UNITED STATES
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 1934

For the quarterly period ended: March 31, 2001

OR

[ ] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from to

Commission File Number 0-9992

KLA-TENCOR CORPORATION
(Exact name of registrant as specified in its charter)

DELAWARE	04-2564110
(STATE OR OTHER JURISDICTION OF INCORPORATION OR ORGANIZATION)	(I.R.S. EMPLOYER IDENTIFICATION NO.)

160 Rio Robles
San Jose, California
95134
(Address of principal executive offices)
(Zip Code)

(408) 875-3000
(Registrant's telephone number, including area code)

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 Act of 1934 during the preceding 12 months (or for 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

As of April 30, 2001 there were 185,385,846 shares of the Registrant's Common Stock, $0.001 par value, outstanding.

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PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

KLA-TENCOR CORPORATION
CONDENSED CONSOLIDATED BALANCE SHEETS
(Unaudited)

(in thousands)	June 30, 2000	March 31, 2001
ASSETS		
Current assets:		
Cash and cash equivalents	$ 478,212	$ 437,380
Short-term investments	119,932	73,459
Accounts receivable, net	481,950	538,173
Inventories	282,489	416,122
Other current assets	189,171	199,951
Total current assets	1,551,754	1,665,085
Land, property and equipment, net	199,719	263,556
Marketable securities	366,239	424,970
Other assets	85,791	86,900
Total assets	$2,203,503	$2,440,511
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 55,016	$ 58,739
Other current liabilities	439,811	493,514
Total current liabilities	494,827	552,253
Stockholders' equity:		
Common stock and capital in excess of par value	718,165	604,801
Retained earnings	976,846	1,283,380
Accumulated other comprehensive income	13,665	77
Total stockholders' equity	1,708,676	1,888,258
Total liabilities and stockholders' equity	$2,203,503	$2,440,511

See accompanying notes to condensed consolidated financial statements.

KLA-TENCOR CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited)

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(In thousands, except per share data)	Three months ended March 31, 2000	Three months ended March 31, 2001	Nine months ended March 31, 2000	Nine months ended March 31, 2001
<S>	<C>	<C>	<C>	<C>
Revenues	$ 413,017	$ 528,790	$1,016,763	$1,636,436
Costs and operating expenses:				
Costs of goods sold	181,372	242,693	470,862	715,205
Engineering, research and development	67,498	89,828	169,840	266,705
Selling, general and administrative	71,700	83,916	185,262	269,321
Non-recurring acquisition, restructuring and other charges	1,300	---	(4,638)	---
Total costs and operating expenses	321,870	416,437	821,326	1,251,231
Income from operations	91,147	112,353	195,437	385,205
Interest income and other, net	10,722	14,606	30,278	40,539
Income before income taxes	101,869	126,959	225,715	425,744
Provision for income taxes	28,522	35,549	63,617	119,210
Net income	$ 73,347	$ 91,410	$ 162,098	$ 306,534
Earnings per share:				
Basic	$ 0.40	$ 0.50	$ 0.90	$ 1.65
Diluted	$ 0.38	$ 0.48	$ 0.85	$ 1.59
Weighted average number of shares:				
Basic	184,026	184,510	180,890	185,661
Diluted	195,236	191,717	191,529	192,954

</TABLE>

See accompanying notes to condensed consolidated financial statements.

KLA-TENCOR CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

<TABLE>
<CAPTION>

(in thousands)	Nine Months Ended March 31, 2000	Nine Months Ended March 31, 2001
<S>	<C>	<C>
Cash flows from operating activities:		
Net income	$ 162,098	$ 306,534
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	45,431	44,969
Deferred income taxes	(457)	2,378
Restructuring charges	(7,838)	---
Non-recurring acquisition charges	3,200	---

Net gain on sale of marketable securities	(1,937)	(6,073)
Changes in assets and liabilities:		
Accounts receivable, net	(106,467)	(85,247)
Inventories	(64,963)	(139,492)
Other assets	(66,473)	(16,224)
Accounts payable	11,332	4,644
Other current liabilities	126,712	60,667
Net cash provided by operating activities	100,638	172,156
Cash flows from investing activities:		
Purchase of property and equipment, net	(49,636)	(105,922)
Acquisition of assets and technology	(19,925)	---
Purchase of available for sale securities and long-term investments	(507,968)	(595,720)
Proceeds from sale of available for sale securities	523,238	581,488
Net cash used in investing activities	(54,291)	(120,154)
Cash flows from financing activities:		
Issuance of common stock	91,286	40,265
Stock repurchases	(16,406)	(153,629)
Net borrowings (payments) under short term debt obligations	(3,217)	1,096
Net cash provided by (used in) financing activities	71,663	(112,268)
Effect of exchange rate changes on cash and cash equivalents	(9,838)	19,434
Net increase (decrease) in cash and cash equivalents	108,172	(40,832)
Cash and cash equivalents at beginning of period	271,488	478,212
Cash and cash equivalents at end of period	$ 379,660	$ 437,380
Supplemental cash flow disclosures:		
Income taxes paid, net of refunds	$ 7,772	$ 126,948
Interest paid	$ 476	$ 742

</TABLE>

See accompanying notes to condensed consolidated financial statements.

KLA-TENCOR CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

NOTE 1 - BASIS OF PRESENTATION

The condensed consolidated financial statements have been prepared by KLA-Tencor Corporation ("KLA-Tencor" or the "Company") pursuant to the rules and regulations of the Securities and Exchange Commission ("SEC"). Certain information and footnote disclosures normally included in financial statements prepared in accordance with accounting principles generally accepted in the United States of America have been condensed or omitted pursuant to such rules and regulations. In the opinion of management, the unaudited interim financial statements reflect all adjustments (consisting only of normal recurring adjustments) necessary for a fair presentation of the financial position, results of operations and cash flows for the periods indicated. These financial statements and notes, however, should be read in conjunction with the Company's audited consolidated financial statements and notes included in the Company's Annual Report on Form 10-K for the fiscal year ended June 30, 2000, filed with the SEC on September 28, 2000.

The results of operations for the three- and nine- month periods ended March 31, 2001 are not necessarily indicative of the results that may be expected for any other interim period or for the full fiscal year ending June 30, 2001.

Certain items previously reported in specific financial statement captions have been reclassified to conform to the presentation of the three- and nine-month periods ended March 31, 2001.

NOTE 2 - INVENTORIES

Inventories are stated at the lower of standard cost (which approximates the first-in, first-out basis) or market. The components of inventories are as follows:

<TABLE>
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(in thousands)	June 30, 2000	March 31, 2001
<S>	<C>	<C>
Inventories		
Customer service parts	$ 54,442	$ 86,939
Raw materials	83,103	152,633
Work-in-process	82,922	94,332
Demonstration equipment	50,817	63,141
Finished goods	11,205	19,077
	$ 282,489	$ 416,122

</TABLE>

NOTE 3 - STOCK REPURCHASE PROGRAM

The Company has adopted a plan to repurchase shares of its Common Stock on the open market for the purpose of partially offsetting dilution created by employee stock options and stock purchase plans. During the nine-month period ended March 31, 2001, the Company repurchased 4,580,000 shares of its Common Stock at a cost of approximately $154 million.

NOTE 4 - COMPREHENSIVE INCOME

The components of comprehensive income, net of tax, are as follows:

<TABLE>
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(in thousands)	Three months ended March 31, 2000	Three months ended March 31, 2001	Nine months ended March 31, 2000	Nine months ended March 31, 2001
<S>	<C>	<C>	<C>	<C>
Net Income	$ 73,347	$ 91,410	$ 162,098	$ 306,534
Other comprehensive income (loss)				
Change in unrealized gain (loss) on investments, net	(696)	1,188	2,876	(3,870)
Currency translation adjustments	693	(3,871)	(4,301)	(9,718)
Other comprehensive loss	(3)	(2,683)	(1,425)	(13,588)
Total Comprehensive Income	$ 73,344	$ 88,727	$ 160,673	$ 292,946

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NOTE 5 - EARNINGS PER SHARE

Basic earnings per share has been determined using the weighted-average number of shares of common stock outstanding during the period. Diluted earnings per share has been determined in the same manner but also includes all dilutive common equivalent shares outstanding during the period. Dilutive common equivalent shares consisted of stock options.

During the three- and nine-month periods ended March 31, 2000, options to purchase approximately 0 and 57,000 shares, respectively, at an average exercise price of $61.44 were not included in the computation of diluted EPS because the exercise price was greater than the average market price of common shares. During the three- and nine- month periods ended March 31, 2001, options to purchase approximately 502,000 and 4,835,000 shares at an average exercise price of $58.49 and $46.28, respectively, were not included in the computation of diluted EPS because the exercise price was greater than the average market price of common shares.

The reconciling difference between the computation of basic and diluted earnings per share for the periods presented is the inclusion of the dilutive effect of stock options issued to employees under employee stock option plans.

NOTE 6 - NONRECURRING ACQUISITION, RESTRUCTURING AND OTHER COSTS

ACQUISITIONS

On February 1, 2000, KLA-Tencor Corporation acquired software developer FINLE Technologies, Inc. (FINLE). FINLE supplies lithography modeling and data analysis software which enables semiconductor manufacturers to speed development of advanced lithography processes required to develop and produce integrated circuits with 0.13 micron and smaller geometries.

On March 23, 2000, KLA-Tencor Corporation acquired Fab Solutions, a division of ObjectSpace. Fab Solutions is a leading provider of advanced process control software solutions for semiconductor manufacturing which enables yield and process engineers to respond to the major yield-impacting parametric data in a fab in near-real time.

Both acquisitions were accounted for as purchases. Accordingly, the estimated fair value of assets acquired and liabilities assumed were included in KLA-Tencor's condensed consolidated balance

sheet as of March 31, 2000 and the results of operations from the respective dates of purchase through March 31, 2000 were included in the Company's condensed consolidated statement of operations.

KLA-Tencor acquired FINLE and Fab Solutions for $5.0 and $8.0 million in cash, respectively. The total purchase prices were allocated to the estimated fair values of assets acquired and liabilities assumed for the respective companies based on management estimates. The FINLE acquisition agreement includes certain additional annual installment contingency payments.

The total in-process research and development charges for FINLE and Fab Solutions of $1.3 million were determined by KLA-Tencor management, utilizing valuation methodologies approved by the SEC. However, there can be no assurance that the SEC will not take issue with assumptions used in KLA-Tencor's valuation model and require KLA-Tencor to revise the amounts allocated to in-process research and development.

To determine the value of the in-process technology, the expected future cash flow attributable to the in-process technology was discounted, taking into account the percentage of completion, utilization of pre-existing technology, risks related to the characteristics and applications of the technology, existing and future markets, and technological risk associated with completing the development of the technology. The valuation approach used was a form of discounted cash flow approach commonly known as the "percentage of completion" approach whereby the cash flows from the technology are multiplied by the percentage of completion of the in-process technology.

RESTRUCTURING AND OTHER CHARGES

During the six-month period ended December 31, 1999, the Company determined that $7.8 million of a $35.0 million restructuring reserve established during the three-month period ended December 31, 1998 would not be utilized because of a change in management's plans for utilization of certain facilities resulting from an increase in demand for the Company's products. Accordingly, the restructuring reserve reversal was included in the determination of income from operations for the nine-month period ended March 31, 2000.

NOTE 7 - COMMITMENTS AND CONTINGENCIES

The Company is currently a party to various legal proceedings, including those outlined in Part II, Item 1, "Legal Proceedings," in this Quarterly Report on Form 10-Q. While management currently believes the ultimate outcome of these proceedings, both individually and in the aggregate, will not have a material adverse effect on the Company's financial position or operating results, the results of complex legal proceedings are difficult to predict. However, the Company believes that it has defenses in each of the pending claims and is vigorously contesting each of these matters.

NOTE 8 - DERIVATIVE INSTRUMENTS AND HEDGING ACTIVITIES

On July 1, 2000, the Company adopted Statement of Financial Accounting Standards ("SFAS") No. 133, "Accounting for Derivative Instruments and Hedging Activities," as amended by SFAS No. 138 "Accounting for Certain Derivative Instruments and Hedging Activities - An Amendment of FASB Statement No. 133." SFAS No. 133 requires that all derivatives, including foreign currency exchange contracts, be recognized on the balance sheet at fair value. Derivatives that do not qualify as hedges must be recorded at fair value through earnings. If a derivative is a qualifying hedge, depending on the nature of the hedge, changes in the fair value of the derivative are either offset against the change in fair value of the underlying assets or liabilities through earnings or recognized in Accumulated other comprehensive income until the underlying hedged item is recognized in earnings. The ineffective portion of a derivative's change in fair value is immediately recognized in earnings.

In accordance with the transition provisions of SFAS No. 133, the Company recorded the fair value of derivatives designated as fair value hedges on the balance sheet with an offset to earnings. The Company also recorded the change in the fair value of the hedged firm commitments on the balance sheet with an offset to earnings. The net impact on the Company's financial statements of the adjustment for fair value hedges was not material.

DERIVATIVE INSTRUMENTS AND HEDGING ACTIVITIES The Company's activities expose it to a variety of market risks, including the effects of changes in foreign currency exchange rates and interest rates. The financial exposures are monitored and managed by the Company as an integral part of its overall risk management program. The Company's risk management program seeks to reduce the potentially adverse effects that the volatility of the markets may have on its operating results.

The Company maintains a foreign currency risk management strategy that uses derivative instruments to protect its interests from unanticipated fluctuations in earnings and cash flows caused by volatility in currency exchange rates.

By using derivative financial instruments to hedge exposures to changes in exchange rates, the Company exposes itself to credit risk and market risk. The Company manages exposure to counterparty credit risk by entering into derivative financial instruments with highly rated institutions that can be expected to fully perform under the terms of the agreement. Market risk is the adverse effect on the value of a financial instrument that results from a change in currency exchange rates. The Company manages exposure to market risk associated with foreign exchange contracts by establishing and monitoring parameters that limit the types and degree of market risk that may be undertaken.

The Company enters into foreign currency forward exchange contracts to hedge against certain future movements in foreign exchange rates that affect certain foreign currency denominated sales transactions. The Company attempts to match the forward contracts with the underlying items being hedged in terms of currency, amount and maturity. These forward contracts have a duration of no longer than one year.

ACCOUNTING FOR DERIVATIVES AND HEDGING ACTIVITIES All derivatives are recognized on the balance sheet at their fair value. Changes in the fair value of a derivative that is highly effective as a fair value hedge, along with the gain or loss on the hedged item are recorded in current period Interest income and other, net.

The Company formally documents all relationships between hedging instruments and hedged items, as well as its risk management objective and strategy for undertaking various hedge items. This process includes linking all derivatives that are designated as fair value hedges to specific assets, liabilities and firm commitments. The Company also formally assesses, both at the hedge's inception and on an ongoing basis, whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in the fair value of hedged items.

The Company discontinues hedge accounting prospectively when (1) it is determined that a derivative is no longer effective in offsetting changes in the fair value of a hedged item; (2) the derivative expires or is sold, terminated, or exercised; (3) the derivative is discontinued as a hedge instrument, because it is unlikely that a transaction will occur; (4) a hedged firm commitment no longer meets the definition of a firm commitment; or (5) management determines that designation of the derivative as a hedge instrument is no longer appropriate. In all situations in which hedge accounting is discontinued, the derivative will be carried at its fair value on the balance sheet, with subsequent changes in its fair value recognized in current period earnings. When hedge accounting is discontinued because it is probable that a forecasted transaction will not occur, the related amounts that were accumulated in other comprehensive income are recognized immediately in earnings. For the three- and nine-month periods ending March 31, 2001, the amount of hedge ineffectiveness and the gain on hedged commitments no longer qualifying as fair value hedges was immaterial.

NOTE 9 - SUBSEQUENT EVENTS

On April 20, 2001, the Company acquired substantially all of the assets of Phase Metrics, Inc. ("Phase Metrics"), a privately-held company, for a total of approximately $21 million in cash. Phase Metrics is a supplier of inspection/certification technologies to the data storage industry. The transaction will be accounted for as a purchase and the purchase price will be allocated to the estimated fair value of assets acquired and liabilities assumed based on management estimates.

NOTE 10 - RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS

In June 2000, the SEC issued Staff Accounting Bulletin ("SAB") No. 101B, "Second Amendment: Revenue Recognition in Financial Statements." SAB No. 101B amends SAB No. 101 "Revenue Recognition in Financial Statements," to defer the implementation date of SAB No. 101 for registrants until no later than the fourth fiscal quarter of fiscal years beginning after December 15, 1999. SAB No. 101 summarizes certain of the SEC's views in applying generally accepted accounting principles to revenue recognition in financial statements of all public companies. The Company is required to adopt SAB No. 101 in the fourth quarter of its fiscal year ending June 30, 2001. Accordingly, any shipments previously reported as revenue, including revenue reported for the first three quarters of fiscal 2001, that do not meet SAB No. 101's guidance will be recorded as revenue in future periods. Changes in the Company's revenue recognition policy resulting from the interpretation of SAB No. 101 would not involve the restatement of prior fiscal year statements but would, to the extent applicable, be reported as a change in accounting principle in the fiscal year ending June 30, 2001, with the appropriate restatement of interim periods as required by SFAS No. 3 "Reporting Accounting Changes in Interim Financial Statements." The Company's reported results of operations for the 12 months ending June 30, 2001 will include a cumulative adjustment for all prior annual and interim periods as if SAB No. 101 had been adopted on July 1, 2000. Management believes that SAB Nos. 101 and 101B, to the extent that they impact the Company, will not affect the underlying strength or weakness of the Company's business operations as measured by the dollar value of the Company's product shipments and cash flows.

In September 2000, the FASB issued SFAS No. 140 "Accounting for the Transfers and Servicing of Financial Assets and Extinguishments of Liabilities." SFAS No. 140 is effective for transfers occurring after March 31, 2001 and for disclosures relating to the securitization transactions and collateral for fiscal years ending after December 15, 2000. It is not expected that SFAS No. 140 will have a significant impact on our financial position or results of operation.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

FORWARD-LOOKING STATEMENTS

This report contains certain forward-looking statements. All statements included in or incorporated by reference in this Quarterly Report on Form 10-Q, other than statements of historical fact, are forward-looking statements. Such forward-looking statements include, among others, those statements regarding our future financial results; the future results of our operations; technological trends in the semiconductor industry; our future product offerings and product features; anticipated revenue from various domestic and international regions; success of our product offerings; completion of backlog; creation of development and engineering programs for research and development; the completion of any acquisitions of third parties, or the technology or assets thereof; benefits received from any acquisitions; the outcome of any litigation to which we are a party; results of our investment in leading edge technologies, enhancements of current products and strategic acquisitions; our future income tax rate; sufficiency of our existing cash balance, investments and cash generated from operations to meet our liquidity and working capital requirements; and the effects of hedging transactions.

Our actual results may differ significantly from those projected in the forward-looking statements in this report. The following discussion and analysis should be read in conjunction with the section entitled "Factors Affecting Results, Including Risks and Uncertainties," as well as the condensed consolidated financial statements and the notes thereto included in Item 1 in this Quarterly Report, our most recent Annual Report on Form 10-K filed by the Company with the SEC, and our other filings with the SEC made from time to time.

RESULTS OF OPERATIONS

KLA-Tencor Corporation is the world's leading supplier of process control and yield management solutions for the semiconductor and related microelectronics industries. Our comprehensive portfolio of products, software, analysis, services and expertise is designed to help integrated circuit manufacturers manage yield throughout the entire wafer fabrication process - from research and development to final mass production yield analysis.

Despite a strong first half of fiscal 2001, a worldwide softening in demand for semiconductors resulted in excess capacity and reduced demand for semiconductor manufacturing equipment in the third fiscal quarter. As a result, we experienced declines in both revenue and bookings in the third fiscal quarter compared to the prior quarter.

Revenues were $529 million and $1,636 million for the three- and nine-month periods ended March 31, 2001, compared to $413 million and $1,017 million for the same periods of the prior fiscal year, representing an increase of 28% and 61% for the respective periods. We experienced increased revenues across nearly all product lines as a result of the increased capital spending by major semiconductor manufacturers.

Gross margins were 54% and 56% of revenues for the three- and nine-month periods ended March 31, 2001, compared to 56% and 54% of revenues for the same periods in the prior fiscal year. Gross margins decreased during the current quarter when compared to the prior year quarter primarily due to lower than expected shipment volumes and new product introduction costs. Gross margin for the nine months ended March 31, 2001 increased when compared to the same period of the prior fiscal year primarily due to increased capacity utilization resulting from higher unit volume, as well as faster growth of higher margin product revenue compared to lower margin service revenue.

Engineering, research and development (R&D) expenses were $90 million and $267 million for the three- and nine-month periods ended March 31, 2001, compared to $67 million and $170 million for the same periods in the prior fiscal year. As a percentage of revenues, R&D expenses were 17% and 16% for the three- and nine-month periods ended March 31, 2001, compared to 16% and 17% for the same periods in the prior fiscal year. The aggregate amount for R&D investment increased, representing our continued commitment to product development in new and emerging market segments and enhancements to existing products for 0.13 micron, copper development and 300mm wafers.

Selling, general and administrative expenses were $84 million and $269 million for the three- and nine-month periods ended March 31, 2001, compared to $72 million and $185 million for the same periods in the prior fiscal year. As a percentage of revenues, selling, general and administrative expenses were 16% for both the three- and nine-month periods ended March 31, 2001, compared to 17% and 18% for the same periods in the prior fiscal year. Aggregate selling, general and administrative expenses increased, but at a slower rate than the increase in revenues. The aggregate increase was primarily due to increases in our sales and marketing infrastructure and the high level of new product activity during the last nine months.

During the six-month period ended December 31, 1999, the Company determined that $7.8 million of a $35.0 million restructuring reserve established during the three-month period ended December 31, 1998 would not be utilized because of a change in management's plans for utilization of certain facilities resulting from an increase in demand for the Company's products. Accordingly, the restructuring reserve reversal was included in the determination of income from operations for the nine-month period ended March 31, 2000.

Non-recurring acquisition charges were $1.3 million and $3.2 million for the three- and nine-month periods ended March 31, 2000, as a result of the acquisition of ACME Systems, Inc., FINLE Technologies, Inc. and Fab Solutions. Accordingly, the non-recurring acquisition charges were included in the determination of income from operations for the three- and nine- month periods ended March 31, 2000.

Interest income and other, net, were $15 million and $41 million for the three- and nine-month periods ended March 31, 2001, compared to $11 million and $30 million in the same periods in the prior fiscal year. The increase was due to gains realized on sales of marketable securities and settlements of certain foreign currency contracts.

Our effective tax rate for the three- and nine-month periods ended March 31, 2001 was 28% on pretax income. This rate is consistent with the effective rate applied to income from operations excluding the impact of non-recurring acquisition, restructuring and other charges during the same periods in the prior fiscal year. The tax rate on the restructuring reserve reversal in the three- and nine-month periods ended March 31, 2000 was 35%, which is consistent with the tax rate applied when the restructuring reserve was recorded during the three-month period ended December 31, 1998. Currently we anticipate an overall tax rate of approximately 28% for the balance of the fiscal year ending June 30, 2001.

LIQUIDITY AND CAPITAL RESOURCES

During the nine-month period ended March 31, 2001, cash, cash equivalents, short-term investments and marketable securities balances decreased to $936 million from $964 million at June 30, 2000. Net cash provided by operating activities for the nine-month period ended March 31, 2001 was $172 million, compared to $101 million of net cash from operating activities for the same period of the prior fiscal year. This change primarily resulted from increased net income before non-cash charges offset by an increase in inventory. We increased our net purchases of both available-for-sale securities and long-term investments and property and equipment in the nine-month period ended March 31, 2001 as compared to the same period of the prior fiscal year.

Capital expenditures for the nine-month period ended March 31, 2001 of $106 million included $15 million for the purchase of 31 acres of land in Livermore, California to build a new campus and $10 million in construction costs. The remaining capital expenditures were for manufacturing and engineering equipment and leasehold improvements necessary for our operations. We received $40 million through common stock issued through our employee stock purchase program and through stock option exercises during the nine-month period ended March 31, 2001, and we repurchased $154 million of our common stock under our stock repurchase program during the same period.

Working capital increased to $1,113 million as of March 31, 2001, compared to $1,057 million at June 30, 2000. We believe that existing liquid capital resources and funds generated from operations combined with the ability, if necessary, to borrow funds will be adequate to meet our business requirements for the foreseeable future, including potential acquisitions or strategic investments, capital expenditures for the expansion or upgrading of manufacturing capacity and working capital requirements. However, we can give no assurances that we will continue to generate sufficient funds from operations or that we will be able to borrow funds on reasonable terms in the future, if necessary.

FACTORS AFFECTING RESULTS, INCLUDING RISKS AND UNCERTAINTIES

Fluctuations in Operating Results and Stock Price

Our operating results have varied widely in the past, and our future operating results will continue to be subject to quarterly variations based upon a wide variety of factors including those listed in this section and throughout this Quarterly Report on Form 10-Q for the period ending March 31, 2001. In addition, future operating results may not follow any past trends. We believe the factors that make our results fluctuate and difficult to predict include:

- the cyclical nature of the semiconductor industry;
- the reduction in the price and the profitability of our products;
- our timing of new product introductions;
- our ability to develop and implement new technologies;
- the change in customers' schedules for fulfillment of orders;
- the cancellation of contracts by major customers;
- the shortage of qualified workers in the areas we operate; and
- our ability to manage our manufacturing requirements.

Operating results also could be affected by sudden changes in customer requirements, currency exchange rate fluctuations and other economic conditions affecting customer demand and the cost of operations in one or more of the global markets in which we do business. As a result of these or other factors, we could fail to achieve our expectations as to future revenues, gross profit and income from operations. Our failure to meet the performance expectations set and published by external sources could result in a sudden and significant drop in the price of our stock, particularly on a short-term basis, and could negatively affect the value of any investment in our stock.

Semiconductor Equipment Industry Volatility

The semiconductor equipment industry is highly cyclical. The purchasing decisions of our customers are highly dependent on the economies of both the local markets in which they are located and the semiconductor industry worldwide. The timing, length and severity of the up-and-down cycles in the semiconductor equipment industry are difficult to predict. This cyclical nature of the industry in which we operate affects our ability to accurately predict future revenues and, thus, future expense levels. When cyclical fluctuations result in lower than expected revenue levels, operating results may be adversely affected and cost reduction measures may be necessary in order for us to remain competitive and financially sound. During a down cycle, we must be in a position to adjust our cost and expense structure to prevailing market conditions and to continue to motivate and retain our key employees. In addition, during periods of rapid growth, we must be able to increase manufacturing capacity and personnel to meet customer demand. We can provide no assurance that these objectives can be met in a timely manner in response to industry cycles. If we fail to respond to industry cycles, our business could be seriously harmed.

During industry down cycles, the semiconductor industry typically experiences excess production capacity that causes semiconductor manufacturers to decrease capital spending. We generally do not have long-term volume production contracts with our customers, and we do not control the timing or volume of orders placed by our customers. Whether and to what extent our customers place orders for any specific products, as well as the mix and quantities of products included in those orders, are factors beyond our control. Insufficient orders, especially in our down cycles, will result in under-utilization of our manufacturing facilities and infrastructure and will negatively affect our operating results and financial condition.

International Trade and Economic Conditions

Ours is an increasingly global market. A majority of our revenues are derived from outside the United States, and we expect that international revenues will continue to represent a substantial percentage of our revenues. Our international revenues and operations are affected by economic conditions specific to each country and region. Because of our significant dependence on international revenues, a decline in the economies of any of the countries or regions in which we do business could negatively affect our operating results.

Managing global operations and sites located throughout the world presents challenges associated with, among other things, cultural diversity and organizational alignment. Moreover, each region in the global semiconductor equipment market exhibits unique characteristics that can cause capital equipment investment patterns to vary significantly from period to period. Periodic local or international economic downturns, trade balance issues, political instability and fluctuations in interest and currency exchange rates could negatively affect our business and results of operations. Although we attempt to manage near-term currency risks through the use of hedging instruments, there can be no assurance that such efforts will be adequate.

Competition

Our industry includes large manufacturers with substantial resources to support customers worldwide. Our future performance depends, in part, upon our ability to continue to compete successfully worldwide. Some of our competitors are diversified companies with greater financial resources and more extensive research, engineering, manufacturing, marketing and customer service and support capabilities than we can provide. We face competition from companies whose strategy is to provide a broad array of products and services, some of which compete with the products and services that we offer. These competitors may bundle their products in a manner that may discourage customers from purchasing our products. In addition, we face competition from smaller emerging semiconductor

equipment companies whose strategy is to provide a portion of the products and services which we offer, using innovative technology to sell products into specialized markets. Loss of competitive position could negatively impact our prices, customer orders, revenues, gross margins, and market share, any of which would negatively affect our operating results and financial condition. Our failure to compete successfully with these other companies would seriously harm our business.

Technological Change and Customer Requirements

Success in the semiconductor equipment industry depends, in part, on continual improvement of existing technologies and rapid innovation of new solutions. For example, the semiconductor industry continues to shrink the size of semiconductor devices and has begun to commercialize the process of copper-based interconnects. These and other evolving customer needs require us to respond with continued development programs and to cut back or discontinue older programs which may no longer have industry-wide support. Technical innovations are inherently complex and require long development cycles and appropriate professional staffing. Our competitive advantage and future business success depend on our ability to accurately predict evolving industry standards, to develop and introduce new products which successfully address changing customer needs, to win market acceptance of these new products and to manufacture these new products in a timely and cost-effective manner. If we do not develop and introduce new products and technologies in a timely manner in response to changing market conditions or customer requirements, our business could be seriously harmed.

In this environment, we must continue to make significant investments in research and development in order to enhance the performance and functionality of our products, to keep pace with competitive products and to satisfy customer demands for improved performance, features and functionality. There can be no assurance that revenues from future products or product enhancements will be sufficient to recover the development costs associated with such products or enhancements or that we will be able to secure the financial resources necessary to fund future development. Substantial research and development costs typically are incurred before we confirm the technical feasibility and commercial viability of a product, and not all development activities result in commercially viable products. In addition, we cannot ensure that these products or enhancements will receive market acceptance or that we will be able to sell these products at prices that are favorable to us. Our business will be seriously harmed if we are unable to sell our products at favorable prices or if our products are not accepted by the market in which we operate.

Key Suppliers

We use a wide range of materials in the production of our products, including custom electronic and mechanical components, and we use numerous suppliers to supply materials. We generally do not have guaranteed supply arrangements with our suppliers. Because of the variability and uniqueness of customers' orders, we do not maintain an extensive inventory of materials for manufacturing. We seek to minimize the risk of production and service interruptions and/or shortages of key parts by selecting and qualifying alternative suppliers for key parts, monitoring the financial stability of key suppliers and maintaining appropriate inventories of key parts. Although we make reasonable efforts to ensure that parts are available from multiple suppliers, key parts may be available only from a single supplier or a limited group of suppliers. There can be no assurance that our business will not be harmed if we do not receive sufficient parts to meet our production requirements in a timely and cost-effective manner.

Operations at our primary manufacturing facilities and our assembly subcontractors are subject to disruption for a variety of reasons, including work stoppages, fire, earthquake, flooding or other natural disasters. Such disruption could cause delays in shipments of products to our customers. We cannot ensure that alternate production capacity would be available if a major disruption were to occur or that, if it were available, it could be obtained on favorable terms. Such a disruption could result in cancellation of orders or loss of customers and could seriously harm our business.

Intellectual Property Obsolescence and Infringement

Our success is dependent in part on our technology and other proprietary rights. We own various United States and international patents and have additional pending patent applications relating to some of our products and technologies. The process of seeking patent protection is lengthy and expensive, and we cannot be certain that pending or future applications will actually result in issued patents or that issued patents will be of sufficient scope or strength to provide meaningful protection or commercial advantage to us. Other companies and individuals, including our larger competitors, may develop technologies that are similar or superior to our technology or may design around the patents we own.

We also maintain trademarks on certain of our products and services and claim copyright protection for certain proprietary software and documentation. However, we can give no assurance that our trademarks and copyrights will be upheld or successfully deter infringement by third parties.

While patent, copyright and trademark protection for our intellectual property is important, we believe our future success in highly dynamic markets is most dependent upon the technical competence and creative skills of our personnel. We attempt to protect our trade secrets and other proprietary information through agreements with our customers, suppliers, employees and consultants and through other security measures. We also rely on trade secret protection for our technology, in part through confidentiality agreements with our employees, consultants and third parties. We also maintain exclusive and non-exclusive licenses with third parties for strategic technology used in certain products. However, these employees, consultants and third parties may breach these agreements, and we may not have adequate remedies for wrongdoing. In addition, the laws of certain territories in which we develop, manufacture or sell our products may not protect our intellectual property rights to the same extent as do the laws of the United States.

As is typical in the semiconductor equipment industry, from time to time we have received communications from other parties asserting the existence of patent rights, copyrights, trademark rights or other intellectual property rights which they believe cover certain of our products, processes, technologies or information. Our customary practice is to evaluate such assertions and to consider whether to seek licenses where appropriate. However, we cannot ensure that licenses can be obtained or, if obtained, will be on acceptable terms or that litigation or other administrative proceedings will not occur. The inability to obtain necessary licenses or other rights on reasonable terms could seriously harm our operating results and financial condition.

Key Employees

Our employees are vital to our success, and our key management, engineering and other employees are difficult to replace. We generally do not have employment contracts with our key employees. Further, we do not maintain key person life insurance on any of our employees. The expansion of high technology companies worldwide has increased demand and competition for qualified personnel. We may not be able to attract, assimilate or retain additional highly qualified employees in the future. These factors could seriously harm our business.

Acquisitions

We seek to develop new technologies from both internal and external sources. As part of this effort, we may make acquisitions of, or significant investments in, businesses with complementary products, services and/or technologies. Acquisitions involve numerous risks, including management issues and costs in connection with the integration of the operations and personnel, technologies and products of the acquired companies, the possible write-downs of impaired assets, and the potential loss of key employees of the acquired companies. The inability to manage these risks effectively could seriously harm our business.

Litigation

From time to time we are involved in litigation of various types, including litigation that alleges infringement of intellectual property rights and other claims. Litigation tends to be expensive and requires significant management time and attention. If we lose in a dispute concerning intellectual property, a court could require us to pay substantial damages and/or royalties or could issue an injunction prohibiting us from using essential technologies. For these and other reasons, this type of litigation could have a material adverse effect on our business, financial condition and results of operations. Also, although we may seek to obtain a license under a third party's intellectual property rights in order to bring an end to certain claims or actions asserted against us, we may not be able to obtain such a license on reasonable terms or at all.

Regional Electric Shortages

Recently, California has been experiencing a shortage of electric power supply that has resulted in intermittent loss of power in some areas in the form of rolling blackouts. While we have not experienced any power failures to date, a blackout may affect our ability to manufacture products and meet scheduled deliveries. If blackouts were to interrupt our power supply, we would be temporarily unable to continue operations at some of our facilities. Any such interruption in our ability to continue operations at our facilities could damage our reputation, harm our ability to retain existing customers and to obtain new customers, and could result in lost revenue, any of which could substantially harm our business and results of operations.

Euro Conversion

A new European currency was implemented commencing in January 1999 to replace the separate currencies of eleven western European countries. This requires changes in our operations as we modify systems and commercial arrangements to deal with the new currency. Modifications are necessary in operations such as payroll, benefits and pension systems, contracts with suppliers and customers, and internal financial reporting systems. During the three-year transition period in which transactions may also be made in the old currencies, we must maintain dual currency processes for our operations. We have identified the issues created by this problem, and the cost of this effort is not expected to have a material effect on our business or results of operations. We cannot be certain, however, that all problems will be foreseen and corrected or that no material disruption of our business will occur as a result of this currency change.

EFFECTS OF RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS

In June 2000, the SEC issued Staff Accounting Bulletin ("SAB") No. 101B, "Second Amendment: Revenue Recognition in Financial Statements." SAB No. 101B amends SAB No. 101 "Revenue Recognition in Financial Statements," to defer the implementation date of SAB 101 for registrants until no later than the fourth fiscal quarter of fiscal years beginning after December 15, 1999. SAB No. 101 summarizes certain of the SEC's views in applying generally accepted accounting principles to revenue recognition in financial statements of all public companies. The Company is required to adopt SAB No. 101 in the fourth quarter of its fiscal year ending June 30, 2001. Accordingly, any shipments previously reported as revenue, including revenue reported for the first three quarters of fiscal 2001, that do not meet SAB No. 101's guidance will be recorded as revenue in future periods. Changes in the Company's revenue recognition policy resulting from the interpretation of SAB No. 101 would not involve the restatement of prior fiscal year statements but would, to the extent applicable, be reported as a change in accounting principle in the fiscal year ending June 30, 2001, with the appropriate restatement of interim periods as required by SFAS No. 3 "Reporting Accounting Changes in Interim Financial Statements." The Company's reported results of operations for the 12 months ending June 30, 2001 will include a cumulative adjustment for all prior annual and interim periods as if SAB No. 101 had been adopted on July 1, 2000. Management believes that SAB Nos. 101 and 101B, to the extent that they impact the Company, will not affect the underlying strength or weakness of the Company's business operations as measured by the dollar value of the Company's product shipments and cash flows.

In September 2000, the FASB issued SFAS No. 140 "Accounting for the Transfers and Servicing of Financial Assets and Extinguishments of Liabilities." SFAS No. 140 is effective for transfers occurring after March 31, 2001 and for disclosures relating to the securitization transactions and collateral for fiscal years ending after December 15, 2000. It is not expected that SFAS No. 140 will have a significant impact on our financial position or results of operation.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to financial market risks, including changes in interest rates and in foreign currency exchange rates. To mitigate these risks, we utilize derivative financial instruments. We do not use derivative financial instruments for speculative or trading purposes. All of the potential changes noted below are based on sensitivity analyses performed on our financial position at June 30, 2000 and at March 31, 2001. Actual results may differ materially.

As of June 30, 2000 and March 31, 2001, we had an investment portfolio of fixed income securities of $446 million and $450 million, respectively, excluding securities classified as cash equivalents. These securities, as with all fixed income instruments, are subject to interest rate risk and will fall in value if market interest rates increase. If market interest rates were to increase immediately and uniformly by 10% from levels as of June 30, 2000 and March 31, 2001, the fair market value of our portfolio would decline by $5 million and $4 million, respectively.

As of June 30, 2000 and March 31, 2001, we had forward contracts to sell $204 million and $296 million, respectively, in foreign currency in order to hedge currency exposures. The fair market value of these contracts on June 30, 2000 and March 31, 2001, based on prevailing exchange rates on those dates, was $199 million and $267 million, respectively. A 10% adverse change in currency exchange rates affecting the contracts from their June 30, 2000 and March 31, 2001 levels would decrease the fair market value of the contracts by $20 million and $30 million, respectively. However, if this occurred, the fair market value of the underlying exposures hedged by the contracts would increase by similar amounts, which we believe would result in little or no material impact on our income or cash flows.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

A discussion regarding certain pending legal proceedings is included in

Part I, Item 3, "Legal Proceedings," included in the Company's Annual Report on Form 10-K for the fiscal year ended June 30, 2000. Since the fiscal year ended June 30, 2000, certain material developments have occurred with respect to the legal proceedings described in the Company's Annual Report and the Company has been named as a party in certain additional matters as follows:

ADE Corporation

On October 11, 2000, ADE Corporation ("ADE"), a competitor, filed a patent infringement lawsuit against the Company in the U.S. District Court in Delaware. ADE claimed damages and sought an injunction under a wafer inspection patent it holds. The Company filed a counterclaim in the same court alleging that ADE has infringed three of its patents. The Company claimed damages and a permanent injunction against ADE. In addition, the Company is seeking a declaration from the District Court that ADE's patent is invalid and not infringed by the Company. While these matters are in a preliminary stage and we cannot predict the outcome, the Company believes it has valid defenses and further believes that its counterclaims have merit.

Although we cannot predict the outcome of these claims, management does not believe that any of these legal matters will have a material adverse effect on the Company. Were an unfavorable ruling to occur in one or more of the pending claims, there exists the possibility of a material impact on the Company's operating results for the period in which the ruling occurred.

Therma-Wave, Inc.

On April 10, 2001, the Company settled all pending litigation with Therma-Wave, Inc. As part of the settlement, the Company has granted Therma-Wave a license on the Company's U.S. Patent No. 4,899,055 entitled "Thin Film Thickness Measuring Method." In exchange, Therma-Wave has granted the Company a license on Therma-Wave's U.S. Patent No. 5,596,406, entitled "Sample Characteristic Analysis Utilizing Multi Wavelength And Multi Angle Polarization And Magnitude Change Detection;" and U.S. Patent Nos. 5,798,837 and 5,900,939, both entitled "Thin Film Optical Measurement System and Method With Calibrating Ellipsometer." In addition, Therma-Wave agreed to modify its products to avoid using certain technology patented by the Company and both parties agreed to a moratorium on any patent litigation for a period of time.

Schlumberger, Inc. and Rigg Systems, Inc.

On August 30,1999, we were named as a defendant in a lawsuit in which Schlumberger, Inc. alleges trade secret misappropriation, unfair competition and trade slander. On July 21, 2000, the court granted our motion for summary judgment dismissing the case. Schlumberger, Inc. subsequently filed a motion for reconsideration of that dismissal and its request for reconsideration was denied. Schlumberger has now appealed. Although the outcome of these claims cannot be predicted with certainty, we do not believe that this legal matter will have a material adverse effect on our financial condition even if plaintiff prevails. On January 26, 2000, we filed a complaint against Philip Rigg, RIGG Systems and Schlumberger, Inc. for misappropriation of trade secrets, breach of contract, breach of fiduciary duty, interference with contract, and unfair competition. The defendants filed cross-complaints on June 5, 2000 asserting various statutory and common law theories. Although the outcome of these claims cannot be

predicted with certainty, we do not believe that this legal matter will have a material adverse effect on our financial condition or results of operations even if the plaintiff prevails.

ITEM 6. EXHIBITS AND REPORTS ON FORM 8-K

(a) Exhibits

None.

(b) Form 8-K

On March 21, 2001, the Company filed a current report on Form 8-K, dated March 19, 2001, to report a press release announcing it expects its financial results for the 3rd Quarter ending March 31, 2001 to be below the expectations provided in its earnings conference call on January 17, 2001.

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.

KLA-TENCOR CORPORATION
(Registrant)

May 14, 2001	/s/ JOHN H. KISPERT
(Date)	John H. Kispert Executive Vice President and Chief Financial Officer