UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-Q

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

For the quarterly period ended September 30, 2000

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)

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

</TABLE>

160 Rio Robles
San Jose, California, 95134

(Address of principal executive offices, including 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 Exchange 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 October 31, 2000 there were 186,003,036 shares outstanding of the Registrant's Common Stock, $0.001 par value.

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PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

KLA-TENCOR CORPORATION
CONDENSED CONSOLIDATED BALANCE SHEETS
(Unaudited)

<TABLE>
<CAPTION>

(in thousands)	June 30, 2000	September 30, 2000
<S>	<C>	<C>
ASSETS		
Current assets:		
Cash and cash equivalents	$ 478,212	$ 377,353
Short-term investments	119,932	149,435
Accounts receivable, net	481,950	547,388
Inventories	282,489	327,764
Other current assets	189,171	194,764
Total current assets	1,551,754	1,596,704
Land, property and equipment, net	199,719	228,069
Marketable securities	366,239	408,603
Other assets	85,791	96,795
Total assets	$2,203,503	$2,330,171
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Notes payable	$ --	$ 1,566
Accounts payable	55,016	59,135
Other current liabilities	439,811	472,511
Total current liabilities	494,827	533,212
Stockholders' equity:		
Common stock and capital in excess of par value	718,165	705,993
Retained earnings	976,846	1,082,664
Accumulated other comprehensive income	13,665	8,302
Total stockholders' equity	1,708,676	1,796,959
Total liabilities and stockholders' equity	$2,203,503	$2,330,171

</TABLE>

See accompanying Notes to condensed consolidated financial statements.

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

<TABLE>
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	Three months ended September 30,	
(in thousands, except per share data)	1999	2000

<S>	<C>	<C>
Revenues	$272,989	$534,590
Costs and operating expenses:		
Costs of goods sold	136,117	228,076
Engineering, research and development	46,718	80,648
Selling, general and administrative	53,414	90,897
Non-recurring acquisition, restructuring and other charges	(6,000)	--
Total costs and operating expenses	230,249	399,621
Income from operations	42,740	134,969
Interest income and other, net	12,706	12,002
Income before income taxes	55,446	146,971
Provision for income taxes	15,944	41,153
Net income	$ 39,502	$ 105,818
Earnings per share:		
Basic	$ 0.22	$ 0.57
Diluted	$ 0.21	$ 0.54
Weighted average number of shares:		
Basic	177,992	187,282
Diluted	187,934	195,975

</TABLE>

See accompanying Notes to condensed consolidated financial statements.

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

<TABLE>
<CAPTION>

(in thousands)	Three Months Ended September 30, 1999	2000
<S>	<C>	<C>
Cash flows from operating activities:		
Net income	$ 39,502	$ 105,818
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	12,921	14,310
Deferred income taxes	(1,311)	2,378
Restructuring charges	(6,000)	--
Net gain on sale of marketable securities	(3,911)	432
Changes in assets and liabilities:		
Accounts receivable, net	(36,335)	(68,780)
Inventories	(7,998)	(46,624)
Other assets	(10,319)	(16,304)
Accounts payable	(6,724)	4,392
Other current liabilities	26,200	27,989
Net cash provided by operating activities	6,025	23,611
Cash flows from investing activities:		
Purchase of property and equipment, net	(11,841)	(41,359)
Purchase of available for sale securities	(156,951)	(266,884)
Proceeds from sale of available for sale securities	204,306	188,482
Net cash provided by (used in) investing activities	35,514	(119,761)
Cash flows from financing activities:		
Issuance of common stock, net	19,355	6,474

Stock repurchases	(2,161)	(18,745)
Net borrowings (payments) under short term debt obligations	(830)	2,615
Net cash provided by (used in) financing activities	16,364	(9,656)
Effect of exchange rate changes on cash and cash equivalents	(12,522)	4,947
Net increase (decrease) in cash and cash equivalents	45,381	(100,859)
Cash and cash equivalents at beginning of period	271,488	478,212
Cash and cash equivalents at end of period	$ 316,869	$ 377,353
Supplemental cash flow disclosures:		
Income taxes paid, net of refunds	$ (1,956)	$ 13,921
Interest paid	$ 84	$ 178

</TABLE>

See accompanying Notes to condensed consolidated financial statements.

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

NOTE 1 -- BASIS OF PRESENTATION

In the opinion of management, the accompanying unaudited interim condensed consolidated financial statements of KLA-Tencor Corporation ("KLA-Tencor" or "the Company") include all adjustments (consisting only of normal recurring accruals) necessary for their fair presentation in accordance with generally accepted accounting principles. Preparing financial statements requires management to make estimates and assumptions that affect amounts reported in the financial statements and accompanying notes. Actual amounts could differ materially from those amounts. The results for the three-month period ended September 30, 2000 are not necessarily indicative of results to be expected for the entire year. This financial information should be read in conjunction with the financial statements and the notes thereto included in the Company's Annual Report on Form 10-K for the fiscal year ended June 30, 2000.

All historical financial information presented herein has been restated to reflect a two-for-one stock split in the form of a 100 percent stock dividend, effective January 18, 2000.

Certain items previously reported in specific financial statement captions have been reclassified to conform to the presentation of the three-month period ended September 30, 2000.

NOTE 2 -- INVENTORIES

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

<TABLE>
<CAPTION>

(in thousands)	June 30, 2000	September 30, 2000
<S>	<C>	<C>
Inventories		
Customer service parts	$ 54,442	$ 56,973
Raw materials	83,103	117,714
Work-in-process	82,922	93,432
Demonstration equipment	50,817	47,571
Finished goods	11,205	12,074
	$282,489	$327,764

</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 three-month period ended September 30, 2000, the Company repurchased 440,000 shares of its Common Stock at a cost of approximately $19 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 September 31 1999	2000
Net Income	$ 39,502	$ 105,818
Other comprehensive income (loss)		
Change in unrealized gain on investments	(3,574)	(3,502)
Currency translation adjustments	2,228	(1,861)
Other comprehensive loss	(1,346)	(5,363)
Total Comprehensive Income	$ 38,156	$ 100,455

</TABLE>

NOTE 5 -- EARNINGS PER SHARE

Basic earnings per share ("EPS") is calculated using the weighted average number of shares of common stock outstanding during the period. Diluted earnings per share is computed in the same manner and also gives effect to all dilutive common equivalent shares outstanding during the period. Dilutive common equivalent shares consist of stock options.

During the three-month period ended September 30, 1999, options to purchase 5,000 shares at a price of $34.94 were not included in the computation of diluted EPS because the exercise price was greater than the average market price of common shares for the period. During the three-month period ended September 30, 2000, options to purchase approximately 696,000 shares at prices ranging from $56.31 to $68.00 were not included in the computation of diluted EPS because the exercise price was greater than the average market price of common shares for the period.

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

During the three-month period ended September 30, 1999, KLA-Tencor management determined that $6.0 million of a $35.0 million restructure reserve established in November 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 three-month period ended September 30, 1999.

NOTE 7 -- 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" ("SFAS 133"), as amended by SFAS No. 138 "Accounting for Certain Derivative Instruments and Hedging Activities -- An Amendment of FASB Statement No. 133." SFAS 133 requires that all derivatives, including foreign currency exchange contracts, be recognized on the balance sheet at fair value. Derivatives that are not 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 to be immediately recognized in earnings.

Currently, the Company only uses fair value hedges. 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 and purchase 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 asset or liability 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 to specific assets and liabilities on the balance sheet. 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 or (3) the derivative is discontinued as a hedge instrument, because it is unlikely that a transaction will occur. For the three-months ending September 30, 2000, the amount of hedge ineffectiveness and the gain on hedged commitments no longer qualifying as fair value hedges was immaterial.

When hedge accounting is discontinued because it is determined that the derivative no longer qualifies as an effective fair value hedge, the derivative will continue to be carried on the balance sheet at its fair value. When hedge accounting is discontinued because it is probable that a forecasted transaction will not occur, the derivative will continue to be carried on the balance sheet at its fair value, and gains and losses that were accumulated in other comprehensive earnings are recognized immediately in earnings. In all other situations in which hedge accounting is discontinued, the derivative will be carried at its fair value on the balance sheet, with changes in its fair value recognized in current period earnings.

NOTE 8 -- RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS

In June 2000, the Securities and Exchange Commission (SEC) issued Staff Accounting Bulletin No. 101B (SAB 101B), "Second Amendment: Revenue Recognition in Financial Statements." SAB 101B amends Staff Accounting Bulletin No. 101 (SAB 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 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 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 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 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 including an adjustment for revenue reported in the first quarter of fiscal 2001 as if SAB 101 had been adopted on July 1, 2000. The Company, in conjunction with the semiconductor capital equipment industry association is seeking clarification on the requirements of SAB 101 as they relate to the semiconductor capital equipment industry. Management believes that SAB 101 and 101B, to the extent that they impact us, will not affect the underlying strength or weakness of our business operations as measured by the dollar value of our product shipments and cash flows.

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

FORWARD-LOOKING STATEMENTS

This report contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. 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 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. Factors that might cause or contribute to such differences include, but are not limited to, those discussed in this section and those set forth in the Company's most recent Annual Report on Form 10-K. You should carefully review these risks and also review the risks described in other documents we file from time to time with the Securities and Exchange Commission. You are cautioned not to place undue reliance on these forward-looking statements. We undertake no obligation to update forward-looking statements.

RESULTS OF OPERATIONS

KLA-Tencor Corporation ("KLA-Tencor") 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.

Revenues were $535 million for the three-month period ended September 30, 2000, compared to $273 million for the same period of the prior fiscal year, representing an increase of 96%. We experienced increased revenues across nearly all product lines as a result of the increased capital spending by major semiconductor manufacturers.

Gross margins as a percentage of revenues were 57% for the three-month period ended September 30, 2000, compared to 50% for the same period in the prior fiscal year. Gross margins increased 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 $81 million for the three-month period ended September 30, 2000, compared to $47 million for the same periods in the prior fiscal year. As a percentage of revenues, R&D expenses decreased to 15% for the three-month period ended September 30, 2000, compared to 17% for the same period 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 $91 million for the three-month period ended September 30, 2000, compared to $53 million for the same period in the prior fiscal year. As a percentage of revenues, selling, general and administrative expenses were 17% for the three-month period ended September 30, 2000, compared to 20% the same period 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.

During the three-month period ended September 30, 1999, we determined that $6 million of a $35 million restructuring reserve established in November 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 our products. Accordingly, the restructuring reserve reversal was included in the determination of income from operations for the three-month period ended September 30, 1999.

Interest income and other, net, was $12 million for the three-month period ended September 30, 2000, compared to $13 million in the same period in the prior fiscal year. The decrease was due to fewer gains realized on sales of marketable securities and settlements of certain foreign currency contracts.

Our effective tax rate for the three-month period ended September 30, 2000 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 period in the prior fiscal year. The tax rate on the restructure reserve reversal in the three-month period ended September 30, 1999 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. 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 three-month period ended September 30, 2000, cash, cash equivalents, short-term investments and marketable securities balances decreased to $935 million from $964 million at June 30, 2000. Net cash provided by operating activities for the three-month period ended September 30, 2000 was $24 million, compared to $6 million of net cash provided by operating activities for the same period of the prior fiscal year. This change primarily resulted from increased net income before non-cash charges and an increase in other liabilities offset by an increase in accounts receivable, inventory and other assets. We increased our net purchases of available-for-sale securities and our net purchases of property and equipment in the three-month period ended September 30, 2000 as compared to the same period of the prior fiscal year. Capital expenditures for the three-month period ended September 30, 2000 of $41 million included $15 million for the purchase of 31 acres of land in Livermore, California to build a new campus. The remaining capital expenditures were for manufacturing and engineering equipment and leasehold improvements necessary for our operations. We received $7 million through common stock issued through our employee stock purchase program and through stock option exercises during the three-month period ended September 30, 2000 and repurchased $19 million of our common stock under our stock repurchase program during the same period.

Working capital was $1,063 million as of September 30, 2000, 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 operating and capital requirements through the foreseeable future. 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 September 30, 2000. In addition, future operating results may not follow any past trends. The factors we believe 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 the most recent down cycle, the semiconductor industry experienced excess production capacity that caused 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 and 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, develop and introduce new products which successfully address changing customer needs, win market acceptance of these new products and 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 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 consider whether

to seek licenses where appropriate. Based on industry practice and prior experience, we believe that licenses or other rights, if necessary, will be available on commercially reasonable terms for existing or future claims. Nevertheless, 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 integration of the operations, technologies, and products of the acquired companies, 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 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.

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 assured, 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 Securities and Exchange Commission (SEC) issued Staff Accounting Bulletin No. 101B (SAB 101B), "Second Amendment: Revenue Recognition in Financial Statements." SAB 101B amends Staff Accounting Bulletin No. 101 (SAB 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 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 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 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 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 including an adjustment for revenue reported in the first quarter of fiscal 2001 as if SAB 101 had been adopted on July 1, 2000. The Company, in conjunction with the semiconductor capital equipment industry association is seeking clarification on the requirements of SAB 101 as they relate to the semiconductor capital equipment industry. Management believes that SAB 101 and 101B, to the extent that they impact us, will not affect the underlying strength or weakness of our business operations as measured by the dollar value of our product shipments and cash flows.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The Company's market risk exposures as set forth in Part II, Item 7A, "Quantitative and Qualitative Disclosures About market Risk," in the Company's Annual Report on Form 10-K for the fiscal year ended June 30, 2000 have not changed significantly.

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. The information provided therein has not changed materially. Although the outcome of these claims cannot be predicted with certainty, management does not believe that any of these legal matters will have a material adverse effect on the Company's financial condition. Were an unfavorable ruling to occur, there exists the possibility of a material impact on the net income of the period in which the ruling occurs.

ITEM 6. EXHIBITS AND REPORTS ON FORM 8-K

(a) Exhibits

27.1 Financial Data Schedule.

(b) Form 8-K

None

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)

November 14, 2000 /s/ JOHN H. KISPERT

- ----------------- ---------------------------------------

(Date) John H. Kispert
Executive Vice President
and Chief Financial Officer

EXHIBIT INDEX

Exhibits

27.1 Financial Data Schedule.

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THIS SCHEDULE CONTAINS SUMMARY FINANCIAL INFORMATION EXTRACTED FROM THE CONSOLIDATED STATEMENT OF OPERATIONS, THE CONSOLIDATED BALANCE SHEET AND THE ACCOMPANYING NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS, AND IS QUALIFIED IN ITS ENTIRETY BY REFERENCE TO SUCH FINANCIAL STATEMENTS.
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