

Registration No. 333-

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM S-3

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

ANALOG DEVICES, INC.
(Exact name of registrant as specified in its charter)

MASSACHUSETTS	04-2348234
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer. Identification No.)

ONE TECHNOLOGY WAY, NORWOOD, MASSACHUSETTS 02062-9106 (617) 329-4700
(Address, including zip code, and telephone number, including area code, of
registrant's principal executive offices)

PAUL P. BROUNTAS, ESQ.
HALE AND DORR
60 STATE STREET
BOSTON, MASSACHUSETTS 02109
(617) 526-6000

(Name, address, including zip code, and telephone number, including area
code, of agent for service)

Copy to:
PAUL P. BROUNTAS, ESQ.
MARK G. BORDEN, ESQ.
Hale and Dorr
60 State Street
Boston, Massachusetts 02109
(617) 526-6000

Approximate date of commencement of proposed sale to the public: At the discretion of the Selling Stockholders.

If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. / /

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. /X/

If this form is registering additional securities pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. 333- / /

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. 333- / /

If delivery of the prospectus is expected to be made pursuant Rule 434, please check the following box. / /

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered(1)	Proposed Maximum Offering Price Per Share(1)	Proposed Maximum Aggregate Offering Price(1)	Amount of Registration Fee
Common Stock, \$.16 2/3 par value.....	76,596 shares	\$18.375	\$1,407,451.50	\$485.33

(1) Estimated solely for purposes of calculating the registration fee pursuant to Rule 457(c) of the Securities Act of 1933, as amended, on the basis of the average of the high and low sales prices of the Registrant's Common Stock on the New York Stock Exchange on July 16, 1996.

THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(A) OF THE SECURITIES ACT OF 1933 OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(A), SHALL DETERMINE.

INFORMATION CONTAINED HEREIN IS SUBJECT TO COMPLETION OR AMENDMENT. A REGISTRATION STATEMENT RELATING TO THESE SECURITIES HAS BEEN FILED WITH THE SECURITIES AND EXCHANGE COMMISSION. THESE SECURITIES MAY NOT BE SOLD NOR MAY OFFERS TO BUY BE ACCEPTED PRIOR TO THE TIME THE REGISTRATION STATEMENT BECOMES EFFECTIVE. THIS PROSPECTUS SHALL NOT CONSTITUTE AN OFFER TO SELL OR THE SOLICITATION OF AN OFFER TO BUY NOR SHALL THERE BE ANY SALE OF THESE SECURITIES IN ANY STATE IN WHICH SUCH OFFER, SOLICITATION OR SALE WOULD BE UNLAWFUL PRIOR TO REGISTRATION UNDER THE SECURITIES LAWS OF ANY SUCH STATE.

SUBJECT TO COMPLETION, DATED JULY 19, 1996

76,596 Shares

[ANALOG LOGO]

COMMON STOCK

The shares of Common Stock, \$.16 2/3 par value per share (the "Common Stock"), of Analog Devices, Inc. ("Analog" or the "Company") covered by this Prospectus are issued and outstanding shares which may be offered and sold, from time to time, for the account of certain stockholders of the Company (the "Selling Stockholders"). See "The Selling Stockholders." The shares of Common Stock covered by this Prospectus were issued to the Selling Stockholders in a private placement made in connection with the acquisition of Mosaic Microsystems Limited ("Mosaic") by the Company on July 1, 1996. All of the shares offered hereunder are to be sold for the account of the Selling Stockholders. The Company will not receive any of the proceeds from the sale of the shares by the Selling Stockholders. The Common Stock of the Company is traded on the New York Stock Exchange under the symbol "ADI." On July 16, 1996, the last reported sale price of the Common Stock on the New York Stock Exchange was \$19.375 per share.

SEE "RISK FACTORS" BEGINNING ON PAGE 4 FOR A DISCUSSION OF CERTAIN FACTORS THAT SHOULD BE CONSIDERED BY PROSPECTIVE INVESTORS.

THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION NOR HAS THE COMMISSION OR ANY STATE SECURITIES COMMISSION PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this Prospectus is , 1996.

AVAILABLE INFORMATION

The Company is subject to the informational requirements of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and in accordance therewith files reports and other information with the Securities and Exchange Commission (the "Commission"). The reports, proxy materials and other information filed by the Company with the Commission may be inspected and copied at the public reference facilities maintained by the Commission at the Public Reference Section of the Commission at 450 Fifth Street, N.W., Washington, D.C. 20549, and at the Regional Offices of the Commission located at Seven World Trade Center, Suite 1300, New York, New York 10048, and at Citicorp Center, 500 West Madison Street, Suite 1400, Chicago, Illinois 60661. Copies of such materials also may be obtained from the Public Reference Section of the Commission at 450 Fifth Street, N.W., Washington, D.C. 20549 at prescribed rates. The Common Stock of the Company is listed on the New York Stock Exchange. Reports, proxy materials and other information concerning the Company may also be inspected at the offices of the New York Stock Exchange, 20 Broad Street, New York, New York 10005.

The Company has filed with the Commission a Registration Statement on Form S-3 under the Securities Act of 1933, as amended (the "Securities Act"), with respect to the shares of Common Stock offered hereby. This Prospectus does not contain all the information set forth in the Registration Statement and the exhibits and schedules thereto, certain portions of which are omitted as permitted by the rules and regulations of the Commission. For further information with respect to the Company and the shares of Common Stock offered hereby, reference is made to the Registration Statement, including the exhibits and schedules. The Registration Statement, together with the exhibits and schedules thereto, may be inspected, without charge, at the Commission's principal office at 450 Fifth Street, N.W., Washington, D.C. 20549, and also at the regional offices of the Commission listed above. Copies of such material may also be obtained from the Commission upon the payment of prescribed rates.

Statements contained in this Prospectus as to any contracts, agreements or other documents filed as an exhibit to the Registration Statement are not necessarily complete, and in each instance reference is hereby made to the copy of such contract, agreement or other document filed as an exhibit to the Registration Statement for a full statement of the provisions thereof, and each such statement in this Prospectus is qualified in all respects by such reference.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

In accordance with the requirements of the Exchange Act, certain reports and other information are filed by the Company periodically with the Commission. The following documents filed by the Company with the Commission are incorporated herein by reference: (1) the Company's Annual Report on Form 10-K for the fiscal year ended October 28, 1995, (2) the

Company's Quarterly Report on Form 10-Q for the quarter ended February 3, 1996, (3) the Company's Quarterly Report on Form 10-Q for the quarter ended May 4, 1996, (4) the Company's Current Report on Form 8-K filed on July 16, 1996 and (5) all documents filed by the Company pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act after July 19, 1996 and prior to the date of this Prospectus.

All documents filed by the Company pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this Prospectus and before the termination of the offering of the Common Stock offered hereby shall be deemed to be a part hereof from the date of filing such documents. Any statement contained herein or in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Prospectus to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement as so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Prospectus.

The Company will provide without charge to each person to whom this Prospectus is delivered, on the request of any such person, a copy of any or all of the above documents incorporated herein by reference (other than exhibits to such documents, unless such exhibits are specifically incorporated by reference into the documents that this Prospectus incorporates). Requests should be directed to Joseph E. McDonough, Vice President-Finance of Analog Devices, Inc., One Technology Way, Norwood, MA 02062-9106; telephone number (617) 329-4700.

RISK FACTORS

The shares of Common Stock offered hereby involve a high degree of risk, including the risks described below. Prospective investors should carefully consider the following risk factors in addition to the other information contained in, or incorporated by reference in, this Prospectus before purchasing the shares of Common Stock offered hereby.

POTENTIAL FLUCTUATIONS IN OPERATING RESULTS. The Company's operating results are affected by a wide variety of factors, including the timing of new product announcements or introductions by the Company and its competitors, competitive pricing pressures, fluctuations in manufacturing yields, adequate availability of wafers and manufacturing capacity, changes in product mix and economic conditions in the United States and international markets. In addition, the semiconductor market has historically been cyclical and subject to significant economic downturns at various times. As a result of these and other factors, there can be no assurance that the Company will not experience material fluctuations in future operating results on a quarterly or annual basis.

DEPENDENCE ON NEW PRODUCTS AND NEW MARKETS. The Company's success depends in part on its continued ability to develop and market new products. There can be no assurance that the Company will be able to develop and introduce new products in a timely manner or that such products, if developed, will achieve market acceptance. In addition, the Company's growth is dependent on its continued ability to penetrate new markets such as the communications, computer and automotive segments of the electronics market, where the Company has limited experience and competition is intense. There can be no assurance that the markets being served by the Company will continue to grow, that the Company's existing and new products will meet the requirements of such markets, that the Company's products will achieve customer acceptance in such markets, 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. In addition, some of the customers in these markets are less well established which could subject the Company to increased credit risk.

COMPETITION. The semiconductor industry is intensely competitive. Certain of the Company's competitors have greater technical, marketing, manufacturing and financial resources than the Company. The Company's competitors also include emerging companies attempting to sell products to specialized markets such as those served by the Company. Competitors of the Company have, in some cases, developed and marketed products having similar design and functionality as the Company's products. There can be no assurance that the Company will be able to compete successfully in the future against existing or new competitors or that the Company's operating results will not be adversely affected by increased price competition.

MANUFACTURING CAPACITY. While the Company is planning in fiscal 1996 to increase substantially its manufacturing capacity through

both expansion of its production facilities and increased access to third-party foundries, there can be no assurance that the Company will complete the expansion of its production facilities or secure increased access to third party foundries in a timely manner or that the Company will not encounter unanticipated production problems at either its own facilities or at third-party foundries. The Company relies, and plans to continue to rely, on third-party wafer fabricators to supply most of its wafers that can be manufactured using industry-standard digital processes, and such reliance involves several risks, including the absence of adequate guaranteed capacity and reduced control over delivery schedules, manufacturing yields and costs. In addition, the Company's capacity additions will result in a significant increase in operating expenses and, if revenue levels do not increase to offset these additional expense levels, the Company's future operating results could be adversely affected.

The Company believes that other semiconductor manufacturers are also expanding or planning to expand their production capacity over the next several years, and there can be no assurance that the expansion by the Company and its competitors will not lead to over capacity in the Company's target markets, which could lead to price erosion that would adversely affect the Company's operating results.

MANUFACTURING RISKS. The fabrication of integrated circuits involves highly complex and precise processes that are continuously being modified in an effort to improve yields and product performance. Minute impurities or other difficulties in the manufacturing process can lower yields. As the Company continues to increase its manufacturing output and its use of third-party foundries, there can be no assurance that the Company will not experience a decrease in manufacturing yields or other manufacturing problems. Decreased yields could adversely affect gross margin and operating results. If the Company were unable to use any manufacturing facility, as a result of a natural disaster or otherwise, the Company's operations would be materially adversely affected.

PATENTS AND INTELLECTUAL PROPERTY. The semiconductor industry is characterized by frequent claims and litigation involving patent and other intellectual property rights. The Company has from time to time received, and may in the future receive, claims from third parties asserting that the Company's products or processes infringe their patents or other intellectual property rights. In the event a third party makes a valid intellectual property claim and a license is not available on commercially reasonable terms, the Company's operating results could be materially and adversely affected. Litigation may be necessary to enforce patents or other intellectual property rights of the Company or to defend the Company against claims of infringement, and such litigation can be costly and divert the attention of key personnel. See Part II, Item 1 - "Legal Proceedings," contained in the Form 10-Q for the fiscal quarter ended May 4, 1996 and Part I, Item 3 - "Legal Proceedings," contained in the Company's Annual Report on Form 10-K for the fiscal year ended October 28, 1995 for information concerning pending litigation involving the Company. An adverse resolution

of such litigation, may, in certain cases, 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 litigation is resolved.

INTERNATIONAL OPERATIONS. A significant portion of the Company's revenues are derived from customers in international markets. The Company has manufacturing facilities in Ireland, the Philippines and Taiwan. The Company is therefore subject to the economic and political risks inherent in international operations, including expropriation, air transportation disruptions, currency controls and changes in currency exchange rates, tax and tariff rates and freight rates. Although the Company engages in certain hedging transactions to reduce its exposure to currency exchange rate fluctuations, there can be no assurance that the Company's competitive position will not be adversely affected by changes in the exchange rate of the U.S. dollar against other currencies.

STOCK PRICE VOLATILITY. The trading price of the Company's Common Stock may be subject to wide fluctuations in response to quarter-to-quarter variations in operating results, announcements of new products by the Company or its competitors, general conditions in the semiconductor industry, changes in earnings estimates and recommendations by analysts or other events. In future quarters, if the Company's financial performance were to fall below the performance predicted by securities analysts, the Company's stock price could decline. In addition, the public stock markets have experienced extreme price and trading volume volatility that has significantly affected the market prices of securities of many high technology companies and that has often been unrelated or disproportionate to the operating performance of these companies. These factors may adversely affect the market price of the Common Stock.

THE COMPANY

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 general-purpose, standard-function linear and mixed-signal ICs ("SLICs"), special-purpose linear and mixed-signal ICs ("SPLICs") and digital signal processing ICs ("DSP ICs"). The Company also manufactures and markets devices using assembled product technology.

Analog believes it is 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 SLIC products offered by the Company include analog signal-processing devices (such as analog multipliers), voltage references and comparators. SLICs are sold to a very large customer base for a wide variety of applications, including applications in the medical, engineering and scientific instruments market, factory automation market and military/ aerospace market.

Over the past five years, Analog has sought to balance its traditionally stable SLIC business with the growth opportunities available for SPLICs and DSP ICs, particularly in the communications and computer markets. Analog's SPLIC and DSP IC products feature high levels of functional integration on a single chip and are designed to address customers' needs to incorporate increasingly greater levels of real-world signal processing capability in their products. The Company's SPLIC and DSP ICs include products used in wireless communication applications, such as digital mobile phones and base stations, and computer applications, such as audio enhancement in multimedia PCs.

The Company is a Massachusetts corporation with its principal headquarters located at One Technology Way, Norwood, Massachusetts 02062- 9106; and its telephone number is (617) 329-4700.

USE OF PROCEEDS

The Company will not receive any proceeds from the sale of Common Stock by the Selling Stockholders.

THE SELLING STOCKHOLDERS

The shares of Common Stock covered by this Prospectus were issued to the Selling Stockholders in a private placement made in connection with the acquisition of Mosaic by the Company on July 1, 1996.

The following table sets forth the name and the number of shares of Common Stock beneficially owned by the Selling Stockholders as of July 14, 1996 and the number of the shares to be offered by the Selling Stockholders pursuant to this Prospectus.

NAME OF SELLING STOCKHOLDER	TOTAL NUMBER OF SHARES OF COMMON STOCK BENEFICIALLY OWNED	SHARES OF COMMON STOCK OFFERED HEREBY
Simon Atkinson(1)	19,094	19,094
Jonathan Richard Strange(2)	19,094	19,094
Jane Atkinson(3)	13,953	13,953
Kate Elizabeth Baldwin(4)	13,953	13,953
Svein Olav Davidsen(5)	3,672	3,672
Timothy Doyen(6)	4,994	4,994
Christopher Schiller(7)	1,028	1,028
Christopher Saint(8)	808	808

- (1) Mr. Atkinson served as a managing director of Mosaic and is currently an employee of Mosaic, a wholly-owned subsidiary of the Company.
- (2) Mr. Strange served as a managing director of Mosaic and is currently a managing director of Mosaic, a wholly-owned subsidiary of the Company.
- (3) Ms. Atkinson served as an employee of Mosaic and is currently an employee of Mosaic, a wholly-owned subsidiary of the Company.
- (4) Ms. Baldwin served as Mosaic Company Secretary.
- (5) Mr. Davidsen served as a managing director of Mosaic.
- (6) Mr. Doyen served as an officer and director of Mosaic Microsystems, Inc. ("Mosaic, Inc."), a indirectly wholly-owned subsidiary of the Company.
- (7) Mr. Schiller served as an employee of Mosaic, Inc. and is currently an employee of Mosaic, Inc., a indirectly wholly-owned subsidiary of the Company.
- (8) Mr. Saint served as an employee of Mosaic, Inc. and is currently an employee of Mosaic, Inc., a indirectly wholly-owned subsidiary of the Company.

The Company cannot determine the number of shares of Common Stock which will be held by the Selling Stockholders upon the completion of the offering, as the length of time of the offering period and the determination of whether to buy or sell additional securities of the Company during the offering period are at the discretion of the Selling Stockholders.

PLAN OF DISTRIBUTION

Shares of Common Stock covered hereby may be offered and sold from time to time by the Selling Stockholders. The Selling Stockholders will act independently of the Company in making decisions with respect to the timing, manner and size of each sale. Such sales may be made on one or more exchanges or in the over-the-counter market or otherwise, at prices related to the then current market price or in negotiated transactions, including pursuant to an underwritten offering or one or more of the following methods: (a) purchases by a broker-dealer as principal and resale by such broker-dealer for its account pursuant to this Prospectus; (b) ordinary brokerage transactions and transactions in which a broker solicits purchasers; and (c) block trades in which a broker-dealer so engaged will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction. The Company has been advised by the Selling Stockholders that they have not made any arrangements relating to the distribution of the shares covered by this Prospectus. In effecting sales, broker-dealers engaged by the Selling Stockholders may arrange for other broker-dealers to participate. Broker-dealers will receive commissions or discounts from the Selling Stockholders in amounts to be negotiated immediately prior to the sale. The Registration Rights annexed to the Share Purchase Agreement between the Company and the Selling Stockholders dated July 1, 1996 provide that the Company will indemnify the Selling Stockholders against certain liabilities, including liabilities under the Securities Act.

In offering the shares of Common Stock covered hereby, the Selling Stockholders and any broker-dealers and any other participating broker-dealers who execute sales for the Selling Stockholders may be deemed to be "underwriters" within the meaning of the Securities Act in connection with such sales, and any profits realized by the Selling Stockholders and the compensation of such broker-dealer may be deemed to be underwriting discounts and commissions. In addition, any shares covered by this Prospectus which qualify for sale pursuant to Rule 144 may be sold under Rule 144 rather than pursuant to this Prospectus. None of the shares covered by this Prospectus presently qualify for sale pursuant to Rule 144.

The Company has advised the Selling Stockholders that during such time as they may be engaged in a distribution of the shares of Common Stock covered hereby they are required to comply with Rules 10b-6 and 10b-7 under the Exchange Act (as those Rules are described in more detail below) and, in connection therewith, that they may not engage in any stabilization activity in connection with the Company's securities, are required to furnish to each broker-dealer through which the shares of Common Stock covered hereby may be offered copies of this Prospectus, and may not bid for or purchase any securities of the Company or attempt to induce any person to purchase any Company securities except as permitted under the Exchange Act. The Selling Stockholders have agreed to inform the Company when the distribution of the shares of Common Stock covered hereby is completed.

Rule 10b-6 under the Exchange Act prohibits, with certain exceptions, participants in a distribution from bidding for or purchasing, for an account in which the participant has a beneficial interest, any of the securities that are the subject of the distribution. Rule 10b-7 governs bids and purchases made in order to stabilize the price of a security in connection with a distribution of the security.

This offering will terminate on the earlier of (i) 24 months after the effective date of this Prospectus or (ii) the date on which the shares of Common Stock covered hereby have been sold by the Selling Stockholders.

DESCRIPTION OF CAPITAL STOCK

The authorized capital stock of the Company consists of 450,000,000 shares of Common Stock, \$.16 2/3 par value per share, and 500,000 shares of preferred stock, \$1.00 par value per share (the "Preferred Stock").

COMMON STOCK

As of July 15, 1996, there were 116,257,830 shares of Common Stock outstanding and held of record by approximately 5,499 stockholders.

Holders of Common Stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders, and do not have cumulative voting rights. Accordingly, holders of a majority of the shares of Common Stock entitled to vote in any election of directors may elect all of the directors standing for election. Holders of Common Stock are entitled to receive ratably such dividends, if any, as may be declared by the Board of Directors out of funds legally available therefor, subject to any preferential dividend rights of outstanding Preferred Stock. Upon the liquidation, dissolution or winding up of the Company, the holders of Common Stock are entitled to receive ratably the net assets of the Company available after the payment of all debts and other liabilities and subject to the prior rights of any outstanding Preferred Stock. Holders of the Common Stock have no preemptive, subscription, redemption or conversion rights. The outstanding shares of Common Stock are fully paid and nonassessable. The rights, preferences and privileges of holders of Common Stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of Preferred Stock which the Company may designate and issue in the future. There are no shares of Preferred Stock outstanding.

PREFERRED STOCK

The Board of Directors of the Company is authorized, subject to certain limitations prescribed by law, without further stockholder approval to issue from time to time up to an aggregate of 500,000 shares of Preferred Stock in one or more series and to fix or alter the designations, preferences, rights and any qualifications, limitations or restrictions of the shares of each such series thereof, including the dividend rights, dividend rates,

conversion rights, voting rights, terms of redemption (including sinking fund provisions), redemption price or prices, liquidation preferences and the number of shares constituting any series or designation of such series. The issuance of Preferred Stock may have the effect of delaying, deferring or preventing a change of control of the Company. The Company has no present plans to issue any shares of Preferred Stock.

MASSACHUSETTS LAW AND CERTAIN PROVISIONS OF THE COMPANY'S RESTATED ARTICLES OF ORGANIZATION AND BY-LAWS

Because the Company has more than 200 stockholders of record, it is subject to Chapter 110F of the Massachusetts General Laws, an anti-takeover law. In general, this statute prohibits a publicly held Massachusetts corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years after the date of the transaction in which the person becomes an interested stockholder, unless (i) the interested stockholder obtains the approval of the Board of Directors prior to becoming an interested stockholder, (ii) the interested stockholder acquires 90% of the outstanding voting stock of the corporation (excluding shares held by certain affiliates of the corporation) at the time it becomes an interested stockholder, or (iii) the business combination is approved by both the Board of Directors and the holders of two-thirds of the outstanding voting stock of the corporation (excluding shares held by the interested stockholder). An "interested stockholder" is a person who, together with affiliates and associates, owns (or at any time within the prior three years did own) 5% or more of the outstanding voting stock of the corporation. A "business combination" includes a merger, a stock or asset sale, and certain other transactions resulting in a financial benefit to the interested stockholders.

Massachusetts General Laws Chapter 156B, Section 50A generally requires that publicly-held Massachusetts corporation have a classified board of directors consisting of three classes as nearly equal in size as possible, unless the corporation elects to opt out of the statute's coverage. The Company's By-Laws contain provisions which give effect to Section 50A.

The Company's By-Laws include a provision excluding the Company from the applicability of Massachusetts General Laws Chapter 110D, entitled "Regulation of Control Share Acquisitions." In general, this statute provides that any stockholder of a corporation subject to this statute who acquires 20% or more of the outstanding voting stock of a corporation may not vote such stock unless the stockholders of the corporation so authorize. The Board of Directors may amend the Company's By-Laws at any time to subject the Company to this statute prospectively.

The Restated Articles of Organization of the Company, as amended (the "Articles of Organization") provide that the directors and officers of the Company shall be indemnified by the Company to the fullest extent authorized by Massachusetts law, as it now exists or may in the future be amended, against all liabilities and expenses incurred in connection with service for

or on behalf of the Company. In addition, the Articles of Organization provide that the directors of the Company will not be personally liable for monetary damages to the Company for breaches of their fiduciary duty as directors.

STOCKHOLDER RIGHTS PLAN

The Company adopted a Stockholder Rights Plan on January 28, 1988, which was amended on June 14, 1989 (the "Rights Plan"). Pursuant to the Rights Plan, each share of Common Stock has an associated right (a "Right"). Each Right entitles the registered holder to purchase from the Company one share of Common Stock at a purchase price of \$26.67 (as adjusted to account for the 50% Common Stock dividend distributed by the Company on January 3, 1996) per share, subject to adjustment (the "Purchase Price").

The Rights will be exercisable upon the earlier of (i) ten business days following a public announcement that a person or group has acquired, or obtained the right to acquire, beneficial ownership of 20% or more of the outstanding Common Stock of the Company (an "Acquiring Person"), or (ii) ten business days following the commencement of a tender offer or exchange offer, the consummation of which would result in a person or group owning 30% or more of the outstanding Common Stock (the earlier of such dates being called the "Distribution Date"). Until a Right is exercised, the holder thereof has no rights as a stockholder of the Company. Until the Distribution Date (or earlier redemption or expiration of the Rights), Rights are transferred with and only with the Common Stock.

In certain circumstances specified in the Rights Plan, including certain circumstances occurring after any person or group becomes an Acquiring Person, each holder of a Right, other than Rights beneficially owned by the Acquiring Person, will thereafter have the right to receive upon exercise that number of shares of Common Stock having a market value of two times the Purchase Price, and in the event that the Company is acquired in a business combination transaction or 50% or more of its assets are sold, each holder of a Right will thereafter have the right to receive upon exercise that number of shares of Common Stock of the acquiring company which at the time of the transaction will have a market value of two times the Purchase Price.

The Rights have certain anti-takeover effects, in that they would cause substantial dilution to a person or group that attempts to acquire a significant interest in the Company on terms not approved by the Board of Directors. The Board of Directors of the Company may in certain circumstances redeem the Rights in whole at a price of \$.0089 per Right, as adjusted.

TRANSFER AGENT AND REGISTRAR

The transfer agent and registrar for the Company's Common Stock is Boston EquiServe L.P.

LEGAL MATTERS

The validity of the shares offered hereby will be passed upon for the Company by Hale and Dorr, Boston, Massachusetts.

EXPERTS

The consolidated financial statements of Analog Devices, Inc. appearing in Analog Devices, Inc.'s Annual Report (Form 10-K) for the year ended October 28, 1995 have been audited by Ernst & Young LLP, independent auditors, as set forth in their report thereon included therein and incorporated herein by reference. Such financial statements are incorporated herein by reference in reliance upon such report given upon the authority of such firm as experts in accounting and auditing.

No dealer, salesman or any other person has been authorized to give any information or to make any representation in connection with this offering other than those contained in this Prospectus, and any information or representation not contained herein must not be relied upon as having been authorized by the Company. This Prospectus does not constitute an offer to sell, or a solicitation of an offer to buy, any securities other than the registered securities to which it relates or an offer to, or solicitation of, any person in any jurisdiction where such an offer or solicitation would be unlawful. Neither the delivery of this Prospectus nor any sale made hereunder shall, under any circumstance, create any implication that there has been no change in the affairs of the Company since the date hereof or that the information contained herein is correct as of any date subsequent to the date hereof.

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76,596 Shares

[ANALOG LOGO]

COMMON STOCK

PROSPECTUS

, 1996

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION.

The following table sets forth the various expenses in connection with the issuance and distribution of the securities being registered. All amounts shown are estimates except the Securities and Exchange Commission registration fee.

SEC Registration Fee.....	\$ 485.33
NYSE Listing Fee.....	1,500.00
Transfer Agent and Registrar.....	500.00
Accounting Fees and Expenses.....	4,000.00
Legal Fees and Expenses.....	10,000.00
Printing and Engraving.....	3,000.00
Miscellaneous.....	2,514.67

Total.....	\$22,000.00
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ITEM 15. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

Article 6A of the Registrant's Articles of Organization, as amended (the "Articles of Organization") provides for indemnification of directors and officers to the full extent permitted under Massachusetts law. Section 67 of Chapter 156B of the Massachusetts General Laws provides that a corporation has the power to indemnify a director, officer, employee or agent of the corporation and certain other persons serving at the request of the corporation and certain other persons serving at the request of the corporation in related capacities against amounts paid and expenses incurred in connection with an action or proceeding to which he is or is threatened to be made a party by reason of such position, if such person shall have acted in good faith and in a manner he reasonably believed to be in the best interests of the corporation, provided that, no indemnification shall be made with respect to any matter as to which such person shall have been adjudged not to be entitled to indemnification under Section 67.

Article 6A also provides for indemnification of directors and officers of the Registrant against liabilities and expenses in connection with any legal proceedings to which they may be made a party or with which they may become involved or threatened by reason of having been an officer or director of the Registrant or of any other organization at the request of the Registrant. Article 6A generally provides that a director or officer of the Registrant (i) shall be indemnified by the Registrant for all expenses of such legal proceedings unless he has been adjudicated not to have acted in good faith in the reasonable belief that his action was in the best interests of the Registrant, and (ii) shall be indemnified by the Registrant for the expenses, judgments, fines and amounts paid in settlement and

compromise of such proceedings. No indemnification will be made to cover costs of settlements and compromises if the Board determines by a majority vote of a quorum consisting of disinterested directors (or, if such quorum is not obtainable, by a majority of the disinterested directors of the Registrant), that such settlement or compromise is not in the best interests of the Registrant.

Article 6A permits the payment by the Registrant of expenses incurred in defending a civil or criminal action in advance of its final disposition, subject to receipt of an undertaking by the indemnified person to repay such payment if it is ultimately determined that such person is not entitled to indemnification under the Articles of Organization. No advance may be made if the Board of Directors determines, by a majority vote of a quorum consisting of disinterested directors (or, if such quorum is not obtainable, by a majority of the disinterested directors of the Registrant), that such person did not act in good faith in the reasonable belief that his action was in the best interest of the Registrant.

Article 6D of the Registrant's Articles of Organization provides that no director shall be liable to the Registrant or its stockholders for monetary damages for breach of his fiduciary duty as a director, except for liability (i) for any breach of the director's duty of loyalty to the Registrant or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 61 or 62 of Chapter 156B, or (iv) for any transaction from which the director derived an improper personal benefit.

The Registrant has directors and officers liability insurance for the benefit of its directors and officers.

ITEM 16. EXHIBITS.

See Exhibit Index included immediately preceding the Exhibits to this Registration Statement, which is incorporated herein by reference.

ITEM 17. UNDERTAKINGS.

(a) The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933, as amended (the "Securities Act");

(ii) To reflect in the prospectus any facts or events arising after the effective date of this Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this Registration Statement;

(iii) To include any material information with respect to the plan of distribution not previously disclosed in this Registration Statement or any material change to such information in this Registration Statement;

provided, however, that paragraphs (1)(i) and (1)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed by the Registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") that are incorporated by reference in this Registration Statement.

(2) That, for the purposes of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at the time shall be deemed to be the initial bona fide offering thereof.

(b) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the provisions described under "Item 15 -- Indemnification of Directors and Officers" above, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

(c) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or 15(d) of the Exchange Act, (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in this Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the bona fide offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Norwood, Commonwealth of Massachusetts, on this 19th day of July, 1996.

ANALOG DEVICES, INC.

By: /S/ RAY STATA

Ray Stata
Chairman of the Board and
Chief Executive Officer

POWER OF ATTORNEY

We, the undersigned officers and directors of Analog Devices, Inc., hereby severally constitute and appoint Ray Stata, Jerald G. Fishman and Joseph E. McDonough, and each of them singly, our true and lawful attorneys with full power to them, and each of them singly, to sign for us and in our names, in the capacities indicated below, the Registration Statement filed herewith, and any and all amendments (including post-effective amendments) to said Registration Statement (or any other Registration Statement for the same offering that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act of 1933) and generally to do all such things in our names and behalf in our capacities as officers and directors to enable Analog Devices, Inc. to comply with the Securities Act of 1933, and all requirements of the Securities and Exchange Commission, hereby ratifying and confirming our signatures as they may be signed by our said attorneys, or any of them, to any such Registration Statement and any and all amendments thereto.

Witness our hands and common seal on the date set forth below.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

SIGNATURE	TITLE	DATE
(i) Principal Executive Officers)
/S/ RAY STATA	Chairman of the Board, Chief)
-----	Executive Officer and Director)
RAY STATA)
/S/ JERALD G. FISHMAN	President, Chief Operating)
-----	Officer and Director)
JERALD G. FISHMAN)
(ii) Principal Financial Officer and Principal Accounting Officer)
/S/ JOSEPH E. MCDONOUGH	Vice President-Finance and)
-----	Chief Financial Officer)
JOSEPH E. MCDONOUGH)

(iii) Board of Directors) July 19, 1996
/S/ JOHN L. DOYLE	Director)
-----)
JOHN L. DOYLE)
/S/ SAMUEL H. FULLER	Director)
-----)
SAMUEL H. FULLER)
/S/ PHILIP L. LOWE	Director)
-----)
PHILIP L. LOWE)
/S/ GORDON C. MCKEAGUE	Director)
-----)
GORDON C. MCKEAGUE)
/S/ JOEL MOSES	Director)
-----)
JOEL MOSES)
/S/ LESTER C. THURLOW	Director)
-----)
LESTER C. THURLOW)

EXHIBIT INDEX

EXHIBIT NUMBER	DESCRIPTION
4.01	Restated Articles of Organization of the Registrant, as amended (incorporated herein by reference to the Registrant's Form S-8, dated as of May 30, 1996).
4.02	By-Laws of the Registrant, as amended (incorporated herein by reference to the Registrant's Form 10-K for the fiscal year ended October 31, 1992).
4.03	Rights Agreement, as amended, between the Registrant and The First National Bank of Boston, as Rights Agent (incorporated herein by reference to a Form 8 filed on June 27, 1989 amending the Registration Statement on Form 8-A relating to Common Stock Purchase Rights).
4.04	The registration rights of the Selling Stockholders referenced in and annexed to the Share Purchase Agreement between the Registrant and the Selling Stockholders dated July 1, 1996.
5.01	Opinion of Hale and Dorr.
23.01	Consent of Hale and Dorr (included in Exhibit 5.01).
23.02	Consent of Ernst & Young LLP.
24.01	Powers of Attorney (included on page II-4).

REGISTRATION RIGHTS

This document constitutes the Registration Rights Agreement (the "Registration Rights Agreement") referred to in Article 7 of the Agreement by and among Analog Devices, Inc. and the Shareholders, as defined therein, dated July 1, 1996 (the "Share Purchase Agreement").

1. Definitions.

As used in this document, the following terms shall have the meanings ascribed to them below:

1.1. "BUSINESS DAY" means any Monday, Tuesday, Wednesday, Thursday or Friday that is not a day on which banking institutions in the City of New York are authorized by law, regulation or executive order to close.

1.2. "REGISTRABLE SECURITIES" means (i) the Analog Shares received by the Shareholders and (ii) any securities issued or issuable in respect of or in exchange for any of the Analog Shares referred to in clause (i) by way of a stock dividend or stock split or in connection with a combination of shares of Analog Shares, recapitalization, reclassification, merger, consolidation, or exchange offer. For purposes of this Agreement, a Registrable Security ceases to constitute a Registrable Security (a) when such Registrable Security shall have been effectively registered under the Securities Act and disposed of pursuant to the Registration Statement, (b) when such Registrable Security shall have been sold pursuant to Rule 144 (or any successor provision) under the Securities Act, (c) when such Registrable Security shall have been otherwise transferred and a new certificate for such Registrable Security not bearing a legend restricting further transfer shall have been delivered by Analog following Analog's receipt of an opinion of counsel satisfactory to it that the issuance and delivery of such a certificate is legal and proper, or (d) when such Registrable Security shall have ceased to be outstanding.

1.3. "REGISTRATION STATEMENT" shall have the meaning set forth in Section 2.1.

1.4. "SEC" shall mean the United States Securities and Exchange Commission.

1.5. "SECURITIES ACT" shall mean the United States Securities Act of 1933, as amended.

Capitalized terms not otherwise defined herein shall have the meaning ascribed to them in the Share Purchase Agreement.

2. Shelf Registration. As soon as practicable following, and in any event, within thirty days of, the Completion Date, Analog shall file with the SEC under the Securities Act a Registration Statement (the "REGISTRATION STATEMENT") on Form S-3 covering the sale on a continuous or delayed basis of all of the Analog Shares. Analog shall use its reasonable efforts to cause the Registration Statement to be declared effective by the SEC as soon as practicable. Analog shall cause the Registration Statement to remain effective until the date two years after the Completion Date or such earlier time as all of the Analog Shares covered by the Registration Statement have been sold pursuant thereto.

3. Registration Procedures.

3.1. Analog Procedures. In connection with Analog's registration obligations pursuant to Section 2 Analog shall keep the Registration Statement continuously effective for the period of time provided in Section 2, to permit the sale of Registrable Securities pursuant to the Registration Statement in accordance with the intended method or methods of distribution thereof specified in the Registration Statement or in the related prospectus(es) (the "PROSPECTUS"), and shall:

3.1.1 comply with such provisions of the Securities Act as may be necessary to facilitate the disposition of all Registrable Securities covered by the Registration Statement during the applicable period in accordance with the intended method or methods of disposition thereof set forth in the Registration Statement or such Prospectus or supplement thereto;

3.1.2 notify the Shareholders, promptly (A) when the Registration Statement, Prospectus or supplement thereto or post-effective amendment has been filed, and, with respect to the Registration Statement or post-effective amendment when it has become effective, (B) of any request by the SEC for amendments or supplements to the Registration Statement or Prospectus or for additional information, (C) of the issuance by the SEC of any comments with respect to any filing and of any stop order suspending the effectiveness of the Registration Statement or the initiation of any proceedings for that purpose, (D) of the receipt by Analog of any notification with respect to the suspension of the qualification of the Registrable Securities for sale in any jurisdiction or the initiation or threatening of any proceeding for such purpose, (E) of the happening of any event that makes any statement made in the Registration Statement, Prospectus or any other document incorporated therein by reference untrue or that requires the making of any changes in the Registration Statement, Prospectus or any document incorporated therein by reference in order that such documents not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading, and (F) of Analog's determination

that a post-effective amendment to the Registration Statement would be appropriate;

3.1.3 furnish to each Shareholder, at such Shareholder's request and without charge, as many conformed copies as may reasonably be requested by such Shareholder, of the Registration Statement and any post-effective amendments thereto, including financial statements and schedules, all documents incorporated therein by reference and all exhibits (including those incorporated by reference);

3.1.4 deliver to each Shareholder, without charge, as many copies of the then effective Prospectus covering the Registrable Securities and any amendments or supplements thereto as such Shareholder may reasonably request;

3.1.5 register, qualify, obtain an exemption therefrom, or cooperate with the Shareholders and their respective counsel in connection with the registration or qualification or exemption therefrom of the Registrable Securities for offer and sale under the securities or blue sky laws of such jurisdictions as may be reasonably requested in writing by the Shareholders and do any and all other acts or things necessary or advisable to enable the disposition in such jurisdictions of the Registrable Securities covered by the then-effective Registration Statement; provided, however, that Analog shall not be required to (w) qualify as a foreign corporation or generally to transact business in any jurisdiction where it is not then so qualified, (x) qualify as a dealer (or other similar entity) in securities, (y) otherwise subject itself to taxation in connection with such activities, or (z) take any action which would subject it to general service of process in any jurisdiction where it is not then so subject;

3.1.6 cooperate with the Shareholders to facilitate the timely preparation and delivery of certificates representing Registrable Securities to be sold;

3.1.7 upon the occurrence of any event contemplated by clauses (E) or (F) of paragraph 3.1.2 above, promptly prepare and file, if necessary, a post-effective amendment to the Registration Statement or a supplement to the related Prospectus or any document incorporated therein by reference or file any other required document so that the Registration Statement and the Prospectus will not thereafter contain an untrue statement of a material fact or omit to state any material fact necessary to make the statements therein not misleading;

3.1.8 otherwise comply with all applicable rules and regulations of the SEC relating to such registration and the distribution of the securities being offered;

3.1.9 in no event later than five (5) Business Days before filing the Registration Statement, any post-effective amendment thereto, any Prospectus or any amendment or supplement thereto (other than any amendment or supplement made solely as a result of incorporation by reference of documents), furnish to the Shareholders copies of all such documents proposed to be filed;

3.1.10 not file the Registration Statement or any amendment thereto or any Prospectus or any supplement thereto (other than any amendment or supplement made solely as a result of incorporation by reference of documents) to which the Shareholders holding a majority of the Registrable Securities shall have reasonably objected in writing, within two (2) Business Days after delivery of such documents to the address of such Shareholder as set forth in the Share Purchase Agreement or such other address which shall have been provided to Analog in writing (the "Shareholder Address"), to the effect that the Registration Statement or amendment thereto or Prospectus or supplement thereto does not comply in all material respects with the requirements of the Securities Act (including, without limitation, in respect of any information describing the manner in which the Shareholders acquired such Registrable Securities and the intended method or methods of distribution of such Registrable Securities), (provided that the foregoing shall not limit the right of any Shareholder reasonably to object, within two (2) Business Days after delivery of such documents to the Shareholder Address, to any particular information relating specifically to such Shareholder that is to be contained in the Registration Statement, Prospectus or Supplement, including, without limitation, any information describing the manner in which such Shareholder acquired such Registrable Securities and the intended method or methods of distribution of such Registrable Securities), and if Analog is unable to file any such document due to the objections of the Shareholders, Analog shall use its reasonable efforts to cooperate with the Shareholders to prepare, as soon as practicable, a document that is responsive in all material respects to the reasonable objections of the Shareholders;

3.1.11 promptly after the filing of any document that is to be incorporated by reference into the Registration Statement or Prospectus, provide copies of such document to the Shareholders;

3.1.12 subject to the proviso in paragraph 3.1.5 above, cause the Registrable Securities to be registered with or approved by such other governmental agencies or authorities within the United States of America as

may be reasonably necessary to enable the seller or sellers thereof to consummate the disposition of such Registrable Securities;

3.1.13 use its reasonable efforts to cause all Registrable Securities covered by the Registration Statement to be listed on each securities exchange or market, if any, on which similar securities issued by Analog are then listed, provided that the applicable listing requirements are satisfied; and

3.1.14 take all actions reasonably required to prevent the entry of any stop order by the SEC or by any state securities regulators or to remove any such order if entered.

3.2. Limitations on Registration Rights.

(a) Analog may, by written notice to the Shareholders, (i) delay the filing or effectiveness of the Registration Statement or (ii) suspend the Registration Statement after effectiveness and require that the Shareholders immediately cease sales of Registrable Securities pursuant to the Registration Statement in the event that Analog (A) files a registration statement (other than a registration statement on Form S-8 or its successor form) with the SEC for a public offering of its securities, (B) is ineligible for use of a Form S-3 or (C) Analog shall have delivered a notice in writing to the Shareholders stating that a delay in the disposition of Registrable Securities is necessary because Analog, in its reasonable judgment, has determined that sales of Registrable Securities would require public disclosure by Analog of material non-public information that Analog deems it advisable not to disclose; provided, however, that no such delay shall be imposed unless Analog shall equally prohibit during the period of such delay any sale of Analog's securities by any executive officer or director of Analog.

(b) In the event of the delivery of the notice described in clause 3.2(a)(ii) above by Analog, Analog shall use its reasonable efforts to amend the Registration Statement or amend or supplement the Prospectus, if necessary and to take all other actions necessary to allow the proposed disposition to take place as promptly as practicable after the conditions referred to therein have ceased to exist;

(c) Analog shall not restrict dispositions under clause 3.2(a)(ii) above for a period exceeding forty five (45) days; and

(d) In no event shall Analog be permitted to extend the restriction period under clause 3.2(a)(ii) above beyond such forty five (45) day period, and Analog shall not restrict sales of the Registrable Securities under clause 3.2(a)(ii) above more than a total of twice in any twelve (12) month period.

(e) If Analog delays or suspends the Registration Statement or requires the Shareholders to cease sales of shares pursuant to paragraph 3.2(a) above, Analog shall, as promptly as practicable following the termination of the circumstance which entitled Analog to do so, take such actions as may be necessary to file or reinstate the effectiveness of the Registration Statement and/or give written notice to all Shareholders authorizing them to resume sales pursuant to the Registration Statement. If as a result thereof the Prospectus included in the Registration Statement has been amended to comply with the requirements of the Securities Act, Analog shall enclose such revised Prospectus with the notice to Shareholders given pursuant to this paragraph 3.2(b), and the Shareholders shall make no offers or sales of shares pursuant to the Registration Statement other than by means of such revised Prospectus.

3.3. Requirements of Shareholders. Analog shall not be required to include any Analog Shares in the Registration Statement unless the Shareholder owning such Shares furnishes to Analog in writing such information regarding such Shareholder and the proposed sale of Analog Shares by such Shareholder as Analog may reasonably request in writing in connection with the Registration Statement or as shall be required in connection therewith by the SEC or any state securities law authorities.

4. Registration Expenses.

All expenses incident to Analog's performance of or compliance with this Agreement, including without limitation all registration and filing fees, fees and expenses of compliance with state securities or blue sky laws (including fees and disbursements of counsel in connection with blue sky qualifications or registrations (or the obtaining of exemptions therefrom) of the Registrable Securities), printing expenses (including expenses of printing Prospectuses), messenger and delivery expenses, internal expenses (including, without limitation, all salaries and expenses of its officers and employees performing legal or accounting duties), fees and disbursements of its counsel and its independent certified public accountants, securities acts liability insurance (if Analog elects to obtain such insurance), and reasonable fees and expenses of any special experts retained by Analog in connection with any registration hereunder (all of such expenses herein referred to as "REGISTRATION EXPENSES"), and the fees of one counsel for the Shareholders shall be borne by Analog; provided, however, that the Registration Expenses shall not include any sales or underwriting discounts, commissions or fees attributable to the sale of the Registrable Securities and provided further that the fees and expenses of counsel to the Shareholders borne by Analog shall not exceed \$2,500.

5. Indemnification: Contribution.

5.1. Indemnification by Analog. Analog shall indemnify and hold harmless, to the full extent permitted by law, each Shareholder, and his respective representatives and agents, and each person who controls (within the meaning of the Securities Act) such Shareholder, against all losses, claims, damages, liabilities and expenses (including reasonable costs of investigation and legal expenses) resulting from any untrue or alleged untrue statement of a material fact contained in the Registration Statement, any Prospectus, or any amendment or supplement thereto, or any omission or alleged omission of a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading, except in each case insofar as the same arises out of or is based upon an untrue statement or alleged untrue statement of a material fact or an omission or alleged omission to state a material fact in such Registration Statement, Prospectus, amendment or supplement, as the case may be, made or omitted, as the case may be, in reliance upon and in conformity with written information furnished to Analog by such Shareholder for use therein. This indemnity is in addition to any liability that Analog may otherwise have.

5.2. Indemnification by Shareholders. Each seller of Registrable Securities, severally and not jointly, shall indemnify and hold harmless, to the full extent permitted by law, Analog, each of its directors and officers and each person, if any, who controls (within the meaning of the Securities Act) Analog, against all losses, claims, damages, liabilities and expenses (including reasonable costs of investigation and legal expenses) resulting from any untrue or alleged untrue statement of a material fact contained in the Registration Statement, any Prospectus, or any amendment or supplement thereto, or any omission or alleged omission of a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading, if the statement or omission was made in reliance upon and in conformity with written information furnished to Analog by such Shareholder for use in the Prospectus. This indemnity is in addition to any liability that any such selling Shareholder may otherwise have.

5.3. Conduct of Indemnification Proceedings. Each party entitled to indemnification under this Section 5 (the "INDEMNIFIED PARTY") shall give notice to the party required to provide indemnification (the "INDEMNIFYING PARTY") promptly after such Indemnified Party has actual knowledge of any claim as to which indemnity may be sought, and shall permit the Indemnifying Party to assume the defense of any such claim or any litigation resulting therefrom; provided, that the failure of any Indemnified Party to give notice as provided herein shall not relieve the Indemnifying Party of its obligations except to the extent that its defense of the claim or litigation involved is prejudiced by such failure. The Indemnified Party may participate in such defense at such Party's expense; provided, however, that the Indemnifying Party shall pay such expense if representation of such Indemnified

Party by the counsel retained by the Indemnifying Party would be inappropriate due to actual or potential conflicts of interest between the Indemnified Party and any other party represented by such counsel in such proceeding. No Indemnifying Party, in the defense of any such claim or litigation, except with the consent of each Indemnified Party, shall consent to entry of any judgment or enter into any settlement that does not include as an unconditional term thereof the giving by the claimant or plaintiff to such Indemnified Party of a release from all liability in respect of any claim or litigation, and no Indemnified Party will consent to entry of any judgment or settle any claim or litigation without the prior written consent of the Indemnifying Party. Each Indemnified Party shall furnish such information regarding himself or itself and the claim in question as the Indemnifying Party may reasonably request and as shall be reasonably required in connection with the defense of such claim and litigation resulting therefrom.

5.4. Contribution.

5.4.1 If for any reason the indemnification provided for in this Section 5 from an Indemnifying Party, although otherwise applicable by its terms, is determined by a court of competent jurisdiction to be unavailable to an Indemnified Party hereunder, then the Indemnifying Party, in lieu of indemnifying such Indemnified Party, shall contribute to the amount paid or payable by such Indemnified Party as a result of such losses, claims, damages, liabilities or expenses in such proportion as is appropriate to reflect the relative fault of the Indemnifying Party and the Indemnified Party in connection with the actions that resulted in such losses, claims, damages, liabilities or expenses, as well as any other relevant equitable considerations. The relative fault of the Indemnifying Party and Indemnified Party shall be determined by reference to, among other things, whether any action in question, including any untrue or alleged untrue statement of a material fact, has been made by, or relates to information supplied by, the Indemnifying Party or the Indemnified Party, and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such action. The amount paid or payable by a Party as a result of the losses, claims, damages, liabilities and expenses referred to above shall be deemed to include, subject to the limitations set forth in Section 5.3, any legal or other fees or expenses reasonably incurred by such Party in connection with any investigation or proceeding. Notwithstanding the foregoing, no Shareholder will be required to contribute any amount in excess of the proceeds to such Shareholder of all Registrable Securities sold by such Shareholder pursuant to the Registration Statement.

5.4.2 The parties hereto agree that it would not be just and equitable if contribution pursuant to this Section 5.4 were determined by pro rata allocation or by any other method of allocation that does not take account of the equitable considerations referred to in the immediately preceding paragraph. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities

Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation.

6. Rule 144.

Analog shall take such further action as any Shareholder may reasonably request to the extent required from time to time to enable such Shareholder to sell Registrable Securities without registration under the Securities Act, subject to the limitations of the exemption provided by Rule 144, if applicable.

7. Future Mergers.

Analog covenants and agrees that it will not, directly or indirectly, enter into any merger, consolidation or reorganization in which Analog shall not be the surviving corporation (a "Merger") unless prior to such Merger, the proposed surviving corporation shall agree in writing to assume the obligations of Analog under this Registration Agreement and for that purpose, references hereunder to "Registrable Securities" shall be deemed to refer to the securities that the Shareholders would be entitled to receive in exchange for Registrable Securities under any such Merger, provided, however, that the provisions of this Section 7 shall not apply in the event of any Merger if the holders of Registrable Securities are entitled to receive in exchange therefor (a) cash or (b) securities of the acquiring corporation that may be immediately sold to the public without limitations as to amount or procedure.

8. Assignment of Rights.

A Shareholder may not assign any of its rights under this Registration Agreement except in connection with the transfer of some or all of his or her Analog Shares to a child or spouse, or trust for their benefit, provided each such transferee agrees in a written instrument delivered to Analog to be bound by the provisions of this Registration Agreement.

HALE AND DORR
60 State Street
Boston, Massachusetts 02109

July 19, 1996

Analog Devices, Inc.
One Technology Way
Norwood, MA 02062-9106

Dear Sirs:

This opinion is furnished to you in connection with a Registration Statement on Form S-3 (the "Registration Statement"), filed with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended, for the registration of 76,596 shares of Common Stock, \$.16 2/3 par value per share (the "Shares"), of Analog Devices, Inc., a Massachusetts corporation (the "Company"), held by the Selling Stockholders, as defined in the Registration Statement.

We have examined the Registration Statement and all exhibits thereto, all as filed with the Commission. We have also examined and relied upon the originals, or copies of minutes of meetings or actions taken by unanimous written consent of the Board of Directors of the Company, the By-laws of the Company and the Restated Articles of Organization of the Company, as amended, and such other documents and instruments as in our judgment are necessary or appropriate to enable us to render the opinions expressed below.

In our examination of the foregoing documents, we have assumed (i) the genuineness of all signatures and the authenticity of any documents submitted to us as originals, (ii) the conformity to the originals of any documents submitted to us as conformed or photostatic copies and (iii) the authenticity of the originals of the latter documents.

We have not made an independent review of the laws of any state or jurisdiction other than the Commonwealth of Massachusetts and the United States. Accordingly, we express no opinion herein with respect to the laws of any state or jurisdiction other than the Commonwealth of Massachusetts and the United States.

Based upon the foregoing, we are of the opinion that the Shares have been duly authorized and will be validly issued, fully paid and nonassessable.

We hereby consent to the filing of this opinion as part of the Registration Statement and to the use of our name therein and in the related Prospectus under the caption "Legal Matters."

Very truly yours,

HALE AND DORR

CONSENT OF ERNST & YOUNG LLP, INDEPENDENT AUDITORS

We consent to the reference to our firm under the caption "Experts" in the Registration Statement (Form S-3) and related Prospectus of Analog Devices, Inc. for the registration of 76,596 shares of its common stock and to the incorporation by reference therein of our report dated November 28, 1995, except for the fifth paragraph of Note 4 as to which the date is December 18, 1995, with respect to the consolidated financial statements and schedule of Analog Devices, Inc. included in its Annual Report (Form 10-K) for the year ended October 28, 1995, filed with the Securities and Exchange Commission.

ERNST & YOUNG LLP

Boston, Massachusetts
July 15, 1996