall deliver any Securities which previously shall have been signed and delivered by the officers of the Issuer to the Trustee for authentication, and any Securities which successor corporation thereafter shall cause to be signed and delivered to the Trustee for that purpose. All of the Securities so issued shall in all respects have the same legal rank and benefit under this Indenture as the Securities theretofore or thereafter issued in accordance with the terms of this Indenture as though all of such Securities had been issued at the date of the execution hereof.

In the case of any such consolidation, merger, sale, lease or conveyance such changes in phraseology and form (but not in substance) may be made in the Securities thereafter to be issued as may be appropriate.

In the event of any such sale or conveyance (other than a conveyance by way of lease) the Issuer or any such successor corporation which shall theretofore have become such in the manner described in this Article shall be discharged from all obligations and covenants under this Indenture and the Securities and may be liquidated and dissolved.

SECTION 8.3 OPINION OF COUNSEL TO TRUSTEE. The Trustee, subject to the provisions of Section 5.1 and 5.2, may receive an Opinion of Counsel as conclusive evidence that any such consolidation, merger, sale, lease or conveyance, and any such assumption, and any such liquidation or dissolution, complies with the applicable provisions of this Indenture.

ARTICLE NINE

SATISFACTION AND DISCHARGE OF INDENTURE; UNCLAIMED MONEYS

SECTION 9.1 SATISFACTION AND DISCHARGE OF INDENTURE. If at any time (a) the Issuer shall have paid or caused to be paid the principal of and interest on all the Securities outstanding hereunder, as and when the same shall have become due and payable, or (b) the Issuer shall have delivered to the Trustee for cancellation all Securities theretofore authenticated (other than any Securities which shall have been destroyed, lost or stolen and

which shall have been replaced or paid as provided in Section 2.6) or (c) (i) all such Securities not theretofore delivered to the Trustee for cancellation shall have become due and payable, or are by their terms to become due and payable within one year, and (ii) the Issuer shall have irrevocably deposited or caused to be deposited with the Trustee as trust funds the entire amount in cash (other than moneys repaid by the Trustee or any paying agent to the Issuer in accordance with Section 9.4) sufficient to pay at maturity all such Securities not theretofore delivered to the Trustee for cancellation, including principal and interest due or to become due to such date of maturity as the case may be, and if, in any such case, the Issuer shall also pay or cause to be paid all other sums payable hereunder by the Issuer, then this Indenture shall cease to be of further effect (except as to (i) rights of registration of transfer and exchange, (ii) substitution of apparently mutilated, defaced, destroyed, lost or stolen Securities, (iii) rights of holders to receive payments of principal thereof and interest thereon, (iv) the rights, obligations and immunities of the Trustee hereunder and (v) the rights of the Securityholders as beneficiaries hereof with respect to the property so deposited with the Trustee payable to all or any of them), and the Trustee, on demand of the Issuer accompanied by an Officers' Certificate and an Opinion of Counsel and at the cost and expense of the Issuer, shall execute proper instruments acknowledging such satisfaction of and discharging this Indenture. The Issuer agrees to reimburse the Trustee for any costs or expenses thereafter reasonably and properly incurred and to compensate the Trustee for any services thereafter reasonably and properly rendered by the Trustee in connection with this Indenture or the Securities.

SECTION 9.2 APPLICATION BY TRUSTEE OF FUNDS DEPOSITED FOR PAYMENT OF SECURITIES. Subject to Section 9.4, all moneys deposited with the Trustee pursuant to Section 9.1 shall be held in trust and applied by it to the payment, either directly or through any paying agent (including the Issuer acting as its own paying agent), to the holders of the particular Securities for the payment or redemption of which such moneys have been deposited with the Trustee, of all sums due and to become due thereon for principal and interest; but such money need not be segregated from other funds except to the extent required by law.

SECTION 9.3 REPAYMENT OF MONEYS HELD BY PAYING AGENT. In connection with the satisfaction and discharge of this Indenture all moneys then held by any paying agent under the provisions of this Indenture shall, upon demand of the Issuer be repaid to it or paid to the Trustee and thereupon such paying agent shall be released from all further liability with respect to such moneys.

SECTION 9.4 RETURN OF MONEYS HELD BY TRUSTEE AND PAYING AGENT UNCLAIMED FOR THREE YEARS. Any moneys deposited with or paid to the Trustee or any paying agent for the payment of the principal of or interest on any Security and not applied but remaining unclaimed for three years after the date upon which such principal or interest shall have become due and payable, shall, upon the written request of the Issuer and unless otherwise required by mandatory provisions of applicable escheat or abandoned or unclaimed property law, be repaid to the Issuer by the Trustee or such paying agent, and the holder of such Security shall, unless otherwise required by mandatory provisions of applicable escheat or abandoned or unclaimed property laws, thereafter look only to the Issuer for any payment which such holder may be entitled to collect, and all liability of the Trustee or any paying agent with respect to such moneys shall thereupon cease.

ARTICLE TEN

MISCELLANEOUS PROVISIONS

SECTION 10.1 INCORPORATORS, STOCKHOLDERS, OFFICERS AND DIRECTORS OF ISSUER EXEMPT FROM INDIVIDUAL LIABILITY. No recourse under or upon any obligation, covenant or agreement contained in this Indenture, or in any Security, or because of any indebtedness evidenced thereby, shall be had against any incorporator, as such or against any past, present or future stockholder, officer or director, as such, of the Issuer or of any successor, either directly or through the Issuer or any successor, under any rule of law, statute or constitutional provision or by the enforcement of any assessment or by any legal or equitable proceeding or otherwise, all such liability being expressly waived and released by the acceptance of the Securities by the holders thereof and as part of the consideration for the issue of the Securities.

SECTION 10.2 PROVISIONS OF INDENTURE FOR THE SOLE BENEFIT OF PARTIES AND SECURITYHOLDERS. Nothing in this Indenture or in the Securities, expressed or implied, shall give or be construed to give to any person, firm or corporation, other than the parties hereto and their successors and the holders of the Securities, any legal or equitable right, remedy or claim under this Indenture or under any covenant or provision herein contained, all such covenants and provisions being for the sole benefit of the parties hereto and their successors and of the holders of the Securities.

SECTION 10.3 SUCCESSORS AND ASSIGNS OF ISSUER BOUND BY INDENTURE. All the covenants, stipulations, promises and agreements in this Indenture contained by or in behalf of the

Issuer shall bind its successors and assigns, whether so expressed or not .

SECTION 10.4 NOTICES AND DEMANDS ON ISSUER, TRUSTEE AND SECURITYHOLDERS. Any notice or demand which by any provision of this Indenture is required or permitted to be given or served by the Trustee or by the holders of Securities to or on the Issuer may be given or served by being deposited postage prepaid, first- class mail (except as otherwise specifically providing herein) addressed (until another address of the Issuer is filed by the Issuer with the Trustee) to

Analog Devices, Inc. One Technology Way Norwood, Massachusetts 02062 Attention: Chairman

Any notice, direction, request or demand by the Issuer or any Securityholder to or upon the Trustee shall be deemed to have been sufficiently given or made, for all purposes, if given or made at the Corporate Trust Office.

Where this Indenture provides for notice to holders, such notice shall be sufficiently given (unless otherwise herein expressly provided) if in writing and mailed, first-class postage prepaid, to each holder entitled thereto, at his last address as it appears in the Security register. In any case where notice to holders is given by mail, neither the failure to mail such notice, nor any defect in any notice so mailed, to any particular holder shall affect the sufficiency of such notice with respect to other holders. Where this Indenture provides for notice in any manner, such notice may be waived in writing by the person entitled to receive such notice, either before or after the event, and such waiver shall be the equivalent of such notice. Waivers of notice by holders shall be filed with the Trustee, but such filing shall not be a condition precedent to the validity of any action taken in reliance upon such waiver.

In case, by reason of the suspension of or irregularities in regular mail service, it shall be impracticable to mail notice to the Issuer and Securityholders when such notice is required to be given pursuant to any provisions of this Indenture, then any manner of giving such notice as shall be satisfactory to the Trustee shall be deemed to be a sufficient giving of such notice.

SECTION 10.5 OFFICERS' CERTIFICATES AND OPINIONS OF COUNSEL; STATEMENTS TO BE CONTAINED THEREIN. Upon any application or demand by the Issuer to the Trustee to take any action under any of the provisions of this Indenture, the Issuer shall, upon the

Trustee's request, furnish to the Trustee an Officers' Certificate stating that all conditions precedent provided for in this Indenture relating to the proposed action have been complied with and an Opinion of Counsel stating that in the opinion of such counsel all such conditions precedent have been complied with, except that in the case of any such application or demand as to which the furnishing of such documents is specifically required by any provision of this Indenture relating to such particular application or demand, no additional certificate or opinion need be furnished.

Each certificate or opinion provided for in this Indenture and delivered to the Trustee with respect to compliance with a condition or covenant provided for in this Indenture shall include (a) a statement that the person making such certificate or opinion has read such covenant or condition, (b) a brief statement as to the nature and scope of the examination or investigation upon which the statements or opinions contained in such certificate or opinion are based, (c) a statement that, in the opinion of such person, he has made such examination or investigation as is necessary to enable him to express an informed opinion as to whether or not such covenant or condition has been complied with and (d) a statement as to whether or not, in the opinion of such person, such condition or covenant has been complied with.

Any certificate, statement or opinion of an officer of the Issuer may be based, insofar as it relates to legal matters, upon a certificate or opinion of or representations by counsel, unless such officer knows that the certificate or opinion or representations with respect to the matters upon which his certificate, statement or opinion may be based as aforesaid are erroneous, or in the exercise of reasonable care should know that the same are erroneous. Any certificate, statement or opinion of counsel may be based, insofar as it relates to factual matters or information with respect to which is in the possession of the Issuer, upon the certificate, statement or opinion of or representations by an officer or officers of the Issuer, unless such counsel knows that the certificate, statement or opinion or representations with respect to the matters upon which his certificate, statement or opinion may be based as aforesaid are erroneous, or in the exercise of reasonable care should know that the same are erroneous.

Any certificate, statement or opinion of an officer of the Issuer or of counsel may be based, insofar as it relates to accounting matters, upon a certificate or opinion of or representations by an accountant or firm of accountants in the employ of the Issuer, unless such officer or counsel, as the case may be, knows that the certificate or opinion or representations

with respect to the accounting matters upon which his certificate, statement or opinion may be based as aforesaid are erroneous, or in the exercise of reasonable care should know that the same are erroneous.

Any certificate or opinion of any independent firm of public accountants filed with the Trustee shall contain a statement that such firm is independent.

SECTION 10.6 PAYMENTS DUE ON SATURDAYS, SUNDAYS AND HOLIDAYS. If the date of maturity of interest on or principal of the Securities or the date fixed for redemption of any Security shall not be a Business Day, then payment of interest or principal need not be made on such date, but may be made on the next succeeding Business Day with the same force and effect as if made on the date of maturity or the date fixed for redemption, and no interest shall accrue for the period after such date.

SECTION 10.7 CONFLICT OF ANY PROVISION OF INDENTURE WITH TRUST INDENTURE ACT OF 1939. If and to the extent that any provision of this Indenture limits, qualifies or conflicts with another provision included in this Indenture by operation of Sections 310 to 317, inclusive, of the Trust Indenture Act of 1939 (an "incorporated provision"), such incorporated provision shall control.

SECTION 10.8 MASSACHUSETTS LAW TO GOVERN. This Indenture and each Security shall be deemed to be a contract under the laws of The Commonwealth of Massachusetts, and for all purposes shall be construed in accordance with the laws of said Commonwealth, except as may otherwise be required by mandatory provisions of law.

SECTION 10.9 COUNTERPARTS. This Indenture may be executed in any number of counterparts, each of which shall be an original; but such counterparts shall together constitute but one and the same instrument.

SECTION 10.10 EFFECT OF HEADINGS. The Article and Section headings herein and the Table of Contents are for convenience only and shall not affect the construction hereof.

| IN WITNESS WHEREOF, the parties hereto have caused this Indenture to be |
|--|
| duly executed, and, in the case of the Trustee, its corporate seal to be |
| hereunto affixed and attested, all as of March 1, 1993. |
| |

| | ANALOG DEVICES, INC. |
|------------------|---|
| | Ву |
| Attest: | |
| Ву | |
| | THE FIRST NATIONAL BANK OF BOSTON, Trustee |
| | Ву |
| [CORPORATE SEAL] | |
| Attest: | |
| Dv. | |

COMMONWEALTH OF MASSACHUSETTS

COUNTY OF SUFFOLK, SS

| On this day of March, 1993, before me of the day | |
|--|------------------------------|
| depose and say that he resides at | ; |
| that he is the of Analog Dev described in and which executed the above instru | ices, Inc., the corporation |
| name thereto by authority of the Board of Direct | |
| [NOTARIAL SEAL] | |
| | National Building |
| | Notary Public |
| | |
| | |
| COUNTY OF SUFFOLK, SS | |
| | |
| On this day of March, 1993, before me, to me personally known, | |
| did depose and say that he resides at of The First | |
| national banking association described in and wh. | ich executed the above |
| instrument; that he knows the corporate seal of seal affixed to said instrument is such corporate | |
| affixed by authority of the Board of Directors σ he signed his name thereto by like authority. | f said association, and that |
| [NOTARIAL SEAL] | |
| | |
| · | Notary Public |

ANALOG DEVICES, INC.

BONUS PLAN

1. Purpose

The purpose of the Bonus Plan ("Plan") of Analog Devices, Inc. and its subsidiaries (the "Company") is to encourage employees to work together toward the Company-wide goal of improved financial performance and to reward employees if the Company achieves its targeted improvement in Company performance.

2. Participants

Employees eligible to participate in the Plan are officers and full-time U.S. employees of the Company, except for the following who are excluded as participants: employees already covered under Company field sales, field applications engineering or other incentive programs; individuals who terminate their employment prior to the end of the bonus period; employees who receive a "needs improvement" performance rating during the bonus period; employees who receive a written warning during the bonus period; co-op students and interns; and temporary employees.

3. Administration

(a) The Plan shall be administered by the Compensation Committee of the Board of Directors, subject however to the approval by the Board of Directors of the applicable goals and

performance objectives, payment factors and other matters referred to in Section 4.

(b) The Compensation Committee may establish such rules and regulations, not inconsistent with the provisions of the Plan, as it deems necessary for the proper administration of the Plan, and may amend or revoke any rule or regulation so established. The Committee may make such determinations and interpretations under or in connection with the Plan as it deems necessary or advisable. All such rules, regulations, determinations and interpretations shall be binding and conclusive upon the Company, its subsidiaries, and all employees, and upon their respective legal representatives, beneficiaries, successors and assigns and upon all other persons claiming under or through any of them.

4. Determination of Bonus Award

- (a) Participants in the Plan will be entitled to bonus payments based on the Company's attainment of a targeted Operating Profit Before Taxes ("OPBT") for the applicable year, or other performance measures determined by the Board of Directors after consultation with the Compensation Committee.
- (b) For purposes of the Plan, OPBT for any fiscal year shall mean the amount reported as operating profit before taxes in the Company's financial statements as adjusted for any one-time nonrecurring charges such as restructuring expenses.

- (c) Each employee of the Company shall be assigned a Bonus Target which shall, in the case of all employees, except corporate officers, be based on the employee's job grade which is in effect at the end of the bonus period. The Bonus Target is expressed as a percentage of the employee's regular earnings paid during the applicable fiscal year. Bonus Targets for corporate officers shall be fixed by the Compensation Committee, subject to approval by the Board of Directors. For purposes of the Plan, regular earnings include the following pay categories: base pay, shift differential, sick pay, vacation pay, holiday pay, bereavement pay, jury duty pay and alternative work schedule; and exclude overtime pay, bonus payments received from a previous period, and other payments which are taxable but not considered regular earnings.
- (d) Within the first 90 days of each fiscal year, the Compensation Committee, subject to the approval of the Board of Directors, shall designate the OPBT target (hereinafter "OPBT Target") for such year (generally based on the Company's Benchmark Plan for the year) and the manner in which the Bonus Factor shall be applied to attainment of the OPBT Target. The Bonus Factor is expressed as a multiple (e.g., 1.2x) of the Bonus Target. If the OPBT Target is attained, each participant will be paid a bonus equal to the amount derived by multiplying the participant's regular earnings for the bonus period by the participant's Bonus Target, and then multiplying the product by his/her Bonus Factor.

If the Company's OPBT for a particular year either exceeds or is less than the OPBT Target for such year, the Bonus Factor will be increased or decreased, as the case may be, based on a formula determined by the Compensation Committee. The Compensation Committee will establish for each fiscal year a maximum Bonus Factor, provided that in no event may the Bonus Factor exceed 2.0x.

(e) Bonus awards may be calculated and paid quarterly, semi-annually or annually, as determined by the Compensation Committee.

5. General

- (a) No participant shall be entitled to a bonus award for any particular bonus period if he/she is not employed by the Company at the end of such bonus period, provided, however, that this provision may be waived by the Company.
- (b) No employee nor his or her spouse or other designee shall have any right to commute, sell, assign, pledge, transfer or otherwise convey any interest he/she may have under the Plan.
- (c) Benefits payable under the Plan shall be independent and separate of and in addition to any employment agreement that may exist from time to time between a participant and the Company. The Plan shall not be deemed to constitute a contract of employment between a participant and the Company, nor shall any provision hereof restrict the right of the Company to discharge

any participant or restrict the right of any participant to terminate his/her employment.

- (d) The Company may make such provisions as it may deem appropriate for the withholding of any taxes which the Company determines it is required to withhold in connection with any bonus payment.
- (e) The rights of any participant under the Plan shall be solely those of an unsecured creditor of the Company.
- (f) The invalidity or illegality of any provision of the Plan shall not impair or affect the validity or enforceability of any other provision of the Plan, and such other provisions shall remain in full force and effect in accordance with their terms.

6. Amendment and Termination

There is no obligation on the part of the Company to continue the Plan after the end of a particular bonus period, as determined by the Compensation Committee. However, the Company may continue the Plan for any subsequent fiscal or bonus periods by appropriate action of the Board of Directors. The Board of Directors of the Company may amend the Plan, provided, however, that no such amendment may reduce any amounts which have theretofore been earned and credited to a participant under the Plan, without such participant's consent.

7. Effective Date

ANALOG DEVICES, INC.

1994 DIRECTOR OPTION PLAN

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 two hundred thousand (200,000) 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.1
- (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.

¹ The maximum number of shares issuable under the Plan and the references to the number of shares purchasable upon exercise of options (as set forth in Section 5) have been adjusted to reflect the 3-for-2 stock split, to be effected in the form of a 50% stock dividend, approved by the Board of Directors of the Company on November 29, 1994 and to be distributed on January 4, 1995 to stockholders of record December 12, 1994.

(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 5,250 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 5,250 shares of Common Stock upon such election or appointment.
- (iii) Each such eligible director shall be granted an additional option to purchase 5,250 shares of Common Stock upon each of the first, second and third "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 other- wise 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. 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 op-tion. 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.

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 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 the day next preceding the fifth anniversary of the date of its approval by the Company's stockholders, 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

LEASE

PARTIES

THIS INDENTURE OF LEASE made on the 13th day of February, 1970 Campanelli and Alfred Campanelli, Trustees of Campanelli Investment Properties under Declaration of Trust dated July 6, 1962, and recorded with Middlesex South District Registry of Deeds, Book 10095, Page 307, as amended in Book 10495, Page 12, (hereinafter referred to as Landlord), and Analog Devices, Inc., a Massachusetts corporation having its principal place of business in Cambridge, Middlesex County, Massachusetts, (hereinafter referred to as Tenant).

WITNESSETH:

PREMISES

- -----

1. In consideration of the covenants and agreements hereinafter mentioned and to be performed on the part of Tenant and payment the rental hereinafter designated to be paid, and for other good and valuable consideration, Landlord has leased, rented, let and demised, and by these presents does lease, rent, let and demise unto Tenant, and Tenant does hereby lease from Landlord a certain parcel of land containing 10.71 acres situated off Route 1, Boston/Providence Pike, in the town of Westwood, Norfolk County, Commonwealth of Massachusetts, shown as Lot 1A on plan entitled "Plan of Land, Westwood, Massachusetts, owned by Glacier Sand & Stone Co., Inc." dated February 3, 1970, Bradford

Saivetz & Associates, Inc., Consulting Civil Engineers, being marked "Exhibit A-1" attached hereto and made a part hereof, which plan is to be recorded with Norfolk Deeds, together with the building to be erected thereon, said building to contain 97,200 square feet, including 31,700 square feet of office space, 9100 square feet for laboratory and 56,400 square feet of manufacturing space. Said premises are hereinafter referred to as the "premises" or the "demised premises". Said premises are leased subject to the items set forth in Schedule "A" hereto. The building or buildings in the demised premises are hereinafter sometimes referred to as the "demised building" or the "demised buildings".

TERM

- 2. The term of this lease shall be a period commencing upon the day hereinafter provided for the commencement thereof and ending twenty-five (25) years from the date rent commences to accrue hereunder unless sooner terminated as hereinafter provided.
- 3. Tenant covenants and agrees to pay Landlord during the term of this lease, except as in this lease otherwise provided, the annual net rent of ONE HUNDRED EIGHTY-SIX THOUSAND FOUR HUNDRED SIXTY-NINE DOLLARS (\$186,469) payable in equal monthly installments of FIFTEEN THOUSAND FIVE HUNDRED THIRTY-NINE AND 08/100 DOLLARS (\$15,539.08) in advance on the first day of each calendar month included within the term of this lease.

All rent and other payments to be made by Tenant to Landlord shall be made payable to Landlord and sent to Landlord at the place to which notices to Landlord shall be required to be sent unless Landlord shall direct otherwise by notice to Tenant.

Said annual net rent is sometimes hereinafter referred to as "minimum rent".

CONSTRUCTION

- -----

4A. The Landlord agrees to commence the construction program of the building by April 1, 1970 and to prosecute to completion with due diligence the work called for in the plans and specifications attached hereto and marked Exhibits "A", "B", "C" and Addendum No. 1 to Exhibit C all at its own cost and expense within twelve months from the date of this lease subject to extension for delays as set forth in Section 23 hereof, provided that Tenant may terminate this lease within 30 days after eighteen months from the date of this lease by written notice to Landlord if the buildings are not substantially completed, notwithstanding any such excusable delays, whereupon this lease shall terminate and all obligations of the parties hereto shall cease. Tenant shall have the right to make changes in the plans and specifications, except that any increase in cost to the Landlord caused by such changes made by Tenant shall be borne by Tenant and shall be paid to Landlord upon substantial completion of the building. The cost to Tenant for such changes shall be as set forth in Exhibit "C" hereof. Any such changes shall not be of

such nature as to cause the Landlord any delay in completing the construction of the building. Tenant shall have the right to approve all working drawings and changes in the plans and specifications which approval shall not be unreasonably withheld or delayed and shall be in conformity with the exhibits to this lease. Tenant shall present to Landlord its floor plan within four weeks from the date of this lease so that Landlord may develop working drawings.

B. Tenant shall have the right, without charge, after the execution of this lease and prior to the delivery to it of possession of the demised premises, whenever Tenant shall deem it appropriate to enter the demised premises and make such improvements thereto as it shall have the right to make and install therein fixtures, supplies, merchandise and other property. Tenant agrees that any such entry and the making of any such improvements and any such installation shall be done without materially interfering with the Landlord's construction of the demised premises.

Prior to such entry, Tenant shall evidence to Landlord comprehensive public liability insuring the Landlord, tenant, and all persons claiming under them, and Workmen's Compensation insurance policies covering Tenant's activities. If it can be so obtained, Landlord will obtain an endorsement to its builder's risk policy insuring Tenant against loss for work performed by Tenant and Tenant shall pay any additional cost for such

endorsement. If it cannot be so obtained, Tenant shall evidence to Landlord fire insurance as required under Article 5A of this lease.

DELIVERY OF PREMISES

C. Upon substantial completion of Landlord's construction work, but not prior thereto, notwithstanding any entry into the demised premises by Tenant prior thereto pursuant to the provisions of this section, Landlord shall deliver possession of the demised premises to Tenant and rent pursuant to Article 2 hereof shall commence on the date of such delivery of the demised premises to the Tenant.

COMMENCEMENT OF RENT

The rent for the calendar month during which rent shall begin to accrue and for the last calendar month of the term of this lease shall be apportioned.

ACCEPTANCE OF THE PREMISES

Tenant or its representatives may enter upon the Premises during the progress of the work to inspect the progress thereof and to determine if the $\,$ work is being performed in accordance with the requirements of this lease.

Tenant shall promptly give to Landlord notices of any alleged failure by
Landlord to comply with those requirements. Landlord's Work shall be deemed approved by Tenant upon substantial completion as defined below except for items of Landlord's Work which are uncompleted or do not conform to the requirements of this lease and as to which Tenant shall in

either case, have given written notice to Landlord prior to such opening.

CONSTRUCTION REPRESENTATIVES

- -----

Each party authorizes the other to rely in connection with plans and construction upon approval and other actions on the party's behalf by any Construction Representative of the Landlord or Tenant designated by written notice to the party relying.

DEFINITION OF SUBSTANTIAL COMPLETION

- -----

Landlord's construction shall be deemed substantially completed when the same shall be fully completed except only for "touch-ups" and "adjustments". Landlord agrees that when possession of the demised premises shall be delivered to Tenant, the same will be free and clear of all tenancies, occupancies, restrictions, violations, liens and encumbrances except as specified herein and in Exhibit "D" attached to this lease, which would affect Tenant's use of the demised premises. Nothing herein contained shall relieve Landlord from the obligation to complete Landlord's construction without unreasonable delay, notwithstanding the fact that the term of this lease shall have commence pursuant to the provisions of this paragraph.

GUARANTIES

- -----

Landlord agrees to deliver or assign to Tenant all guaranties and warranties which the Landlord receives on any equipment and materials installed in the premises by the Landlord, or by any contractor or supplier. Landlord agrees to cure any defects,

including labor charges at no expense to Tenant due to faulty design, workmanship or materials in the improvements constructed or to be constructed on the Premises by Landlord provided Tenant shall have given written notice of such defects to Landlord prior to the first anniversary of the Commencement Date.

COMMENCEMENT DATE

- -----

The term of the lease shall be deemed to commence upon delivery to Tenant of possession as above provided. During the period of time between the delivery by Landlord to Tenant of possession of the demised premises and the time hereinbefore provided for the commencement of rent accrual, all the provisions of this lease except the provisions relating to the payment of rent and real estate taxes and assessments shall apply to the extent that said provisions may be made applicable to said period. Until such time as Landlord shall deliver possession of the demised premises to Tenant, Landlord shall pay the cost of water, electricity, heat, air-conditioning, and other utilities used upon the demised premises; and until such time Tenant shall have the right to use, to the extent that the same are available, water, electricity, heat, air-conditioning and other utilities available upon the demised premises without charge. Prior to the delivery to Tenant of possession of the demised premises and while Tenant may be making improvements to the demised premises or installing $% \left(1\right) =\left(1\right) \left(1\right) \left($ in the demised premises fixtures, supplies, merchandise, and other property, as hereinabove provided, Tenant and its installations

shall be in the demised premises at its own risk, subject to the insurance provisions set forth in Article 4.B. hereof.

FIRE INSURANCE

_ ____

5A. Tenant agrees that it will at its expense maintain throughout the term of this lease with respect to the demised premises insurance against loss or damage by (1) fire and the so-called extended coverage causalties in an amount not less than eighty per cent (80%) of the full insurable value of the demised buildings or up to the full insurable value of the buildings or buildings if required by the holder of a first mortgage in accordance with general practice of holders of first mortgages in the Boston area in case of similar loans and only if such holder would suffer a loss arising out of the carrying of 80% of the full insurance value coverage and (2) sprinkler leakage in an amount not less than ten per cent (10%) of the full insurable value of the demised buildings. The policies of such insurance may contain a co-insurance clause, in which event the amount of the insurance shall be sufficient so that the insured will not be a co-insurer. Landlord and Tenant shall be named as insureds, the insurance should be payable in case of loss to the holders of any mortgages upon the demised premises as their interest may appear, and the policies shall provide that the loss, if any, shall be adjusted with Tenant. Said insurance shall be written by responsible insurance companies authorized to do business in the Commonwealth of Massachusetts and in amounts with each company satisfactory to

the holder of a first mortgage upon the demised premises. If at any time Landlord shall question the insurance value of the demised premises and request an appraisal, Tenant will have an appraisal made by a mutually satisfactory appraiser, the expense of the appraisal to be borne equally between Landlord and Tenant, provided that Landlord may not question the insurable value of the demised premises for a period of three (3) years after any such appraisal establishing the same. Tenant agrees that it will deliver to Landlord the policies and certificates of such insurance upon acceptance or possession of the demised premises by Tenant and that it will deliver to Landlord at least thirty (30) days prior to the expiration of any policy, a renewal policy and a certificate thereof. If the terms of any such policies shall expire subsequent to the termination of the term of this lease, a proper apportionment of the premiums for such policies shall be made. Upon the termination of the term of this lease, Tenant shall release its interest in such policies.

LIABILITY INSURANCE

- -----

B. Tenant will maintain with respect to the demised premises throughout the term of this lease, a policy or policies or comprehensive general public liability insurance, indemnifying the Landlord and Tenant, in amounts of not less than Three Hundred Thousand Dollars (\$300,000) with respect to injuries to any one person and not less than Five Hundred Thousand Dollars (\$500,000) with respect to injuries suffered in any one accident, and against

all claims for damages to or loss of property occurring upon the demised premises in the amount of at least Twenty-five Thousand Dollars (\$25,000), such policies of insurance to be issued by insurance companies authorized to do business in the Commonwealth of Massachusetts. Tenant shall deliver such policies to Landlord at least fifteen (15) days prior to the commencement of the term Tenant shall deliver such policies to Landlord of this lease, and each renewal policy at least fifteen (15) days prior to the expiration of the policy it renews. Tenant agrees that such insurance will contain an endorsement that the same will not be cancelled without ten (10) days' notice to Landlord, to the extent that such endorsement is obtainable. Tenant may maintain such insurance under a blanket policy affecting the demised premises and other premises of Tenant or any business organization affiliated with Tenant. In lieu of delivering any policy of insurance to Landlord, Tenant may deliver to Landlord a certificate of the company issuing such policy certifying such independent insurance or certifying the existence of a blanket policy showing the coverage.

FIRE OR OTHER CASUALTY

6A. In the event that during the term hereof the demised building shall be partially damaged or totally destroyed by fire, other casualty, the elements, or any other cause whatsoever, this lease shall not cease or determine, nor shall the rent herein provided for to be paid be diminished or abated or cease, but such rent herein provided for shall be paid by Tenant. The building or

buildings so damaged or destroyed by fire, other casualty, the elements or otherwise shall be repaired, re-erected or replaced by Tenant with all reasonable diligence at the expense of Tenant to the condition existing prior to such damage or destruction. Notwithstanding anything to the contrary in this Article 6A, Tenant shall be obligated to repair, re-erect or replace the building if such damage or destruction is caused by war, riot, revolution or other civil disorder, or nuclear explosion only to the extent of the net proceeds of insurance, if any, recovered arising out of such casualty and in the event such net proceeds of insurance recovered are not sufficient to repair re-erect or replace the buildings to the condition existing prior to such damage or destruction, Tenant shall use such net proceeds to repair, re-erect or replace the buildings to the extent of such proceeds and a just proportion of the rent shall be abated based on the diminished value of the buildings existing after such repair, re-erection or replacement, or in the event the buildings are not so repaired, re-erected or replaced the rent shall be suspended and this lease shall terminate. All insurance proceeds recovered with respect to Tenants leasehold improvement, including, without limitation, structural improvements, and Tenant's personal property shall be paid to Tenant. If any insurance proceeds recovered on account of damage to the buildings shall be less than Ten Thousand Dollars (\$10,000), the same shall be paid over to the Tenant. If any insurance proceeds payable on

account of such damage to the buildings are more than Ten Thousand Dollars (\$10,000) such insurance proceeds shall be disbursed by the mortgagee to the Tenant as the work of repair or restoration progresses upon certificates of the architect or engineer supervising the repair or restoration that the disbursements then requested plus all previous disbursements made from said insurance proceeds do not exceed the cost of the repair or restoration already completed, and that after the disbursement then requested shall be made, the balance of said insurance proceeds shall be sufficient to pay the remaining cost of complete repair or restoration. The term "mortgagee" in the preceding sentence shall mean any bank, insurance company, pension fund, or similar institutional lender holding a first mortgage on the premises. In the event such holder is not a bank, insurance company, pension fund or similar institutional lender, Tenant shall select a bank or trust company having its principal place of business in Massachusetts to hold such proceeds, subject to Landlord's approval, which approval shall not be unreasonably withheld or delayed. If the insurance proceeds shall exceed the cost of complete repair and restoration, any excess shall be paid to the Tenant upon the Landlord's being furnished with a certificate reasonably satisfactory to it that at a time not less than forty-three (43) days subsequent to completion of the repair or restoration, the demised premises are free from liens on account of such repair and construction, and that all bills for labor and

materials in connection therewith have been paid. The Tenant agrees to proceed promptly with such work of restoration and repair and to prosecute such work with due diligence.

DAMAGE BY FIRE AND OTHER CASUALTY

It is agreed and understood that (1) if during the fourth semi-annual period preceding the expiration of the term of this lease, the demised buildings shall be so damaged or destroyed to the extent of twenty-five per cent (25%) or more of their insurable value, or (2) if during the third semi-annual period preceding the expiration of the term of this lease, the demised buildings shall be so damaged or destroyed to the extent of twenty per cent (20%) or more of their insurable value, or (3) if during the second semi-annual period preceding the expiration of the term of this lease, the demised buildings shall be so damaged or destroyed to the extent of fifteen per cent (15%) or more of their insurable value, or (4) if during the semi-annual period immediately preceding the expiration of the term of this lease, the demised buildings shall be so damaged or destroyed to the extent of ten per cent (10%) or more of their insurable value, either Landlord or Tenant may, if either shall so elect, terminate the term of this lease by notice to the other within thirty (30) days after such damage or destruction. In the event of any termination of the term of this lease pursuant to the provisions of this article, the termination shall become effective on the thirtieth day after the giving of the notice of termination, and a $\,$

just proportion of the minimum rent according to the nature and extent of the injury to the demised premises, shall be suspended or abated until the time of termination, rent shall be apportioned as of the time of termination and proper adjustments shall be made, and neither Landlord nor Tenant shall be obligated to repair or restore any damage or destruction caused by the fire or other casualty. The Landlord in case of such termination shall be entitled to all the avails of any policy or policies insuring the hazard causing such damage or destruction. If the Tenant, within thirty (30) days after the receipt of notice from Landlord as hereinbefore provided, shall give notice to the Landlord of Tenant's intention to extend the term of this lease or to purchase the premises in accordance with any option or right so to do which it may have, (even though the time for the exercise of any option to extend the lease may not have arrived) then this lease and the options to extend and to purchase shall not terminate and end although notice of termination may previously have been given by Landlord to Tenant. In case neither party shall serve such notice of termination, or if Landlord's notice is nullified as above provided, this lease shall not terminate and all of the provisions of the preceding paragraph shall apply to and be binding upon the parties hereto.

TENANT'S REPAIRS

TENANT S REPAIRS

7A. Tenant agrees that it will make all repairs and alterations to the demised premises and buildings which Tenant is

required to maintain, as hereinafter set forth, which may be necessary to maintain the same in as good repair and condition as the same are in at the commencement of the term of this lease or may be put in thereafter, or which may be required by any laws, ordinances or regulations of any public authorities having jurisdiction, reasonable wear and tear, and damage by fire or other casualty, act of God, the elements, the act of any public authority or taking by right of eminent domain excepted, subject to the Tenant's obligation to restore or repair as hereinbefore provided in Article 6A hereof. Tenant shall take all reasonable steps (including removal of snow and ice) to prevent the liveload on the roof of the building from exceeding its design capacity of a live load of forty (40) pounds per square foot.

Tenant agrees not to make structural alterations or improvements, including new buildings, to or upon the demised premises without on each occasion obtaining the prior written consent of the Landlord, which consent Landlord agrees not unreasonably to delay or withhold.

Landlord agrees that Tenant may at any time and from time to time make nonstructural alterations, and improvements to or upon the demised premises without prior notice to or approval by Landlord.

REPAIRS AND ALTERATIONS

.

Tenant agrees that any repairs, alterations, other improvements or installations made by it, structural or $\,$

nonstructural shall be done in a good and workmanlike manner and in conformity with all laws, ordinances and regulations of all public authorities having jurisdiction, that materials of good quality shall be employed therein, that the demised premises shall not be decreased in value thereby and that the building on the demised premises will not be endangered or impaired thereby. All salvage in connection therewith may be disposed of by Tenant.

REMOVAL OF GOODS AT TIME OF TERMINATION

Upon the expiration or other termination of the terms of this lease, Tenant will remove its goods and effects and nonstructural alterations, additions and improvements made by Tenant or paid for by Tenant in any way other than as rent including, if tenant elects to so remove, lighting fixtures, carpeting and any specialized equipment and installations and those of all persons claiming under it and will yield up peaceably to Landlord the demised premises and all structural alterations or additions made to or upon the same in as good repair and condition as the same were at the commencement of the term of this lease or may have been put in thereafter, reasonable wear and tear, damage by fire or other casualty, act of God, the elements, the act of any public authority, or taking by right of eminent domain excepted. It is agreed and understood that Landlord will accept the demised premises as altered pursuant to the provisions hereof without any

obligation upon Tenant to restore the same to their former condition.

LANDLORD'S REPAIRS

- -----

B. It is further expressly agreed and understood that Landlord shall not be obligated during the term of this lease to make any repairs, alterations, or changes, structural or otherwise, of any kind whatsoever, to the said demised premises (land and demised building), except for such repairs as may be necessitated by defects in design, workmanship or material as set forth in Article 4C hereof. Notwithstanding the provisions of the preceding sentence, Landlord shall maintain the drainage ditch serving the premises and all roads within the subdivision of which the premises are a part and all utilities to the lot line of the premises until such roads and such drainage ditch is permanently accepted by the appropriate governmental authorities and until the maintenance of such utilities is the responsibility of the utility furnishing such service under a recorded easement requiring such utility to permanently maintain such service.

PERMITS

- -----

C. Tenant agrees that it will procure all necessary permits, before making any such repairs, alterations, other improvements or installations. Landlord agrees it will cooperate with Tenant in obtaining such permits.

MECHANICS LIENS

- -----

D. Tenant agrees to pay promptly when due the entire cost of any work done by Tenant upon the demised premises so that the demised premises shall at all times be free of liens for labor or materials.

INDEMNITY

_ ____

E. Tenant agrees to save and indemnify Landlord from any and all injury, loss, claims or damage to any person or property occasioned by or arising out of the doing of such work.

EMINENT DOMAIN

- 8A. If after the execution of this lease and prior to the expiration of the term of this lease the whole of the demised premises shall be taken by eminent domain, then the term of this lease shall cease as of the time when Landlord shall be divested of its interest in the demised premises, and minimum rent shall be apportioned and adjusted as of the time of termination.
 - B. If by eminent domain
- (1) part of the demised buildings shall be taken and if as a result thereof the floor area within the demised buildings shall be reduced by more than fifteen per cent (15%), or
- (2) a part of the demised land shall be taken and if as a result thereof Tenant shall no longer have free and uninterrupted access for passage by foot and by vehicle from a public street to each door and loading platform originally

installed by Landlord in the demised buildings situated as advantageously as at the beginning of this lease, or

- (3) a part of the demised land shall be taken and if as a result thereof the remaining land is not sufficient in area to provide as reasonable parking facilities as immediately prior to such taking by employees and business invitees of the demised buildings shall be taken, or
- (4) if any part of the drainage easement servicing the premises shall be taken so that the drainage from the premises is no longer adequate to serve the premises, or
- (5) any part of the demised buildings or demised premises shall be taken during the last year of the term of this lease, then Tenant may, if it shall so elect, terminate the term of this lease by giving notice of the exercise of such election to Landlord within twenty (20) days after the receipt from Landlord of notice of such taking. If Tenant shall give notice of termination pursuant to the provisions of subdivision (1) immediately above and if within fifteen (15) days after the giving of such notice by Tenant, Landlord shall give Tenant notice that (a) Landlord will add to what shall remain of the demised buildings additional premises adjacent thereto so that what shall remain plus said addition shall have a floor area not less than eighty-five per cent (85%) of the demised buildings at the commencement of the term, and (b) that Landlord will reconstruct the demised buildings so that the detailed layout of the demised

buildings as reconstructed will be reasonably satisfactory to Tenant with respect to functional efficiency for both warehouse and office purposes based upon the standard of functional efficiency immediately prior to the taking; then such notice of termination by Tenant shall become void and of no force and effect. If Tenant shall give notice of termination pursuant to the provisions of subdivision (2) immediately above and if within fifteen (15) days after the giving of such notice by Tenant, Landlord shall give Tenant notice that Landlord will restore free and uninterrupted access for passage by foot and by vehicle from a public street to each door and loading platform originally installed by Landlord in the demised buildings situated as advantageously as at the beginning of this lease, then such notice of termination by Tenant shall become void and of no force or effect. If Tenant shall give such notice of termination pursuant to the provisions of subdivision (3) immediately above, and if within fifteen (15) days after the giving of such notice by Tenant, Landlord shall give Tenant notice that Landlord will substitute for the taken ground area used for parking (immediately prior to such taking) by employees and business invitees of the demised building other ground area contiguous to the remaining land included within the demised premises so that what shall remain of said ground area used for parking plus such other ground area shall be reasonably sufficient to furnish parking facilities for at least 400 cars, subject to an appropriate abatement of rent for the loss of such spaces from the original 494 spaces provided,

then such notice of termination by Tenant shall become void and of no force or effect. If Tenant shall give such notice of termination pursuant to the provisions of subdivision (4) immediately above, and if within fifteen days after the giving of such notice by Tenant, Landlord shall give Tenant notice that Landlord will substitute for the taken drainage easement, another drainage easement substantially similar to the easement taken, then such notice of termination by Tenant shall become void and of no force and effect. Landlord shall provide any such substitutions promptly and in no event later than six months from the date of any such taking. Until such substitution is provided, an appropriate amount of the rent shall be abated depending on the nature and duration of the loss of use of the premises suffered by Tenant.

In the event of a termination under the provisions of this article, the termination shall be effective as of the time that Tenant is deprived of possession of the premises so taken, and minimum rent shall be apportioned and adjusted as of the time of termination. The amount charged by the taking authority or its assigns for rent or use and occupation between the time of the taking and the time of termination shall be deductible from rent paid or payable hereunder. If there shall be a taking by eminent domain and if the term of this lease shall not be terminated as aforesaid, then the term of this lease shall continue in full force and effect, and Landlord shall, within a reasonable time

after possession is required for public use, restore what may remain of the demised premises and construct such additions as Landlord may have agreed to add, by notice as aforesaid, to condition suitable for use, according to the standards of the original construction set forth in Exhibit "A" and "C", and including the restoration of facilities and services existing prior to such taking. A just proportion of the minimum rent according to the nature and extent of the injury to the demised premises shall be suspended or abated until what may remain of the demised premises shall be so restored and such additions shall be so constructed as aforesaid. Thereafter a just proportion of the minimum rent according to the nature and extent of the part so taken shall be abated for the balance of the term of this lease, and for the purpose hereof minimum rent shall be deemed allocable one hundred per cent (100%) to the demised buildings, except, however, if any of the ground area within the demised premises used for parking shall be taken, then to the extent that the same has not been replaced by Landlord by substituted ground area, Tenant shall be allowed a reasonable abatement of minimum rent and upon failure of the Landlord and Tenant to agree upon such abatement, the same shall be determined by arbitration as hereinafter provided.

Landlord reserves and excepts all rights to damages to the demised premises and the leasehold hereby created, then or thereafter accruing, by reason of any taking by eminent domain or

by reason of anything lawfully done or required by any public authority, and Tenant grants to Landlord all Tenant's rights, if any, to such damages and shall execute and deliver to Landlord such further instruments of assignment thereof as Landlord may from time to time request. Notwithstanding the foregoing, the Landlord does not reserve or except and Tenant does not grant to Landlord any rights of Tenant to any damages that may be payable for trade fixtures, equipment, signs or similar property or leasehold improvements installed by and belonging to Tenant or any other damages, to the extent that any such damages are of a nature such as the Tenant would be entitled to recover damages on its own account if the lease were terminated by reason of the taking and such lease contained no expressed provisions as to the rights of the Landlord and Tenant.

FINANCING

- ------

9. In the event the Landlord should desire to obtain a loan on this lease from a savings bank in accordance with Section 38, Paragraph 6, Chapter 168 of the General Laws, Tenant agrees that it will execute an agreement in writing between the bank and the Tenant which shall provide that, upon the written request by the bank, the Tenant will make all payments of rent and other sums due thereafter under the lease directly to such bank.

WAIVER OF SUBROGATION

_ _____

10A. Each of the Landlord and Tenant hereby releases the other to the extent of its insurance coverage from any and all

liability for any loss or damage caused by fire or any of the extended coverage casualties, even if such fire or other casualty shall be brought about by the fault or negligence of the other party, or any persons claiming under it; provided, however, this release shall be in force and effect only with respect to loss or damage occurring during such time as releasor's policies of fire and extended coverage insurance shall contain a clause to the effect that this release shall not affect said policies or the right of the release to recover thereunder. Each of the Landlord and Tenant agrees that its fire and extended coverage insurance policies will include such a clause so long as the same is obtainable and in includable without extra cost, or if such extra cost is chargeable therefor, so long as the other party pays such extra cost. If extra cost is chargeable therefor, each party will advise the other thereof and of the amount thereof, and the other party, at its election, may pay the same but shall not be obligated to do so.

INDEMNIFICATION

- -----

11. Tenant agrees to save Landlord harmless from and indemnify Landlord against any and all injury, loss or damage or claims for injury, loss or damage of whatever nature, to any person or property caused by or resulting from any act, omission or negligence of Tenant or any subtenant or concessionaire of Tenant or any employee or agent of Tenant or any subtenant or concessionaire of Tenant. If Tenant or anyone claiming under

Tenant or the whole or any part of the property of Tenant or anyone claiming under Tenant shall be injured, lost or damaged by theft, fire, water or steam or in any other way or manner, whether similar or dissimilar to the foregoing, no part of said injury, loss or damage is to be borne by Landlord unless the same shall be caused by or result from the negligent act or omission of Landlord or its employees or agents.

SELF-HELP

TENANT'S DEFAULT

12A. If Tenant shall default in the performance or observance of any agreement or condition in this lease contained on its part to be performed or observed, and shall not cure such default within thirty (30) days after notice from Landlord specifying the default (or shall not within said period commence to cure such default and thereafter prosecute the curing of such default to completion with due diligence), Landlord may, at its option, without waiving any claim for breach of agreement, at any time thereafter cure such default for the account of Tenant and any reasonable amount paid by Landlord in so doing shall be deemed paid for the account of Tenant and Tenant agrees to reimburse Landlord therefor; provided that Landlord may cure any such default as aforesaid prior to the expiration of said waiting period but after notice to Tenant, if the curing of such default prior to the expiration of said waiting period is reasonably necessary to protect the real estate or Landlord's interest

therein, or to prevent injury or damage to persons or property. If Tenant shall fail to reimburse Landlord upon demand for any amount paid for the account of Tenant hereunder, said amount shall be added to and become due as a part of the next payment of rent due hereunder.

LANDLORD'S DEFAULT

- -----

B. If Landlord shall default in the performance or observance of any agreement or condition in this lease contained on its part to be performed or observed, or shall default in the payment of any tax or other governmental charge which shall be a lien upon the demised premises or in the payment of any installment of principal or interest upon any mortgage which shall be prior in lien to the lien of this lease, and if Landlord shall not cure such default within thirty (30) days after notice from Tenant specifying the default or within such time as may be specified in any such mortgage, (or shall not within said period commence to cure such default and thereafter prosecute the curing of such default to completion with due diligence), Tenant may, at its option, without waiving any claim for breach of agreement, at any time thereafter cure such default for the account of Landlord, and any reasonable amount paid by Tenant in so doing shall be deemed paid for the account of Landlord and Landlord agrees to reimburse Tenant therefor, provided that Tenant may cure any such default as aforesaid prior to the expiration of said waiting period, but after said notice to Landlord, if the curing of such

default prior to the expiration of said waiting period is reasonably necessary to protect the real estate or Tenant's interest therein or to prevent injury or damage to persons or property. Further, Landlord agrees that if Tenant shall give Landlord written notice of any violation of any rights of Tenant under this lease, Landlord will use diligence to stop said violation. If Landlord shall fail to reimburse Tenant upon demand for any amount paid for the account of Landlord hereunder, said amount may be deducted by Tenant from the next or any succeeding payments of rent due hereunder.

MORTGAGE SUBORDINATION AND ATTORNMENT AGREEMENT

13. Tenant agrees that upon the request of Landlord in writing it will subordinate this lease and the lien hereof from time to time to the lien of any present or future first mortgage to a bank, insurance company, pension trust or similar

time to time to the lien of any present or future first mortgage to a bank, insurance company, pension trust or similar institutional lender, irrespective of the time of execution or time of recording of any such mortgage or mortgages, provided that the holder of any such mortgage shall enter into an agreement with Tenant, in recordable form, that in the event of foreclosure or other right asserted under the mortgage by the holder or any assignee thereof, this lease and the rights of Tenant, its successors and assigns, hereunder shall continue in full force and effect and shall not be terminated or disturbed except in accordance with the provisions of this lease. Tenant agrees that if requested by the holder of any such mortgage it will be a party

to said agreement and will agree in substance that if the mortgagee or any person claiming under the mortgagee (including a purchaser at foreclosure sale, its successors and assigns) shall succeed to the interest of Landlord in this lease, it will recognize said mortgagee or person as its landlord under the terms of this lease. Tenant agrees that it will upon the request of Landlord execute, acknowledge and deliver any and all instruments necessary or desirable to give effect to or notice of such subordination. The word "mortgage" as used herein includes mortgages, deeds of trust, or other similar instruments and modifications, consolidations, extensions, renewals, replacements and substitutes thereof.

TAXES

.

14. As additional and further rent, Tenant agrees to pay and discharge, before penalties accrue, all and every tax and taxes (whether special or general, ordinary or extraordinary), water rates, sewer rates and assessments imposed or assessed upon or against the said premises and the buildings or improvements thereof by any lawfully constituted governmental or public authority for any period during the term hereof. Nothing herein contained shall be construed to require Tenant to pay any franchise, estate, inheritance, succession, capital levy or transfer tax of Landlord, growing out of or connected with this lease or Landlord's right in said premises, or any income, excess profits or revenue tax, or any other tax, assessment, charge or

levy upon the rentals payable by Tenant under this lease unless and only to the extent that the same is imposed in lieu of the present real estate tax which is assessed on the demised premises. Notwithstanding anything to the contrary in this lease or in this Article 14, Landlord shall pay for all assessments that have been or may be assessed for the roads, water and sewer lines, drainage and utilities that have been or will be installed by Landlord in connection with the development of the subdivision of which the premises are a part.

In the event that the demised premises or any part thereof shall hereafter be affected by an assessment or assessments for local improvements, which may be paid in installments, Tenant shall have the right to pay said assessments over the longest period of time permitted by law and Tenant shall pay only such installments as may be due and payable for any period during the term of this lease.

Upon the commencement of the term of this lease, Tenant shall be liable only for such proportion of such taxes and charges which shall be levied, assessed or become liens upon said premises or any part thereof for the tax year in which this lease commences as the part of such tax year during which this lease is in effect shall bear to the whole of said tax year.

Upon the termination of this lease, either by expiration of its term or under any other provisions of this lease, other than the default by Tenant, Tenant shall be liable only for such proportion of such taxes and charges which shall be levied, assessed or become liens upon said premises or any part thereof for the tax year in which this lease is terminated as the part of such tax year during which this lease is in effect shall bear to the whole of said tax year.

Tenant agrees, upon request of Landlord, to exhibit to Landlord, as Landlord may from time to time require, the official receipts evidencing the payment or payments described in this Article 14.

It is understood and agreed that Tenant may pay under protest and/or contest, review or appeal from all such taxes, assessments and other charges levied or placed upon the demised premises, provided that Tenant shall notify Landlord in writing of such action and shall by legal proceedings or otherwise, prevent the divesting of Landlord's title in said premises; and further provided that all such proceedings shall be at Tenant's sole cost and expense and shall promptly be commenced and diligently prosecuted to a speedy and final conclusion; provided also that Tenant shall indemnify and save harmless Landlord from any and all judgments, decrees, costs, expenses and charges in connection therewith. All refunds and abatements shall belong to Tenant. Tenant may bring such proceedings as it deems necessary in its own name or in the name of the Landlord. Landlord agrees that it will, if requested by Tenant, at the cost and expense of Tenant, execute or have executed any documents that might be necessary to bring any such action or proceedings or defend any action or proceedings which Tenant deems should be defended.

Landlord shall have the right to pay any such taxes or other changes aforesaid if Landlord is about to be divested of interest

upon written notice to Tenant, and Landlord may add the amount so paid to the installment of annual net rent next coming due or to any subsequent installment of said rent, and the same shall be collectible as additional rent in the same manner and with the same remedies as if it had been originally reserved as rent.

PAYMENT OF TAXES TO MORTGAGEE

- -----

If the terms of any first mortgage to a bank, insurance company, pension trust or similar institutional lender, provide for the payment to or deposit with the mortgagee of monthly payment on account of real estate taxes, the Tenant agrees that it will make such payments as may be required by the terms of such mortgage, provided that such mortgagee pays interest on such deposits if a statute is enacted requiring such payment of interest.

UTILITIES

- ------

15. Tenant shall pay all charges for light, power, gas, telephone, water and fuel consumed on the demised premises and sewerage use charges, if any, applicable to the demised premises and shall provide such heat and air-conditioning, if any, as it shall deem desirable, and Tenant shall pay for all snow removal and all maintenance of parking lot. Landlord shall not be liable for any interruption of gas, water, heat, air-conditioning, electricity other utilities in the demised premises, except, however, if any such interruption shall be due to the failure of any utilities, conduits or equipment which it shall be the

obligation of Landlord to maintain pursuant to other provisions of this lease, Landlord shall, upon notice of such failure, use due diligence to repair the same.

ASSIGNMENT

- ------

16. Tenant shall have the right to assign this lease or to sublease the demised premises or any part thereof with the written consent of the Landlord, which consent shall not be unreasonably withheld or delayed; provided, however, that Tenant may assign this lease or sublet any portion or all of the premises without Landlord's consent to any corporation, partnership, trust, association or other business organization directly or indirectly controlling or controlled by Tenant or to any successor by merger, consolidation or acquisition of all or substantially all of the assets of Tenant. Notwithstanding any such assignment or subletting, Tenant shall continue liable during the entire term of this lease, or any extension or renewal or exercise of the option to purchase pursuant to the options granted herein for payment of the annual net rent and additional rent and for the performance of the terms, provisions and covenants in this lease contained and on $% \left\{ 1\right\} =\left\{ 1\right\}$ the part of Tenant to be kept and performed. In the event of any assignment of this lease, Tenant agrees that its continuing liability hereunder shall in no way be affected or impaired by any extension of time or other indulgence granted to any assignee or by waiver by the Landlord of any default of any of the terms and provisions of the lease, whether or not prior notice thereof has

been given to the Tenant, the Tenant hereby waiving all suretyship defenses.

LANDLORD'S LIABILITY

17. It is expressly agreed and understood that if Landlord herein named conveys its interest in the said demised premises during the term hereof, it shall not thereafter be liable for the covenants and agreements to be observed and performed by Landlord hereunder, but the grantee of the Landlord's interest shall thereupon assume and become liable for the observance of said covenants and agreements. Nothing herein, however, shall relieve Landlord named herein of any liability which may have incurred or which may have accrued prior to such conveyance.

DEFAULT

18.A. (1) If the Tenant shall be in default in payment of any rent, or (2) if the Tenant shall be in default in the performance or observance of any other agreement on its part to be performed or observed, or (3) if any person shall take this leasehold interest or any part thereof upon execution, or (4) if Tenant shall make an assignment of its property for the benefit of creditors, or (5) if Tenant shall be declared bankrupt or insolvent according to law or (6) if any bankruptcy or insolvency proceedings shall be commenced by or against Tenant and shall not be dismissed within one hundred twenty (120) days thereafter, or (7) if a receiver, trustee or assignee shall be appointed in any bankruptcy or insolvency proceedings for the property of Tenant

and shall not be discharged within one hundred twenty (120) days thereafter, then, in any of said cases, on the thirtieth day next following the giving of notice designating such default or breach hereof, provided Tenant has not cured such default within such thirty (30) day period or if the default is of such a nature that it cannot reasonably be cured within such thirty (30) day period, provided that Tenant has not commenced diligently to correct the default and has not thereafter diligently pursued such correction to completion, then, without waiving any claim for breach of agreement, Landlord may send written notice to Tenant of the termination of the term of this lease and on the fifth day next following the date of the sending of the notice, the term of this lease shall terminate, Tenant hereby waiving all rights of redemption.

DEFAULT

- -----

B. In case of any such termination, Tenant will indemnify Landlord against all loss of rent and other payments provided herein to be paid by Tenant to Landlord between the time of termination and the expiration of the term of this lease; or at the election of Landlord, exercised at the time of the termination or at any time thereafter, Tenant will indemnify Landlord each month until the exercise of the election against all loss of rent provided herein to be paid by Tenant to Landlord which Landlord may incur by reason of such termination during the period between the time of the termination and the exercise of the election, and

upon the exercise of the election, Tenant will pay to Landlord as damages such amount as at the time of the exercise of the election represents the amount by which the fair rental value of the demised premises for the period from the exercise of the election until the expiration of the term shall be less than the amount of rent and other payments provided herein to be paid by Tenant to Landlord during said period. It is understood and agreed that at the time of the termination or any time thereafter Landlord in the exercise of reasonable business judgment will seek to relet the premises may rent the demised premises for a term which may expire after the expiration of the term of this lease, without releasing Tenant from any liability whatsoever, that Tenant shall be liable for any expenses incurred by Landlord in connection with obtaining possession of the demised premises, in connection with putting the demised premises into good condition for reletting, and in connection with any reletting, including, but without limitation, reasonable attorneys' fees and brokers' fees, and that any monies collected from any reletting shall be applied first to the foregoing expenses and then to payment of rent and all other payments due from Tenant to Landlord.

RIGHTS CUMULATIVE

- -----

19. It is mutually covenanted and agreed that the various rights, powers, options, elections, appointments and remedies of Landlord contained in this lease shall be construed as cumulative

and no one of them is exclusive of the other or exclusive of any rights or priorities allowed by law.

RIGHT OF ENTRY

- ------

20. Landlord shall have the right at any time during the term hereof to enter in or upon said demised premises during reasonable business hours for the purpose of examining and inspecting the same and during the last six (6) month period prior to the expiration of the term hereof, Tenant will permit Landlord to enter in and upon said premises during reasonable business hours for the purpose of showing the same to prospective tenants. Landlord shall obtain any security clearances necessary if Tenant is performing classified work at any time on the premises.

INTERPRETATION

21. It is agreed that if any provision of this lease or the application of any provision to any person or any circumstance shall be determined to be invalid or unenforceable, then such determination shall not affect any other provisions of this lease or the application of said provision to any other person or circumstance all of which other provisions shall remain in full force and effect; and it is the intention of the parties hereto that if any provision of this lease is capable of two constructions, one of which would render the provision void and the other of which would render the provision valid, then the provision shall have the meaning which renders it valid.

SUCCESSORS AND ASSIGNS

- ------

22. The words "Landlord" and "Tenant" and the pronouns referring thereto as used in this lease shall mean, where the context requires or admits, the persons named herein as Landlord and as Tenant respectively, and their respective heirs, legal representatives, successors and assigns, irrespective of whether singular or plural, masculine, feminine or neuter. The agreements and conditions of this lease contained on the part of the Landlord to be performed and observed shall be binding upon Landlord and its heirs, legal representatives, successors and assigns, and shall representatives, successors and assigns, and the agreements and conditions on the part of Tenant to be performed and observed shall be binding upon Tenant and its heirs, legal representatives, successors and assigns, shall enure to the benefit of Landlord and its heirs, legal representatives, successors and assigns. If Landlord shall be more than one person, the obligations of Landlord shall be joint and several.

DELAYS

- -----

23. In any case where either party hereto is required to act (other than make a payment of money) delays caused by or resulting from an act of God, war, civil commotion, fire or casualty, labor difficulties, general shortages of labor, materials, or equipment, government regulations or other causes beyond such reasonable control shall not be counted in determining the time when

the performance of such act must be completed, such time be designated by a fixed time, a fixed period of time or "a reasonable time". In any case where work is to be paid for out of insurance proceeds or condemnation awards, due allowance shall be made, both to the party required to perform such and to the party required to make such payment for delays in the collection of such proceeds and awards.

HOLDING OVER

- --------

24. If Tenant or anyone claiming under Tenant shall remain in possession of the demised premises or any part thereof after the expiration of the term of this lease without any agreement in writing between Landlord and Tenant with respect thereto prior to acceptance of rent by Landlord, the person remaining in possession shall be deemed a tenant at sufferance and after acceptance of rent by Landlord, the person remaining in possession shall be deemed a tenant from month to month, subject to the provisions of this lease insofar as the same may be made applicable to a tenancy from month to month.

WAIVERS

- -----

25. Failure to either party to complain of any act or omission on the part of the other party, no matter how long the same may continue, shall not be deemed to be a wavier by said party of any of its rights hereunder. No waiver by either party at any time, express or implied, of any breach of any provision of this lease shall be deemed a waiver of a breach of any other

provision of this lease or a consent to any subsequent breach of the same or any other provision. If any action by either party shall require the consent or approval of the other party, the other party's consent to or approval of such action on any one occasion shall not be deemed a consent to or approval of said action on any subsequent occasion or a consent to or approval of any other action on the same or any subsequent occasion. Any and all rights and remedies which either party may have under this lease or by operation of law, either at law or in equity, upon any breach, shall be distinct, separate and cumulative and shall not be deemed inconsistent with each other; and no one of them, whether exercised by said party or not shall be deemed to be in exclusion of any other; and any two or more or all of such rights and remedies may be exercised at the same time.

OPTIONS

.

26. The Tenant, provided it is then not in default of its obligations under this lease, shall have the privilege of extending or renewing this lease for a further term of ten (10) years by giving notice to the Landlord in writing on or before twelve (12) months prior to the expiration of the term hereof.

The Tenant, provided it is then not in default of its obligations under this lease shall have the further privilege of extending or renewing this lease for another term of ten (10) years by giving notice to the Landlord in writing on or before

twelve (12) months prior to the expiration of the first ten (10) year renewal option.

QUIET ENJOYMENT

.

27. Landlord agrees that upon Tenant's paying the rent and performing and observing the agreements and conditions on its part to be performed and observed, Tenant shall and may peaceably and quietly have, hold and enjoy the demised premises and all rights of Tenant hereunder during the term of this lease without any manner of hindrance or molestation.

NOTICES

- ----

28. Any notice and other communication given pursuant to the provisions of this lease shall be in writing and shall be given by mailing the same by certified mail or registered mail, return receipt requested, postage prepaid, and, except as may be expressly otherwise provided in this lease, any such notice or other communication shall be deemed given when mailed as in this article provided. If sent to Landlord, the same shall be mailed to Landlord at One Campanelli Drive, South Braintree, Massachusetts 02185, or at such other address or addresses as Landlord may hereafter designate by notice to Tenant; and if sent to Tenant, the same shall be mailed to Tenant at the demised premises or at such other address or addresses as Tenant may hereafter designate by notice to Landlord.

NOTICE OF LEASE

- -----

29. In accordance with the provisions of General Laws, Chapter 183, Section 4, a notice of this lease is being delivered by the parties and being recorded. Upon request of either party, the Landlord and Tenant shall execute and deliver an instrument in form for recording setting forth the commencement date, and if this lease is terminated before the term expires or if the options to extend are not exercised, they shall execute and deliver an instrument in such form acknowledging such fact and the date of termination of this lease. Both parties agree that this lease shall not be recorded.

SIGNS

- ----

30. Tenant shall have the right to place any signs on the premises relating to Tenant's business provided Tenant complies with all applicable governmental statutes, by-laws and regulations. Tenant shall also have the right to place a sign naming Tenant and its operations at the entrance of the subdivision of which the premises are a part of a size no smaller than any sign of any other tenant or occupant in the subdivision, subject to such reasonable rules and regulations as Landlord may impose concerning the location, size and character of such sign.

ARBITRATION

_ _____

31. In the event of a dispute between Landlord and Tenant with respect to the existence of a default hereunder, such dispute shall be arbitrated by three arbitrators appointed as follows:

Landlord and Tenant shall each appoint a fit and impartial person as arbiter who shall have at least ten years' experience in the City of Boston in a calling connected with the subject matter of the dispute. Written notice of such appointment shall be given by each party to the other within 15 days of the date upon which written notice is given by one party to the other demanding arbitration and the arbiters so appointed shall appoint a third arbiter who shall likewise have had ten years' experience in the City of Boston in a calling connected with the subject matter of the dispute, and if the arbiters fail to agree upon a third arbiter within 15 days of the date upon which the later of such written notices of appointment of the first two arbiters is given, such third arbiter shall be appointed by a Justice of the Superior Court of the Commonwealth of Massachusetts in Suffolk County upon ten days' notice of the institution of proceedings for such Court appointment, or by any other Court sitting in Suffolk County succeeding to the jurisdiction and functions exercised by the Superior Court of the Commonwealth of Massachusetts. Any award that shall be made in such arbitration by the arbiters or a majority of them shall be binding and shall have the same force and effect as a judgment made in a court of competent jurisdiction and both Landlord and Tenant shall have the right to apply to the Superior Court of the Commonwealth of Massachusetts in Suffolk County, or to any other court sitting in Suffolk County succeeding to the jurisdiction and functions exercised by the Superior Court

of the Commonwealth of Massachusetts, for a decree, judgment or order upon said arbitration or award upon ten days notice to the other party. The fees, costs and expenses of arbitration, other than fees of attorneys for the parties, expert witnesses and other witness' fees, shall be borne equally between the parties unless the arbiters determine that some other division shall under the circumstances be more equitable.

PURCHASE OPTIONS

TORONNOL OF TENO

32. The Lessee shall have the right to purchase Lessor's leasehold in the demised premises at the end of ten (10) years of the term hereof or at the end of twenty-five (25) years of the term hereof. Such option is to be exercised by written notice to the Lessor delivered twelve (12) months before the expiration of the tenth year of the term hereof or twelve (12) months before the expiration of the twenty-fifth year of the term hereof. The purchase price to be paid in case of the exercise of the twenty-five year option shall be \$1,200,000 and in the case of the twenty-five year option the purchase price shall be \$850,000. Said purchase prices shall be adjusted by the amount of any outstanding mortgage or mortgages on the premises. At the time of conveyance, Lessor shall deliver to Lessee, an assignment of the ground lease from Glacier Sand & Stone Co., Inc. duly assented to by the Ground Lessor, free from all encumbrances except those mentioned in Schedule "A".

If Lessee exercises either of the options to purchase the leasehold set forth in the preceding paragraph, Lessee may also exercise the option to purchase the fee in accordance with the provisions of Article 32 and 33 of the Ground Lease set forth in full as follows:

ARTICLE 32 AND 33 OF GROUND LEASE

APPRAISALS

"32. In any case where an appraisal is required under this lease and the parties hereto do not agree as to the appraisal amount within a period of twenty (20) days, then in such event the Lessor and Lessee shall on or before ten (10) days after the expiration of said twenty (20) days each appoint an appraiser in writing and the two appraisers so appointed shall appoint a third appraiser. The majority of the three so appointed shall determine the appraisal amount. If either party shall fail to appoint an appraiser price to said time or if the appraisers shall fail to select a third appraiser prior to said time, the chief justice of the Probate Court of Norfolk County for the time being upon application of either party shall appoint such number of appraisers so that the total number of them shall be three and a majority of them shall determine said amount. In any event the decision of the majority of the appraisers shall be made in writing within thirty (30) days after appointment of the last appraiser to be appointed, which decision shall be final. The

expense of the appraisal shall be borne equally between Lessor and Lessee.

PURCHASE OPTIONS

33. The Lessee shall have the right to purchase the demised premises at the end of ten (10) years of the term hereof or at the end of twenty-five (25) years of the term hereof. Such option is to be exercised by written notice to the Lessor delivered six (6) months before the expiration of the tenth year of the term hereof or six (6) months before the expiration of the twenty-fifth year of the term hereof. The purchase price to be paid in case of the exercise of either of the above options shall be by agreement between the parties.

In the event the parties do not agree, then the purchase price for the options shall be determined by appraisal in accordance with paragraph numbered 32 of this lease.

In any event, however, the price to be paid at the time of the tenth year option shall not be less than Eight Hundred Ten Thousand Dollars (\$810,000) and shall not be more than Nine Hundred Thousand Dollars (\$900,000), and the price to be paid at the time of the twenty-fifth year option shall not be less than Five Hundred Fifty Thousand Dollars (\$550,000) and shall not be more than Seven Hundred Seventy Thousand Dollars (\$770,000).

No adjustments shall be made with respect to any outstanding mortgage or mortgages on the premises.

The deed to be delivered by the Lessor shall convey a title free from all encumbrances except those mentioned in Exhibit "D" or those imposed with the consent of the Lessee during the term hereof." (End of Article 32 and 33 of Ground Lease)

Notice of the exercise of such options to purchase the fee shall be given simultaneously with the notice to purchase the fee. The amount of any mortgages on the fee shall be deducted from the purchase price to be paid by Lessee. If Lessee requests it or if the Ground Lessor requires it, Lessor will purchase the fee in accordance with the option and will thereupon immediately convey the fee to Lessee.

 $\ensuremath{\mathsf{EXECUTED}}$ AND SEALED on the day and year first above mentioned.

/s/ Michael Campanelli

Trustees as aforesaid for self and co-trustees

LANDLORD

ANALOG DEVICES, INC.

By:/s/ Emil B. Rechsteiner

Emil Rechsteiner, President

EXHIBIT "D"

- Subject to the drainage easement 20 feet wide and the drainage easement 30 feet wide shown on Exhibit "A";
- Subject to the agreement with the Department of Natural Resources recorded with Norfolk Registry of Deeds, Book 4488, Page 656;
- Subject to restrictions set forth in deed from Lessor to Paul J. McMackin and Hugh J. McMackin dated May 16, 1969, recorded with Norfolk Registry of Deeds, Book 4595, Page 277; and
- 4. Subject to the zoning of the town of Westwood, which provides for a buffer zone which is part of the demised premises as defined in the zoning laws of the town of Westwood.

SCHEDULE "A"

- Subject to the drainage easement 20 feet wide and the drainage easement 30 feet wide shown on Exhibit "A";
- Subject to the agreement with the Department of Natural Resources recorded with Norfolk Registry of Deeds, Book 4488, Page 656;
- Subject to restrictions set forth in deed from Lessor to Paul J. McMackin and Hugh J. McMackin dated May 16, 1969, recorded with Norfolk Registry of Deeds, Book 4595, Page 277; and
- Subject to the zoning of the town of Westwood, which provides for the buffer zone which is part of the demised premises as defined in the zoning laws of the town of Westwood.
- Subject to the restrictions denying access to Downey Street in Westwood imposed by the deed from Glacier Sand & Stone Co. Inc. to The Town of Westwood by deed dated March 7, 1968 recorded with said Deeds at Book 4517, Page 27.
- Lease from Glacier Sand & Stone Co., Inc. to the Trustees of Campanelli Investment Properties dated February 13, 1970, notice of which lease is to be recorded with the notice of this lease.

AMENDMENT NO. 2 TO CREDIT AGREEMENT

 $\,$ AMENDMENT dated as of September 8, 1994 among ANALOG DEVICES, INC. and the undersigned BANKS.

WITNESSETH:

WHEREAS, Analog Devices, Inc., the Banks listed therein and Morgan Guaranty Trust Company of New York, as Agent, are parties to a Credit Agreement dated as of March 12, 1993 (as amended by Amendment No. 1 thereto dated as of May 18, 1993, the "Agreement"); and

WHEREAS, the parties hereto desire to extend the facility provided for in the Agreement, and change the pricing applicable thereto, as more fully set forth below;

NOW, THEREFORE, the parties hereto agree as follows:

SECTION 1. DEFINITIONS; REFERENCES. Unless otherwise specifically defined herein, each term used herein which is defined in the Agreement has the meaning assigned to such term in the Agreement. Each reference to "hereof", "herein" and "hereby" and each other similar reference and each reference to "this Agreement" or to the Agreement and each other similar reference contained in the Agreement or in any Exhibit thereto shall from and after the date hereof refer to the Agreement as amended hereby.

SECTION 2. AMENDMENT OF SECTION 1.01. Section 1.01 of the Agreement is amended (a) by replacing the date "March 15, 1996" in the definition of "Termination Date" with the date "September 8, 1998";

"Commitment Fee Rate" means (i) .01 of 1% per annum for any date on which Level I Status exists, (ii) .05 of 1% per annum for any date on which Level II Status exists and (iii) .0625 of 1% per annum for any date on which Level III Status, Level IV Status or Level V Status exists.

"Facility Fee Rate" means (i) .125 of 1% per annum for any date on which Level I Status exists, (ii) .15 of 1% per annum for any date on which Level II Status exists, (iii) .1875 of 1% per annum for any date on which Level III Status exists, (iv) .25 of 1% per annum for any date on which Level IV Status exists and (v) .375 of 1% per annum for any date on which Level V Status exists.

(d) by deleting the definition of Usage Fee Rate.

SECTION 3. AMENDMENT OF SECTION 2.07. Section 2.07 of the Agreement is amended

(a) by replacing the definition of "CD Margin" in subsection (b) with the following:

"CD Margin" means (i) .375 of 1% per annum for any date on which Level I Status exists, (ii) .45 of 1% per annum for any date on which Level II Status exists, (iii) .5375 of 1% per annum for any date on which Level III Status exists, (iv) .75 of 1% per annum for any date on which Level IV Status exists and (v) 1% per annum for any date on which Level V Status exists.

(b) by replacing the definition of "Euro-Dollar Margin" in subsection (c) with the following:

"Euro-Dollar Margin" means (i) .25 of 1% per annum for any date on which Level I Status exists, (ii) .325 of 1% per annum for any date on which Level II Status exists, (iii) .4125 of 1% per annum for any date on which Level III Status exists, (iv) .625 of 1% per annum for any date on which Level IV Status exists, and (v) .875 of 1% per annum for any date on which Level V Status exists.

SECTION 4. AMENDMENT OF SECTION 2.08. Section 2.08 of the Agreement is amended by deleting subsection (e) thereof.

SECTION 5. CHANGES IN COMMITMENTS. The Commitments of the Banks are changed as set forth on the signature pages hereof.

SECTION 6. GOVERNING LAW. This Amendment shall be governed by and construed in accordance with the laws of the State of New York.

SECTION 7. COUNTERPARTS; EFFECTIVENESS. This Amendment may be signed in any number of counterparts, each of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument. This Amendment shall become effective as of the date hereof when the Agent shall receive

- (a) duly executed counterparts hereof signed by the Borrower and the Banks (or, in the case of any party as to which an executed counterpart shall not have been received, the Agent shall receive telex, telecopy or other written confirmation from such party of execution of a counterpart hereof by such party);
- (b) an opinion of William A. Wise, Jr., Assistant General Counsel of the Company, substantially in the form of Exhibit A hereto and covering such additional matters relating to the transactions contemplated hereby as the Required Banks may reasonably request;
- (c) an opinion of Davis Polk & Wardwell, special counsel for the Agent, substantially in the form of Exhibit B hereto and covering such additional matters relating to the transactions contemplated hereby as the Required Banks may reasonably request; and
- (d) all documents it may reasonably request relating to the existence of the Company, the corporate authority for and the validity of this Amendment, the Agreement so amended hereby and the Notes, and any other matters relevant hereto, all in form and substance satisfactory to the Agent;

PROVIDED that this Amendment shall not become effective or be binding on any party hereto unless all of the foregoing conditions are satisfied not later than September 30, 1994.

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be duly executed by their respective authorized officers as of the day and year first above written.

ANALOG DEVICES, INC.

By /s/ William A. Martin

Title: Treasurer

| COMMITMENTS |
|-------------|
|-------------|

\$20,000,000

MORGAN GUARANTY TRUST COMPANY OF NEW YORK

By /s/ Adam J. Silver

Title: Associate

\$20,000,000

BANK OF AMERICA NATIONAL TRUST AND SAVINGS ASSOCIATION

By /s/ Kevin McMahon

Title: Vice President

\$20,000,000

THE FIRST NATIONAL BANK OF

BOSTON

By /s/ George Hibbard

Title: Vice President

Total Commitments

\$60,000,000

Consented to by:

CONTINENTAL BANK N.A.

By /s/ Barry A. Peterson

Title: Vice President

December 15, 1994

Mr. Jerald G. Fishman President and Chief Operating Officer Analog Devices, Inc. Three Technology Way Norwood, Massachusetts 02062-9106

Non-Qualified Stock Option Agreements between Analog Reference:

Devices, Inc. and Jerald G. Fishman dated: (1) December 11, 1991 (2) October 7, 1992

(3) December 14, 1993

Restricted Stock Award Agreements between Analog

Devices, Inc. and Jerald G. Fishman

(1) October 25, 1990 (2) December 18, 1990 dated:

(jointly and severally the "Agreements")

Dear Jerry:

I am pleased to inform you that on September 14, 1994, the Board of Directors (the "Board") of Analog Devices, Inc. (the "Company"), at a meeting duly called at which a quorum was present and voting throughout, voted to authorize amendments to your outstanding Non-Qualified Stock Options and Restricted Stock Awards, granted to you pursuant to each of the Agreements referenced above.

This letter is intended to provide an amendment to each of the above referenced Agreements. The following, upon your acceptance as provided below shall be incorporated in each referenced Agreement as if fully stated therein and shall prevail over any conflicting provision thereof so long as the period of time set forth therein has not expired. The capitalized terms in the amendment shall have the same meaning as set forth in the Agreements.

(1) The parties hereby agree that in the event the Company terminates your employment for any reason other than termination for cause prior to September 15, 1999, (i) the options for the purchase of shares of Common Stock of the

Mr. Jerald G. Fishman Page -2-December 15, 1994

Company which are not then exercisable (in the case of the Non-Qualified Stock Option Agreements) shall be and become immediately exercisable upon such termination, and (ii) the shares of Common Stock of the Company which are not then vested (because the Restricted Period set forth in the Restricted Stock Award Agreements has not then expired) shall be and become immediately fully vested upon such termination date, and the applicable terms set in the Agreements relating to exercisable options and vested shares shall govern.

- (2) The above provisions relating to acceleration of Options and vesting of Restricted Stock shall not apply to (a) any voluntary termination by you of your employment, (b) any termination for cause prior to September 15, 1999 or (c) any Options or Restricted Stock Awards granted to you by the Company after September 14, 1994.
- (3) "Cause" for the purposes hereof means (a) your willful and continued failure to substantially perform your duties as directed by the Board (other than any such failure resulting from your incapacity due to physical or mental disability), provided that a written demand for substantial performance has been delivered to you by the Board specifically identifying the manner in which the Board believes that you have not substantially performed your duties and you have not cured such failure within 30 days after such demand, (b) your willful engaging in conduct which is demonstrably and materially injurious to the Company, or (c) your willful violation of any material provision of any confidentiality, nondisclosure, assignment of invention, noncompetition or similar agreement entered into by you in connection with your employment by the Company. For purposes of this paragraph, no act or failure to act on your part shall be deemed "willful" unless done or omitted to be done by you not in good faith and without reasonable belief that your action or omission was in the best interest of the Company.
- (4) On and after September 15, 1999, the terms of each of the Agreements then in effect will determine your rights with respect to the Common Stock of the Company subject to the Agreements.

Mr. Jerald G. Fishman Page -3-December 15, 1994

Very truly yours,

AGREED AND ACCEPTED:

ANALOG DEVICES, INC.

/s/ Jerald G. Fishman

/s/ Ray Stata

Ray Stata Chairman of the Board and Chief Executive Officer Jerald G. Fishman 169 Hickory Road Weston, MA 02193

Exhibit 21

SUBSIDIARIES

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

| | ORGANIZED UNDER LAW OF | PERCENTAGE OF VOTING SECURITIES OWNED BY REGISTRANT AS OF OCTOBER 29, 1994 |
|--|---------------------------|---|
| | | |
| Analog Devices Limited Analog Devices, GmbH | United Kingdom Germany | 100% 100% |
| Analog Devices, S.A. | France | 100% |
| Analog Devices, K.K. | Japan | 100% |
| Analog Devices APS | Denmark | 100% |
| Analog Devices, A.G. | Switzerland | 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, HDLSGESMBH M.B.H. | Austria | 100% |
| Analog Devices Korea, Ltd. | Korea | 100% |
| Analog Devices, B.V. | The Netherlands | 100% |
| Analog Devices Finance N.V. | Netherlands Antilles | 100% |
| Analog Devices Finance Bermuda, Ltd. | Bermuda | 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 Foreign Sales | | |
| Corporation, B.V. | The Netherlands | 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% |
| Analyzed Investments, Ltd. | Ireland | 54% |
| Analog/NCT Supply Ltd. | Delaware | 50% |
| Analog Supplies Company | Japan | 15% |

The financial statements of all wholly owned subsidiaries are included in the Consolidated Financial Statements listed in the Index to Consolidated Financial Statements appearing elsewhere herein.

1

Exhibit 23

CONSENT OF ERNST & YOUNG LLP, INDEPENDENT AUDITORS

We consent to the incorporation by reference in the Registration Statements (Form S-8 Nos. 2-63561, 2-69122, 2-77321, 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 and 33-60642) of Analog Devices, Inc. of our report dated November 29, 1994, with respect to the consolidated financial statements of Analog Devices, Inc. included in this Annual Report (Form 10-K) for the year ended October 29, 1994.

ERNST & YOUNG LLP

Boston, Massachusetts January 20, 1995 THIS SCHEDULE CONTAINS SUMMARY FINANCIAL INFORMATION EXTRACTED FROM THE CONSOLIDATED CONDENSED FINANCIAL STATEMENTS OF ANALOG DEVICES FOR THE YEAR ENDED OCTOBER 29, 1994 AND IS QUALIFIED IN ITS ENTIRETY BY REFERENCE TO SUCH FINANCIAL STATEMENTS.

1,000 U.S. DOLLARS

```
YEAR
      OCT-29-1994
          OCT-31-1993
            OCT-29-1994
                   1
                      109,113
               72,652
168,740
                  6,403
                 130,726
            505,457
                      658,879
              377,064
              815,871
       206,186
                      80,061
                     12,542
             0
                       0
                  509,373
815,871
                     773,474
            773,474
                       394,448
               394,448
            277,210
                  0
            7,149
              96,911
                 22,415
          74,496
                    0
                   0
                 74,496
                   .96
                   .96
```