Filed Pursuant to Rule 424(b)(2) Registration File No. 333-87053

PROSPECTUS DATED SEPTEMBER 24, 1999

2,000,000 SHARES

ANALOG DEVICES, INC.

COMMON STOCK

The shares of Common Stock, of Analog Devices, Inc. covered by this prospectus may be issued, or transferred, by Analog from time to time to the trust established by Analog and PNC Bank, National Association, the "Trustee" pursuant to Analog's Deferred Compensation Plan. All of the shares covered by this prospectus may be offered and sold for the account of the Trust, and the proceeds of the sale of the shares will be held by the Trustee separate and apart from other funds of Analog and applied for the uses and purposes of participants in Analog's Deferred Compensation Plan. See "Deferred Compensation Plan" and "Use of Proceeds."

Neither the Securities and Exchange Commission nor any state Securities' commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is September 24, 1999.

AVAILABLE INFORMATION

Analog is subject to the informational requirements of the Securities Exchange Act of 1934, as amended, and in accordance therewith files reports and other information with the Securities and Exchange Commission, also referred to as the Commission. Reports, proxy materials and other information filed by Analog with the Commission, pursuant to the informational requirements of the Exchange Act, may be inspected and copied at the public reference facilities maintained by the Commission at 450 Fifth Street, N.W., Washington, D.C. 20549, and at the Commission's regional offices located at Seven World Trade Center, 13th Floor, 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. In addition, Analog is required to file electronic versions of these documents with the Commission through the Commission's Electronic Data Gathering, Analysis and Retrieval (EDGAR) system. The Commission maintains a World Wide Web site at http://www.sec.gov that contains reports, proxy and information statements and other information regarding registrants that file electronically with the Commission. The common stock of Analog is listed on the New York Stock Exchange and traded under the symbol "ADI." Reports, proxy materials and other information concerning Analog may also be inspected at the offices of the New York Stock Exchange, 20 Broad Street, New York, New York 10005.

Analog has filed with the Commission a Registration Statement on Form S-3 under the Securities Act of 1933, as amended, 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 Analog and the shares of common stock offered hereby, reference is made to the Registration Statement, including the exhibits and schedules thereto, which 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 materials 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

The following documents filed by Analog with the Commission are incorporated herein by reference:

- (1) Analog's Annual Report on Form 10-K for the fiscal year ended October 31, 1998;
- (2) Analog's Quarterly Reports on Form 10-Q for each of the quarters ended January 30, 1999, May 1, 1999 and July 31, 1999;
- (3) Analog's Registration Statement on Form 8-A (File No. 0-4407) filed with the Commission on March 2, 1970; and
- (4) All documents filed by Analog pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act after September 13, 1999 and prior to the date of this prospectus.

All documents filed by Analog 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.

This prospectus may contain and/or incorporate by reference forward-looking statements within the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. For this purpose, any statements contained herein or incorporated herein by reference that are not statements of material fact may be deemed to be forward-looking statements. Without limiting the foregoing, the words "believes," "anticipates," "plans," "expects" and similar expressions are intended to identify forward-looking statements. Reference is made in particular to the discussion set forth under "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Analog's Annual Report on Form 10-K for the fiscal year ended October 31, 1998, and the other reports periodically filed with the Commission pursuant to the Exchange Act and incorporated in this prospectus by reference. Such statements are based on then current expectations that involve a number of uncertainties. Actual results could differ materially from those projected in any such forward looking statements.

Analog will provide without charge to each person to whom this prospectus is delivered, upon the request of such person, a copy of any or all of the above documents incorporated herein by reference (without exhibits to such documents other than exhibits specifically incorporated by reference into the documents that this prospectus incorporates). Requests for such copies 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.

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 ANALOG. 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 ANALOG SINCE THE DATE HEREOF OR THAT THE INFORMATION CONTAINED HEREIN IS CORRECT AS OF ANY DATE SUBSEQUENT TO THE DATE HEREOF.

THE COMPANY

Analog is a semiconductor company that designs, manufactures and markets precision high-performance integrated circuits ("ICs") used in analog and digital signal processing ("DSP"). Virtually all of Analog's products are components, which are typically incorporated by original equipment manufacturers ("OEMs") in a wide range of equipment and systems for use in communications, computer, industrial, instrumentation, military/aerospace, automotive and high-performance consumer electronics applications.

Analog's principal products include general-purpose, standard-function analog and mixed-signal ICs and DSP ICs. DSP ICs include general-purpose digital signal processing ICs and application-specific devices that typically incorporate analog and mixed-signal circuitry and a DSP core.

DEFERRED COMPENSATION PLAN

Analog has established the Analog Devices, Inc. Deferred Compensation Plan (the "Plan") to provide (i) certain management and highly compensated employees of Analog and (ii) the non-employee directors of Analog with the opportunity to defer receipt of all or any portion of their compensation payable for services rendered to Analog. The obligations of Analog under such deferral arrangements (the "Obligations") are unfunded and unsecured general obligations of Analog to pay in the future the value of the deferred compensation adjusted to reflect the performance, whether positive or negative, of selected investment measurement options chosen by each participant during the deferral period in accordance with the terms of the Plan. Eligible participants in the Plan ("Eligible Participants") are Analog's non-employee directors and certain Company employees designated from time to time, by name, group or description by the Administrative Committee for the Plan.

The Plan was adopted on November 3, 1995 and amended on December 3, 1996, March 11, 1997 and November 5, 1997 and permits Eligible Participants to defer (i) salary and bonuses, (ii) in the case of non-employee directors, director fees and meeting fees and (iii) the gains that would otherwise be recognized upon the exercise of non-statutory stock options held by Eligible Participants ("Deferred Option Gains") and gains that would otherwise be recognized upon the lapse or termination of the restrictions and forfeiture provisions applicable to grants of restricted stock held by Eligible Participants.

Ordinarily, upon the exercise of non-statutory stock options, Eligible Participants would be required to recognize, for federal income tax purposes, an amount equal to the difference between the option exercise price and the fair market value of Analog's common stock issued upon the option exercise. To defer the Deferred Option Gains, Eligible Participants are required to deliver an irrevocable election to Analog prior to the option exercise. The Eligible Participant must specify at the time the irrevocable election is made whether such election relates to (i) all the shares issuable pursuant to a specified option or (ii) only those shares issuable pursuant to the specified option which, based on the then fair market value, represents the gain that would otherwise be realized upon the option exercise (the "Gain Shares"). After the deferral election has been delivered and the option is exercised, Analog will issue to the Trust (established for the Plan by a Trust Agreement between Analog and the Trustee), in accordance with the prior election, either (i) all of the shares issuable upon the exercise of such option or (ii) the Gain Shares, as the case may be, (collectively, the "Deferred Option Shares").

From time to time, certain employees of Analog are granted stock awards ("Restricted Stock Awards") that are subject to certain restrictions and/or risks of forfeiture (collectively, "Restrictions"). Ordinarily, upon the lapse or termination of such Restrictions, such employees would realize income for Federal Tax purposes in an amount equal to the difference between the price paid for the shares granted pursuant to the Restricted Stock Award, which is ordinarily a nominal amount, and the fair market value of the stock on the date the Restrictions lapse or terminate. The Plan allows Eligible Participants to defer the payment of the taxes which would otherwise be due at the time the Restrictions lapse or terminate ("Restricted Stock Gains"). In order to defer Restricted Stock Gains, Eligible Participants must deliver an irrevocable election to Analog prior to the date that the Restrictions on such shares lapse or terminate. After such an election has been made, the holders of such restricted shares will cause Analog to transfer such shares ("Deferred Restricted Stock Shares") to the Trust.

The Trust is considered to be a grantor trust for federal income tax purposes. Deferred Option Shares and Deferred Restricted Stock Shares (collectively, "Deferred Shares") issued to the Trust are held by the Trustee together with any other funds or assets deposited with the Trustee by Analog pursuant to the terms of the Plan and the Trust Agreement. The assets of the Trust, and any earnings thereon, are held separate and apart from other funds of Analog for the uses and purposes of Plan participants. Analog's obligations with respect to an Eligible Participant's Deferred Shares are unfunded and unsecured promises by Analog to pay in the future the value of the Deferred Shares, adjusted either up or down to reflect the value of an equal amount of shares of Analog's common stock and in certain cases the performance of selected investment measurement options if available to a participant during the deferral period in accordance with the Plan and the Trust Agreement.

Deferred Shares arising out of stock options granted, or Restricted Stock Awards issued, by Analog on or prior to July 23, 1997 may be sold from time to time in the open market for the account of the Trust when an Eligible Participant advises Analog to change his/her investment from Analog to one or more of the several investment measurement options available to Plan participants or whenever the Trustee deems such sale to be appropriate. The Deferred Compensation Plan does not permit Eligible Participants to change their investment from Analog common stock with respect to stock options granted after July 23, 1997 or Restricted Stock Awards issued after July 23, 1997. After Deferred Shares are sold, investment earnings credited to the Eligible Participant's account will be indexed to the mutual funds or indices selected by the Eligible Participant. Analog is not actually required to invest the deferred compensation in the types of funds specified by a Plan participant. However, such use of the Trust may assist Analog in meeting its future Obligations.

Analog has filed with the Commission Registration Statements on Form S-8 under the Securities Act with respect to Analog's Obligations under the Plan (Registration Statement Nos. 33-64849 and 333-48243). Analog has filed with Commission an additional Registration Statement on Form S-8 with respect to an increase in Analog's Obligations under the Plan as of the date of this prospectus.

The address of the Trustee is PNC Bank, N.A., Retirement and Investment Services, One Oliver Plaza, 210 6th Avenue, Pittsburgh, PA 15222-2602, Attention: Trust Officer.

USE OF PROCEEDS

As set forth under "Deferred Compensation Plan," the proceeds from the sale of any shares of Company common stock shall be held by the Trustee separate and apart from other funds of Analog and applied for the use and purposes of participants in the Plan. Such proceeds, together with other assets held by the Trust, shall be subject to the claims of Analog's general creditors under federal and state laws in the event of Analog's insolvency.

Analog cannot determine the number of shares of common stock which will be sold pursuant to this prospectus because that number is dependent upon the extent to which Eligible Participants elect to defer the recognition of gains from their exercise of stock options and Restricted Stock Awards granted by Analog.

PLAN OF DISTRIBUTION

Shares of common stock covered hereby may be offered and sold by Analog for the account of the Trust. Such sales may be made on the New York Stock Exchange in open market transactions including one or more of the following methods: (a) purchases by a broker-dealer as principal for resale on the open market by such broker or dealer for its account pursuant to this prospectus; (b) ordinary open market brokerage transactions and open market transactions in which a broker solicits purchasers; and (c) block trades in which a broker-dealer so engaged will attempt to sell on the open market the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction. In effecting sales, broker-dealers engaged to sell the shares may arrange for other broker-dealers to participate. Broker-dealers will receive commissions or discounts from Analog in amounts to be negotiated immediately prior to the sale.

In offering the shares of common stock covered hereby, any broker-dealers and any other participating

broker-dealers who execute sales may be deemed to be "underwriters" within the meaning of the Securities Act in connection with such sales, and the compensation of such broker-dealers may be deemed to be underwriting discounts and commissions.

This offering will terminate on the date on which all shares offered hereby have been sold.

INDEMNIFICATION MATTERS

The Restated Articles of Organization of Analog, as amended (the "Articles of Organization") provide that the directors and officers of Analog shall be indemnified by Analog 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 Analog. In addition, the Articles of Organization provide that the directors of Analog will not be personally liable for monetary damages to Analog for breaches of their fiduciary duty as directors.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers or persons controlling the registrant pursuant to the foregoing provisions, the Registrant has been informed that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is therefore unenforceable.

LEGAL MATTERS

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

EXPERTS

The consolidated financial statements and financial statement schedule of Analog Devices, Inc. incorporated by reference and included, respectively, in Analog Devices, Inc.'s Annual Report (Form 10-K) for the year ended October 31, 1998 have been audited by Ernst & Young LLP, independent auditors, as set forth in their reports thereon incorporated by reference and included therein and incorporated herein by reference. Such consolidated financial statements and financial statement schedule are incorporated herein by reference in reliance upon such reports given upon the authority of such firm as experts in accounting and auditing.