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            SECURITIES AND EXCHANGE COMMISSION
                                    WASHINGTON, D.C. 20549
                            Form 10-Q
(Mark One)
    [ X ] QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15 (d) OF THE
                                    SECURITIES EXCHANGE ACT OF }193
                    For the quarterly period ended July 31, 1999
                            OR
    [ ] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15 (d) OF THE
                SECURITIES EXCHANGE ACT OF 1934
                For the Transition period from
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Commission File No. 1-7819
Analog Devices, Inc.
(Exact name of registrant as specified in its charter)

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Massachusetts
(State or other jurisdiction of incorporation or organization)

04-2348234
(I.R.S. Employer Identification No.)
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One Technology Way, Norwood, MA
02062-9106
(Address of principal executive offices)
(Zip Code)
(781) 329-4700
(Registrant's telephone number, including area code)

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Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15 (d) of the Securities Exchange Act of 1934 during the preceding 12 months (or such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. YES [X] NO [ ]

The number of shares outstanding of each of the issuer's classes of Common Stock as of August 27, 1999 was 174,459, 082 shares of Common Stock.

\section*{PART I}

FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

ANALOG DEVICES, INC.
CONDENSED CONSOLIDATED STATEMENTS OF INCOME (Unaudited)
(thousands except per share amounts)

*Restated to reflect change in accounting principle.

See accompanying notes.
\begin{tabular}{|c|c|c|}
\hline \multicolumn{3}{|l|}{\multirow[t]{2}{*}{\begin{tabular}{l}
ANALOG DEVICES, INC. \\
CONDENSED CONSOLIDATED STATEMENTS OF INCOME \\
(Unaudited) \\
(thousands except per share amounts) \\
Nine Months Ended
\end{tabular}}} \\
\hline & & \\
\hline & July 31, 1999 & August 1, 1998* \\
\hline Net sales & \$1, 019, 343 & \$932, 921 \\
\hline Cost of sales & 529,721 & 477,140 \\
\hline Gross margin & 489, 622 & 455, 781 \\
\hline \multicolumn{3}{|l|}{Operating expenses:} \\
\hline Research and development & 181, 625 & 166,253 \\
\hline In-process research and development write-off & 5,140 & - - \\
\hline Selling, marketing, general and administrative & 149,937 & 160,862 \\
\hline Restructuring charge & -- & 17,000 \\
\hline Gain on sale of business, net & -- & \((13,100)\) \\
\hline Operating income & 152,920 & 124,766 \\
\hline Equity in loss of WaferTech & 1,149 & 7,065 \\
\hline Interest and other expense, net & \((8,138)\) & \((1,780)\) \\
\hline Income before income taxes & 159,909 & 119,481 \\
\hline Provision for income taxes & 36,308 & 26,329 \\
\hline \multicolumn{3}{|l|}{Net income before cumulative effect of change in accounting principle} \\
\hline Cumulative effect of change in accounting principle, net of \(\$ 20\) million of income taxes & -- & \((37,080)\) \\
\hline Net income after cumulative effect of change in accounting principle & \$ 123,601 & \$ 56, 072 \\
\hline
\end{tabular}

ANALOG DEVICES, INC.
CONDENSED CONSOLIDATED STATEMENTS OF INCOME (Continued)
(Unaudited)
(thousands except per share amounts)


ANALOG DEVICES, INC.
condensed consolidated balance sheets (Unaudited)
(thousands)


See accompanying notes.

ANALOG DEVICES, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS (Unaudited)
(thousands except share amounts)

Liabilities and Stockholders' Equity
July 31, 1999 October 31, 1998 August 1, 1998*

Short-term borrowings and current portion of long-term debt
Obligations under capital leases Accounts payable Deferred income on shipments to distributors
Income taxes payable
Accrued liabilities
Total current liabilities

Long-term debt
Non-current obligations under capital leases
\$
1

2,606
14,607
88,115
103,763
61,5
87,11
\(--------\quad\)
357,792
---------
80,000
19, 842
38, 000
61,458
Other non-current liabilities
199,300

Commitments and Contingencies
Stockholders' equity:
Preferred stock, \$1.00 par value, 471,934 shares authorized, none outstanding
Common stock, \$.16 2/3 par value, 600,000,000 shares authorized, 177,481,502 shares issued (164,092,719 in October 1998 and 163,927,212 in August 1998)
\begin{tabular}{|c|c|c|}
\hline 29,581 & 27,349 & 27,322 \\
\hline 501,609 & 248,970 & 232,437 \\
\hline 1,038,110 & 913,992 & 887,656 \\
\hline 7,425 & 6,025 & 6,925 \\
\hline 1,576,725 & 1,196,336 & 1,154,340 \\
\hline 57,640 & 67,947 & 30,114 \\
\hline 1,519,085 & 1,128,389 & 1,124,226 \\
\hline \$2,076,177 & \$1,861,730 & \$1,879,179 \\
\hline ========== & ========== & ======== \\
\hline
\end{tabular}
```

\$ 1,922 12,065 64,379
129, 277
63, 647
80,837
--------127
352,127
---------
309,985
29, 831
24,499
38,511
402,826
---------

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412,482 ess \(3,133,179\) shares in treasury at cost (3,782,763 in October 1998 and 1,309,917 in August 1998)

Total stockholders' equity
\$2, 076, 177

1,861,730 \$1,879,179
*Restated to reflect change in accounting principle.
See accompanying notes.

ANALOG DEVICES, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)
(thousands)

\section*{Nine Months Ended}

July 31, 1999
August 1,1998*

OPERATIONS Cash flows from operations:
Net income Adjustments to reconcile net income
to net cash provided by operations:
Cumulative effect of change in accounting principle, net of \(\$ 20\) million of income taxes
\$ 123,601

Depreciation and amortization
Non-cash portion of restructuring charge Write-off of acquired in-process R\&D Equity in loss of WaferTech, net of dividends Deferred income taxes
Other non-cash expense
Changes in operating assets and liabilities
Total adjustments
Net cash provided by operations

INVESTMENTS Cash flows from investments: Purchase of short-term investments available for sale
Maturities of short-term investments available for sale
Change in long-term investments
Additions to property, plant and equipment, net Payments for acquisitions, net of cash acquired Decrease (increase) in other assets

Net cash used for investments
\begin{tabular}{|c|c|}
\hline \((356,918)\) & \((111,735)\) \\
\hline 166,988 & 123,949 \\
\hline 105,501 & \((64,318)\) \\
\hline \((46,451)\) & \((143,986)\) \\
\hline \((20,019)\) & -- \\
\hline 5,040 & \((2,142)\) \\
\hline \((145,859)\) & \((198,232)\) \\
\hline
\end{tabular}

FINANCING ACTIVITIES
Cash flows from financing activities:
Proceeds from employee stock plans
\begin{tabular}{|c|c|}
\hline 31,444 & 22,507 \\
\hline \((10,591)\) & \((8,688)\) \\
\hline 2,265 & 1,920 \\
\hline -- & \((44,717)\) \\
\hline 23,118 & \((28,978)\) \\
\hline 1,081 & 987 \\
\hline
\end{tabular}
(27,896)
289, 601
Net increase (decrease) in cash and cash equivalents
142,296
Cash and cash equivalents at beginning of period
263,331
\$ 261, 705
Cash and cash equivalents at end of period
\$ 405, 627
=========

SUPPLEMENTAL INFORMATION Non-cash disclosure:
Conversion of \(31 / 2 \%\) Subordinated Notes to common stock
\$ 229,952
\$
15
* Restated to reflect change in accounting principle.

See accompanying notes.

Analog Devices, Inc.
Notes to Condensed Consolidated Financial Statements
July 31, 1999

Note 1 - In the opinion of management, the information furnished in the accompanying financial statements reflects all adjustments which are necessary to fairly state the results for this interim period and should be read in conjunction with the Company's Annual Report to Stockholders on Form 10-K for the fiscal year ended October 31, 1998, (1998 Annual Report).

Note 2 - Certain amounts reported in the previous year have been reclassified to conform to the 1999 presentation.

\section*{Note 3 - Investments}

During the first quarter of fiscal 1999 Analog Devices Inc., (the Company), completed the sale of approximately \(78 \%\) of its equity ownership in WaferTech, LLC, its joint venture with Taiwan Semiconductor Manufacturing Company and other investors. As a result of this sale, the Company's equity ownership in WaferTech was reduced from \(18 \%\) to \(4 \%\). The Company sold \(78 \%\) of its investment to other WaferTech partners and received \(\$ 105\) million in cash, which was equal to the carrying value of the \(14 \%\) equity ownership at October 31, 1998.

Note 4 - Comprehensive Income
In the first quarter of fiscal 1999 the Company adopted Statement of Financial Accounting Standards No. 130, "Reporting Comprehensive Income", (FAS 130). FAS 130 establishes new rules for the reporting and display of comprehensive income and its components. Components of comprehensive income include net income and certain transactions that have generally been reported in the consolidated statement of shareholders' equity. FAS 130 requires that these transactions be included with net income and presented separately as comprehensive income in the financial statements. The adoption of this Statement had no impact on the Company's net income or shareholders' equity and, during the periods presented, the Company had no material transactions other than net income that should be reported as comprehensive income.

\section*{Note 5 - Earnings Per Share}

Basic earnings per share is computed based only on the weighted average number of common shares outstanding during the period. Diluted earnings per share is computed using the weighted average number of common shares outstanding during the period, plus the dilutive effect of future issues of common stock relating to stock option programs and convertible debt financing. In calculating diluted earnings per share, the dilutive effect of stock options is computed using the average market price for the period. The following table sets forth the computation of basic and diluted earnings per share:

Note 5 - Earnings Per Share (continued)


Note 5 - Earnings Per Share (continued)

\section*{Nine Months Ended}
\(\left.\begin{array}{lrr}\text { Diluted: } \\ \text { Income before cumulative effect of change in } \\ \text { accounting principle }\end{array}\right)\)
* Restated to reflect change in accounting principle.

Note 6 - Convertible Debt
As of March 11, 1999 the Company had converted \(\$ 229,967,000\) of the \(\$ 230\) million principal amount of its \(31 / 2 \%\) Convertible Subordinated Notes (Notes) due 2000 into an aggregate of \(10,983,163\) shares of the Company's common stock, and the remaining Notes were redeemed by a cash payment of \(\$ 33,000\). This conversion did not have an impact on diluted earnings per share.

\section*{Note 7 - Acquisitions}

During the second quarter of fiscal 1999, the Company acquired two DSP tools companies, White Mountain DSP, Inc. of Nashua, New Hampshire and Edinburgh Portable Compilers Limited, of Edinburgh, Scotland. The total cost of these acquisitions was approximately \(\$ 21\) million in cash and \(\$ 2\) million in common stock of the Company, with additional contingent cash consideration up to a maximum of \(\$ 10\) million to be paid if the acquired companies achieve certain revenue and operational objectives. These acquisitions were accounted for as purchases. The excess of the purchase price over the fair value of assets acquired was allocated to existing technology, workforce in place, and tradenames, which are being amortized over periods ranging from six to ten years and goodwill which is being written off on a straight line basis over ten years. In connection with these acquisitions, the Company recorded a charge of \(\$ 5.1\) million for the write-off of in-process research \& development.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

This information should be read in conjunction with the unaudited consolidated condensed financial statements and the notes thereto included in Item 1 of this Quarterly Report and the audited consolidated financial statements and notes thereto and Management's Analysis for the fiscal year ended October 31, 1998, contained in the Company's 1998 Annual Report.

The following discussion and analysis may contain forward-looking statements. Such statements are subject to certain risks and uncertainties, including those discussed below or in the Company's 1998 Annual Report, that could cause actual results to differ materially from the Company's expectations. Readers are cautioned not to place undue reliance on any forward-looking statements, as they reflect management's analysis only as of the date hereof. The Company undertakes no obligation to release the results of any revision to these forward-looking statements which may be made to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events.

\section*{Results of Operations}

Net sales for the third quarter of fiscal 1999 were \(\$ 379\) million, an increase of 28\% from the third quarter of fiscal 1998. Net sales for the first three quarters of fiscal 1999 were \(\$ 1,019\) million, an increase of \(9 \%\) from the comparable period of fiscal 1998. For the quarter and the nine months ended July 31, 1999 the growth was principally attributable to increased sales in both the OEM and distributor channels. Sales to OEM customers in the communications, computer and contract manufacturing markets increased more than \(50 \%\) from the first three quarters of fiscal 1998. This increase was partially offset by a decline of more than \(60 \%\) in automatic test equipment (ATE) revenue compared to the three quarters ended August 1, 1998.

The decline in ATE sales primarily impacted the North American OEM channel, causing sales to North American customers to decrease to \(46 \%\) of total sales for the first three quarters of fiscal 1999, compared to \(50 \%\) of total sales for the comparable period of fiscal 1998. Sales in Europe declined by \(6 \%\) and sales in Japan rose 15\% compared to the comparable nine months of fiscal 1998. Increased Southeast Asian sales for the quarter and nine-month period ended July 31, 1999 resulted primarily from increased sales of analog ICs and communications products.

The gross margin for the third quarter of fiscal 1999 was 49.7\%, compared to \(45.3 \%\) for the third quarter of fiscal 1998. The gross margin was \(48.0 \%\) for the first three quarters of fiscal 1999 compared to \(48.9 \%\) for the first three quarters of fiscal 1998. The increase in gross margin in the third quarter was primarily attributable to higher sales, tight control of internal manufacturing spending, along with reduced costs due to the restructuring programs initiated in fiscal 1998. The decrease in the gross margin for the nine-month period was mainly attributable to the lower production levels experienced in the first quarter of fiscal 1999 followed by a return to more customary levels during the second quarter of fiscal 1999.

Research and development (R\&D) expenses were \(\$ 67\) million and \(\$ 182\) million for the three months and nine months ended July 31, 1999, compared to \(\$ 55\) million and \(\$ 166\) million for the corresponding periods of fiscal 1998. As a percentage of sales R\&D spending decreased during the third quarter of fiscal 1999 to 17.7\% from 18.6\% in the third quarter of fiscal 1998 and for the nine-month period remained flat at \(17.8 \%\) of sales. The quarter-to-quarter percentage decline resulted from the Company's continued efforts to reduce R\&D spending to a targeted range of \(15 \%\) to \(16 \%\) of sales. The Company believes that a continued commitment to research and development is essential in order to maintain product leadership with its existing products and to provide innovative new product offerings, and therefore expects to continue to make significant R\&D investments in the future.

Selling, marketing, general and administrative (SMG\&A) expenses for the third quarter of fiscal 1999 were \(\$ 55\) million, an increase of \(\$ 7\) million from the \(\$ 48\) million reported for the third quarter of fiscal 1998. However, as a percentage of sales SMG\&A decreased from 16.3\% for the third quarter of fiscal 1998 to 14.4\% for the third quarter of fiscal 1999. SMG\&A expenses for the nine months ended July 31, 1999 were \(\$ 150\) million, compared to \(\$ 161\) million for the nine months ended August 1, 1998. During the first half of fiscal 1998 the Company incurred a charge of \(\$ 8\) million related to collection difficulties the Company experienced with customers whose business and financing had been adversely affected by the Southeast Asia economic situation, as well as a charge of \(\$ 6\) million related to the realignment of the Company's sales and distribution organizations.

The effective income tax rate increased to \(24 \%\) for the third quarter and \(23 \%\) for the first nine-month period of fiscal 1999 from \(16 \%\) for the third quarter and 22\% for the first nine-month period of fiscal 1998 due to a shift in the mix of worldwide profits.

In the fourth quarter of fiscal 1998, the Company changed its accounting method for recognizing revenue on all shipments to international distributors and certain shipments to domestic distributors. The change was made with an effective date of November 2, 1997 (the beginning of fiscal 1998). While the Company has historically deferred revenue on most shipments made to domestic distributors until the products were resold by the distributors to end users, it recognized revenue on shipments to international distributors and certain shipments to domestic distributors upon shipment to the distributors, net of appropriate reserves for returns and allowances. As a result of this accounting change, revenue recognition on shipments to distributors worldwide is deferred until the products are resold to the end users. The Company believes that deferral of revenue on shipments to distributors and related gross margin until the product is shipped by the distributors is a more meaningful measurement of results of operations because it better conforms to the substance of the transaction considering the changing business environment in the international marketplace; is consistent with industry practice; and will, accordingly, better focus the entire organization on sales to end users and, therefore, is a preferable method of accounting. The cumulative effect in prior years of the change in accounting principle was a charge of approximately \(\$ 37\) million (net of \(\$ 20\) million of income taxes) or \(\$ 0.21\) per diluted share. The results of operations and cash flows for the period ended August 1, 1998 have been restated to reflect the accounting change.

\section*{Liquidity and Capital Resources}

At July 31, 1999, cash, cash equivalents and short-term investments totaled \$637 million, an increase of \(\$ 332\) million from the fourth quarter of fiscal 1998 and \(\$ 337\) million from the third quarter of fiscal 1998. The increase in cash, cash equivalents and short-term investments was primarily due to operating cash inflows of \(\$ 264\) million, \(\$ 105\) million received in January 1999 related to the sale of the Company's investment in WaferTech and lower capital spending.

Accounts receivable totaled \(\$ 252\) million at the end of the third quarter of fiscal 1999, an increase of \(\$ 44\) million from the fourth quarter of fiscal 1998 and \(\$ 27\) million from the third quarter of fiscal 1998 due to higher sales levels. The Company's days sales outstanding has improved from 63 at October 31, 1998 and 69 at August 1, 1998 to 60 at July 31, 1999.

Inventories of \(\$ 256\) million at July 31, 1999 were \(\$ 19\) million lower than the end of the fourth quarter of fiscal 1998 and \(\$ 17\) million lower than the end of the third quarter of fiscal 1998. The decrease in inventory levels was a result of adjustments by the Company to its production rates to conform to lower levels of demand in the second half of fiscal 1998 and the resumption of sales growth in fiscal 1999.

During the first quarter of fiscal 1999 the Company completed the sale of approximately \(78 \%\) of its equity ownership in WaferTech, LLC, its joint venture with Taiwan Semiconductor Manufacturing Company (TSMC) and other investors. As a result of this sale, the Company's equity ownership in WaferTech was reduced from \(18 \%\) to \(4 \%\). The Company sold \(78 \%\) of its investment to other WaferTech partners and received \(\$ 105\) million in cash, which was equal to the carrying value of the \(14 \%\) equity ownership at October 31, 1998.

Net additions to property, plant and equipment of \(\$ 46\) million for the first nine months of fiscal 1999 were funded with a combination of cash on hand and cash generated from operations. Capital spending in the first nine months of fiscal 1999 was down substantially from the \(\$ 144\) million spent in the first nine months of fiscal 1998. The decrease in capital expenditures was attributable to the Company's efforts to constrain all spending, including capital expenditures, until sales growth resumed. The Company currently expects that total capital expenditures for fiscal 1999 will be approximately \(\$ 85\) million.

At July 31, 1999, the Company's principal sources of liquidity were \(\$ 637\) million of cash and cash equivalents and short-term investments. In addition, the Company has various lines of credit both in the U.S. and overseas, including a \(\$ 60\) million credit facility in the U.S., which expires in 2000, all of which were substantially unused at July 31, 1999.

As of March 11, 1999 the Company had converted \(\$ 229,967,000\) of the \(\$ 230\) million principal amount of its \(31 / 2 \%\) Convertible Subordinated Notes (Notes) due 2000 into an aggregate of \(10,983,163\) shares of the Company's common stock, and the remaining Notes were redeemed by a cash payment of \(\$ 33,000\). As a result of this conversion, the Company's debt-to-equity ratio was reduced to \(8 \%\) as compared to \(31 \%\) in the prior year.

The Company believes that its existing sources of liquidity and cash expected to be generated from future operations, together with current and anticipated available long-term financing, will be sufficient to fund operations, capital expenditures and research and development efforts for the foreseeable future.

\section*{Factors Which May Affect Future Results}

The Company's future operating results are difficult to predict and may be affected by a number 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, and the advent and impact of the Year 2000. In addition, the semiconductor market has historically been cyclical and subject to significant economic downturns at various times. The Company's business is subject to rapid technological changes and there can be no assurance, depending on the mix of future business, that products stocked in inventory will not be rendered obsolete before they are shipped by the Company. 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.

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 grow in the future; 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. Also, some of the customers in these markets are less well established which could subject the Company to increased credit risk.

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.

The Company has substantially increased its manufacturing capacity through both expansion of its production facilities and increased access to third-party foundries. However, the Company cannot be sure that it will not encounter unanticipated production problems at either its own facilities or at third-party foundries, or that the increased capacity will be sufficient to satisfy demand for its products. The Company relies, and plans to continue to rely, on assembly and test subcontractors and on third-party wafer fabricators to supply most of its wafers that can be manufactured using industry-standard digital processes. Such reliance involves several risks, including reduced control over delivery schedules, manufacturing yields and costs. In addition, the Company's capacity additions resulted in a significant increase in operating expenses. If revenue levels do not increase to offset these additional expense levels, the Company's future operating results could be adversely affected. In addition, asset values could be impaired if the additional capacity is underutilized for an extended period of time. Also, non-compliance with "take or pay" covenants in certain of its supply agreements, could adversely impact operating results. The Company believes that other semiconductor manufacturers have expanded their production capacity over the past several years, and there can be no assurance that the expansion by the Company and its competitors will not lead to overcapacity in the Company's target markets, which could lead to price erosion that would adversely affect the Company's operating results.

For the first nine months of fiscal 1999, 54\% of the Company's revenues were derived from customers in international markets. The Company has manufacturing facilities outside the U.S. in Ireland, the Philippines and Taiwan. The Company also has supply agreements that include "take or pay" covenants with suppliers located in Southeast Asia (SEA) and as part of these arrangements, the Company has \(\$ 20\) million on deposit as well as a \(\$ 21\) million investment in one of these suppliers. In addition, the Company's major partner in its joint venture, WaferTech, is TSMC, which is located in SEA. In addition to being exposed to the ongoing economic cycles in the semiconductor industry, the Company is also subject to the economic and political risks inherent in international operations, including the risks associated with the ongoing uncertainties in the economies in SEA. These risks include air transportation disruptions, expropriation, 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.

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 the Company's 1998 Annual Report for information concerning certain pending litigation involving the Company. An adverse outcome in 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.

The Company's software applications have been updated to accommodate the new euro currency. System testing was completed during the fourth quarter of calendar 1998 and the euro functionality was implemented as planned on January 1, 1999. No major system-related issues were encountered and none are anticipated. The impact, either positive or negative, of the euro on the European economy generally and on the Company's operations in Europe in the future is unknown at this time.

Because of these and other factors, past financial performance should not be considered an indicator of future performance. Investors should not use historical trends to anticipate future results and should be aware that the trading price of the Company's common stock may be subject to wide fluctuations in response to quarter-to-quarter variations in operating results, general conditions in the semiconductor industry, changes in earnings estimates and recommendations by analysts or other events.

Year 2000
Over the past five years the Company has made significant investments in new manufacturing, financial and operating hardware and software. These investments were made to support the growth of its operations; however, the by-product of this effort is that the Company now has year 2000, (Y2K), compliant hardware and software running on many of its major platforms.

The Company has made the year 2000 issue a significant priority and a task force is engaged in an ongoing effort to reduce year 2000 related risks in the Company's systems and equipment. It is estimated that the aggregate cost of this project, which formally commenced at the beginning of fiscal 1998, will be approximately \(\$ 10\) million in total for fiscal 1998 and fiscal 1999. The task force's efforts are concentrated in six separate areas. The status of each area as of July 31, 1999 is summarized below.

\section*{Centrally Managed Global Systems}

Centrally managed global systems are the enterprise-wide, headquarters managed operational systems, which include customer service, customer order entry, work-in-progress (WIP) tracking, warehousing, production planning, and financial systems. These systems have been split into "mission critical" and "non-mission critical." Mission critical is defined as systems that can seriously impair the Company's ability to conduct its business. All mission critical applications have been tested and certified to be year 2000 compliant as of April 1, 1999. In addition, system integration testing was performed at our Disaster Recovery site in March 1999. Non-mission critical is defined as systems which would not cause serious impairment to the organization. The task force is continually reviewing and re-prioritizing the non-mission critical systems conversion efforts to ensure that appropriate items are receiving the proper attention. The Company retired its non-compliant mainframe in early 1999. Contingency planning to ensure business continuity into the millennium is expected to be completed in November 1999.

The Company's Computer Aided Design (CAD) Council is leading a worldwide year 2000 compliance review of hardware and software related to design and engineering systems. The team has completed its analysis and the required updates to the CAD operating systems are \(97 \%\) complete. All operating systems are expected to be fully Y2K compliant during the fourth quarter of fiscal 1999. Critical CAD application software packages have been vendor-certified as Y2K compliant. Most application package testing is complete and the installation of the required upgrades will be complete by the end of October 1999. The Company routinely completes full archives of all designs that are currently shipping or in development to enable the recovery of any design database needed for future derivative products. This archive system has been verified as Y2K compliant. The Company believes that if all design engineering systems are not compliant in time, this will result in inconvenience and inefficiencies rather than any significant risk to operations.

\section*{Site Based Manufacturing Systems}

Manufacturing site managers have identified, tested and analyzed all critical manufacturing equipment. All manufacturing sites have completed their Y2K remedial actions. Year 2000 testing is being done to the latest vendor specifications and the Company used the suite of test programs provided by Sematech, a semiconductor research organization. Thus far, no crucial piece of equipment has been identified as having a Y2K compliance problem for which no solution exists. In all instances where a Y2K compliance issue has arisen, the Company has been able to develop a solution without having to replace the equipment. The Company does not foresee any manufacturing equipment-related obstacles which would prevent the continuation of operations in year 2000.

\section*{Personal Computers (PCs)}

The Company has a PC Standards Committee comprised of participants from various Company locations. This committee has developed a hardware and software certification plan. This plan calls for year 2000 certification of PC Basic Input/Output System (BIOS), software applications and user files. The Company certified the BIOS on its 3,500 networked PCs in the first quarter of 1999 and less than \(2 \%\) were found to be non-Y2K compliant. The Company will also issue a tool to assist users in analyzing their data files for potential year 2000 issues. In addition, a year 2000 "patch" has been applied to \(100 \%\) of the desktops for the Microsoft Office Suite (Excel, Word and Access). All other business applications have been reviewed and have been upgraded. The Company does not foresee any material year 2000 issues in this area.

Facility Related Systems
Systems such as heating, sprinklers, elevators and card-key access are also being reviewed by site teams. Each team has a designated facilitator with representatives from each department participating. All of the teams have taken a thorough inventory of their sites' systems and the Company believes its mission critical items are \(100 \%\) year 2000 compliant.

\section*{Third Party}

The Corporate year 2000 task force is also reviewing third-party connectivity issues. The Company's EDI translator supplier, Harbinger, has been successfully tested for Y2K compliance. The EDI carrier, GEIS, has notified the Company that it is Y2K compliant. Other external service providers, primarily financial and human resource services, as well as outside vendors, have also been surveyed as to their state of readiness and most are already Y2K compliant. The Company identified 112 vital suppliers that could put the Company at risk should their service be interrupted. The Company verified their state of readiness and as of May 1999 did not identify any high risk suppliers. Contingency plans are underway to ensure that adequate supplies of critical raw materials and spare parts are in stock by December 31, 1999. In
addition, the Company tested its financial interface with its major financial services provider for Y2K compliance and the results were successful.

The Company currently believes that its most likely worst case year 2000 scenario would relate to problems with systems of third parties which could create the greatest risks with infrastructure, including water and sewer services, electricity, transportation, telecommunications and critical supplies of raw materials and spare parts. The Company is assessing various scenarios and contingency planning will continue through the balance of calendar 1999 as the Company completes the remedial work on its internal systems and assesses the state of readiness of its third-party suppliers.

Summary
The Company believes that the year 2000 issue will not pose significant operational problems. However, year 2000 issues could have a significant impact on the Company's operations and its financial results if modifications to internal systems and equipment cannot be completed on a timely basis, unforeseen needs or problems arise, or if the systems operated by third parties are not year 2000 compliant.

PART II - OTHER INFORMATION ANALOG DEVICES, INC.

Item 6. Exhibits and reports on Form 8-K
(a) See Exhibit Index.
(b) There were no reports on Form \(8-\mathrm{K}\) filed for the three months ended July 31, 1999.

\section*{SIGNATURES}

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: September 14, 1999

Date: September 14, 1999

\section*{Analog Devices, Inc} (Registrant)

By:/s/ Jerald G. Fishman
Jerald G. Fishman
President and
Chief Executive Officer (Principal Executive Officer)

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

EXHIBIT INDEX Analog Devices, Inc.

1,000
U.S. DOLLARS
Asset value represents NET amount.```

