

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

FORM 10-Q

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

For the quarterly period ended December 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, 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 No

As of January 31, 2002, there were 187,059,556 shares outstanding of
the Registrant's Common Stock, \$0.001 par value.

INDEX

<TABLE>
<CAPTION>

	Page

<S>	<C>
PART I	FINANCIAL INFORMATION
Item 1	Financial Statements (unaudited)
	Condensed Consolidated Balance Sheets as of June 30, 2001 and December 31, 2001..... 3
	Condensed Consolidated Statements of Operations for the Three- and Six- Month Periods Ended December 31, 2000 and 2001 4
	Condensed Consolidated Statements of Cash Flows for the Six-Month Periods Ended December 31, 2000 and 2001 5
	Notes to Condensed Consolidated Financial Statements..... 6
Item 2	Management's Discussion and Analysis of Financial Condition and Results of Operations..... 13
Item 3	Quantitative and Qualitative Disclosures About Market Risk..... 20
PART II	OTHER INFORMATION
Item 1	Legal Proceedings..... 21
Item 4	Submission of Matters to a Vote of Security Holders..... 21
Item 6	Exhibits and Reports on Form 8-K..... 22
Signatures 23

</TABLE>

PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

KLA-TENCOR CORPORATION
CONDENSED CONSOLIDATED BALANCE SHEETS
(Unaudited)

<TABLE> <CAPTION>	December 31, 2001	June 30, 2001
(in thousands)	-----	-----
<S>	<C>	<C>
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 303,016	\$ 529,674
Marketable securities	248,075	167,421
Accounts receivable, net	365,419	402,013
Inventories	335,470	394,406
Other current assets	398,966	403,432
	-----	-----
Total current assets	1,650,946	1,896,946
Land, property and equipment, net	310,326	290,254
Marketable securities	514,570	446,765
Other assets	129,718	110,586
	-----	-----
Total assets	\$2,605,560	\$2,744,551
	=====	=====
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 42,546	\$ 60,740
Deferred profit	291,764	422,054
Other current liabilities	451,029	501,291
	-----	-----
Total current liabilities	785,339	984,085
	-----	-----
Stockholders' equity:		
Common stock and capital in excess of par value	640,444	714,333
Retained earnings	1,179,042	1,043,529
Accumulated other comprehensive income	735	2,604
	-----	-----
Total stockholders' equity	1,820,221	1,760,466
	-----	-----
Total liabilities and stockholders' equity	\$2,605,560	\$2,744,551
	=====	=====

</TABLE>

See accompanying notes to condensed consolidated financial statements.

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

<TABLE> <CAPTION>	Three months ended December 31,		Six months ended December 31,	
(In thousands, except per share data)	2001	2000	2001	2000
<S>	<C>	<C>	<C>	<C>
Revenues	\$ 404,148	\$ 500,833	\$ 906,980	\$ 883,548
Costs and operating expenses:				
Costs of goods sold	201,811	215,900	446,179	398,909
Engineering, research and development	74,061	96,229	146,984	176,877
Selling, general and administrative	71,996	94,508	153,244	185,405
	-----	-----	-----	-----
Total costs and operating expenses	347,868	406,637	746,407	761,191
	-----	-----	-----	-----
Income from operations	56,280	94,196	160,573	122,357
Interest income and other, net	10,001	13,931	22,553	25,933
	-----	-----	-----	-----

Income before income taxes	66,281	108,127	183,126	148,290
Provision for income taxes	17,233	30,276	47,613	41,522
	-----	-----	-----	-----
Income before cumulative effect of change in accounting principle	49,048	77,851	135,513	106,768
Cumulative effect of change in accounting principle, net of tax benefit	--	--	--	(306,375)
	-----	-----	-----	-----
Net income (loss)	\$ 49,048	\$ 77,851	\$ 135,513	\$ (199,607)
	=====	=====	=====	=====
Earnings per basic share:				
Income before cumulative effect of change in accounting principle	\$ 0.26	\$ 0.42	\$ 0.72	\$ 0.57
Cumulative effect of change in accounting principle	--	--	--	(1.65)
	-----	-----	-----	-----
Net income (loss)	\$ 0.26	\$ 0.42	\$ 0.72	\$ (1.08)
	=====	=====	=====	=====
Earnings per diluted share:				
Income before cumulative effect of change in accounting principle	\$ 0.25	\$ 0.41	\$ 0.70	\$ 0.55
Cumulative effect of change in accounting principle	--	--	--	(1.58)
	-----	-----	-----	-----
Net income (loss)	\$ 0.25	\$ 0.41	\$ 0.70	\$ (1.03)
	=====	=====	=====	=====
Weighted average number of shares:				
Basic	186,200	185,247	186,928	186,101
	=====	=====	=====	=====
Diluted	194,637	190,893	194,855	193,449
	=====	=====	=====	=====

</TABLE>

See accompanying notes to condensed consolidated financial statements.

4

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

<TABLE>
<CAPTION>

(in thousands)	Six Months Ended December 31,	
	2001	2000
	-----	-----
<S>	<C>	<C>
Cash flows from operating activities:		
Net income (loss)	\$ 135,513	\$ (199,607)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:		
Cumulative effect of accounting change, net of tax benefit	--	306,375
Depreciation and amortization	33,345	29,224
Deferred income taxes	(2,645)	(39,761)
Net gain (loss) on sale of marketable securities	1,077	(3,880)
Changes in assets and liabilities:		
Accounts receivable, net	36,590	(133,616)
Inventories	58,975	(107,787)
Other assets	(14,318)	(13,135)
Accounts payable	(18,195)	6,709
Deferred profit	(130,290)	147,647
Other current liabilities	(44,708)	53,058
	-----	-----
Net cash provided by operating activities	55,344	45,227
	-----	-----
Cash flows from investing activities:		
Purchase of land, property and equipment, net	(50,776)	(75,903)
Cash paid for acquisition	(4,035)	--
Purchase of marketable securities	(783,564)	(415,143)
Proceeds from sale of marketable securities	552,104	350,596
Proceeds from maturity of marketable securities	84,478	30,630
	-----	-----
Net cash used in investing activities	(201,793)	(109,820)
	-----	-----
Cash flows from financing activities:		
Issuance of common stock, net	34,161	30,694
Stock repurchases	(110,812)	(149,561)
Net borrowings (payments) under short term debt obligations	(499)	1,070
	-----	-----
Net cash used in financing activities	(77,150)	(117,797)
	-----	-----

Effect of exchange rate changes on cash and cash equivalents	(3,059)	6,177
	-----	-----
Net decrease in cash and cash equivalents	(226,658)	(176,213)
Cash and cash equivalents at beginning of period	529,674	478,212
	-----	-----
Cash and cash equivalents at end of period	\$ 303,016	\$ 301,999
	=====	=====
Supplemental cash flow disclosures:		
Income taxes paid (refunded), net of refunds	\$ (16,136)	\$ 87,594
	=====	=====
Interest paid	\$ 428	\$ 410
	=====	=====

</TABLE>

See accompanying notes to condensed consolidated financial statements.

5

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

NOTE 1 -- BASIS OF PRESENTATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

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, 2001, filed with the SEC on September 21, 2001.

The results for the three- and six- month periods ended December 31, 2000 have been adjusted to reflect the adoption of Staff Accounting Bulletin No. 101, "Revenue Recognition in Financial Statements" (SAB 101).

The results of operations for the three- and six- month periods ended December 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, 2002.

FAIR VALUE OF FINANCIAL INSTRUMENTS KLA-Tencor has evaluated the estimated fair value of financial instruments using available market information and valuation methodologies. The use of different market assumptions and/or estimation methodologies could have a significant effect on the estimated fair value amounts. The fair value of KLA-Tencor's cash, cash equivalents, accounts receivable, accounts payable and other current liabilities approximates the carrying amount due to the relatively short maturity of these items.

MARKETABLE SECURITIES Short-term marketable securities include debt and equity securities acquired with maturities exceeding three months but less than one year from the date of acquisition. Non-current marketable securities include debt securities acquired with maturities exceeding one year from the date of acquisition. While KLA-Tencor's intent is to hold debt securities to maturity, KLA-Tencor has classified all debt securities and all investments in equity securities that have readily determinable fair values as available-for-sale, as the sale of such securities may be required prior to maturity to implement management strategies. Such securities are reported at fair value determined based on quoted market prices at the reporting date for those instruments, with unrealized gains or losses excluded from earnings and included in "Accumulated other comprehensive income," net of applicable taxes, until realized. The cost of securities sold is based on the specific identification method. Realized gains or losses and declines in value, if any, judged to be other than temporary are reported in "Interest income and other, net" in the Condensed Consolidated Statements of Operations.

INTANGIBLE ASSETS Purchased technology, patents, trademarks, favorable leases and goodwill are presented at cost, net of accumulated amortization. Effective July 1, 2001, KLA-Tencor replaced ratable

6

amortization of goodwill with periodic testing of goodwill for impairment in accordance with the provision of Statement of Financial Accounting Standard No. 142, "Goodwill and Intangible Assets." Intangible assets other than goodwill are amortized over their estimated useful lives of three to five years using the straight-line method.

IMPAIRMENT OF LONG-LIVED ASSETS KLA-Tencor evaluates the carrying value of its long-lived assets whenever events or changes in circumstances indicate that the carrying value of the asset may be impaired in accordance with the provisions of Statement of Financial Accounting Standard No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed of." An impairment loss is recognized when estimated future cash flows expected to result from the use of the asset including disposition, is less than the carrying value of the asset.

CONCENTRATION OF CREDIT RISK Financial instruments, which potentially subject KLA-Tencor to credit risk, consist principally of investments, accounts receivable and derivative financial instruments used in hedging activities.

Investments are maintained with high-quality institutions, and the composition and maturities of investments are regularly monitored by management. Generally, these securities are traded in a highly liquid market, may be redeemed upon demand and bear minimal risk. KLA-Tencor, by policy, limits the amount of credit exposure to any one financial institution or commercial issuer. KLA-Tencor has not experienced any material losses on its investments.

A majority of KLA-Tencor's trade receivables are derived from sales to large multinational semiconductor manufacturers throughout the world. Concentration of credit risk with respect to trade receivables is considered to be limited due to its customer base and the diversity of its geographic sales areas. KLA-Tencor performs ongoing credit evaluations of its customers' financial condition. KLA-Tencor maintains a reserve for potential credit losses based upon expected collectibility of all accounts receivable.

KLA-Tencor is exposed to credit loss in the event of nonperformance by counterparties on the foreign exchange contracts used in hedging activities. KLA-Tencor does not anticipate nonperformance by these counterparties.

WARRANTY KLA-Tencor generally warrants its systems for a period of 12 months for material and labor to repair and service the system. A provision for the estimated cost of warranty is recorded when initial revenue is recognized on the system.

REVENUE RECOGNITION In December 1999, the SEC issued Staff Accounting Bulletin ("SAB") No. 101, "Revenue Recognition in Financial Statements." The SEC Staff addressed several issues in SAB 101, including the timing of revenue recognition for sales that involve contractual customer acceptance provisions and installation of the product if these events occur after shipment and transfer of title. KLA-Tencor implemented the provisions of SAB 101 in the fourth fiscal quarter of 2001, retroactive to July 1, 2000. Prior to adoption of SAB 101, KLA-Tencor's general policy was to recognize revenue on shipment. Accordingly, KLA-Tencor did not have any formal centralized processes for tracking, obtaining and filing customer acceptance reports; therefore, pro forma amounts for the periods beginning before July 1, 2000 have not been presented as the effect of the change in accounting principle could not be reasonably determined.

KLA-Tencor derives revenues from four sources -- system sales, spare part sales, service contracts and software license fees. SAB 101 has no impact on KLA-Tencor's revenue recognition policy for spare part sales, service contracts and software license fees.

7

Prior to the implementation of SAB 101, system revenue was generally recognized upon shipment. Effective July 1, 2000, KLA-Tencor changed its method of accounting for system sales to generally recognize revenue upon a positive affirmation by the customer that the system has been installed and is operating according to predetermined specifications. In certain limited cases, KLA-Tencor may deviate from the need for a written acceptance by the customer, as follows:

- When system sales to independent distributors have no installation, contain no acceptance agreement, and 100% payment is done upon shipment, revenue is recognized on shipment;

- When the system requires no integration and installation is inconsequential, revenue is recognized on shipment. In these cases we are required to perform the installation but we consider installation not essential to the functionality of the equipment, and there are no additional tests required to be performed on-site. In addition, third party distributors and customers regularly complete the installation of these tools;

- When the customer fab has already accepted the same tool, with the same specifications on the same process, for the same application, and it can be objectively demonstrated that it meets all of the required acceptance criteria upon shipment, revenue due on shipment of the product is recognized at the time of shipment. Revenue recognized upon shipment is exclusive of the amount allocable to the installation element. Revenue attributable to the installation element is the higher of the amount due upon acceptance or the fair value of installation;

- When the system is performing in production to published and contractually agreed specifications and customer signature is withheld due to warranty or other limited issues, revenue recognition is permitted only if all of the specified criteria have been met and the customer is withholding final acceptance for reasons unrelated to product performance;

Total revenues recognized under conditions when KLA-Tencor may deviate from the need for a written acceptance by the customer were less than 1% of total revenue for the three- and six-month periods ended December 31, 2001 and December 31, 2000, respectively.

Spares revenue is recognized when the product has been shipped, risk of loss has passed to the customer and collection of the resulting receivable is probable.

Service and maintenance revenue is recognized ratably over the term of the maintenance contract. If maintenance is included in an arrangement, which includes a license agreement, amounts related to maintenance are allocated based on vendor specific objective evidence. In situations where maintenance is to be provided over a period beyond twelve months from the balance sheet date, the portion of revenue relating to those services is classified as noncurrent deferred revenue. Consulting and training revenue is recognized when the related services are performed.

Revenue from license fees is typically recognized upon shipment of the software if collection of the resulting receivable is probable, the fee is fixed or determinable, and vendor-specific objective evidence exists to allocate a portion of the total fee to any undelivered elements of the arrangement. Such undelivered elements in these arrangements typically consist of services and/or upgrades. If vendor-specific objective evidence does not exist for the undelivered elements of the arrangement, all revenue is deferred until such evidence does exist, or until all elements are delivered, whichever is earlier. In instances where an arrangement to deliver software requires significant modification or customization, license fees are recognized under the percentage of completion method of contract accounting.

8

Allowances are established for potential product returns and credit losses. To date, revenues from license fees have been less than ten percent of total revenues.

As a result of implementing SAB 101, KLA-Tencor changed its method of accounting for revenue recognition. This change resulted in cumulative deferred revenue of \$660.9 million as of July 1, 2000, which was recorded as a non-cash charge of \$306.4 million (after reduction for product and warranty costs of \$207 million and income taxes of \$147.5 million). The deferred profit balance as of December 31, 2001 was \$292 million and equals the amount of system revenue that was invoiced and due on shipment but deferred under SAB 101 less applicable product and warranty costs of \$152 million.

STRATEGIC DEVELOPMENT AGREEMENTS Net engineering, research and development expenses were partially offset by \$6 million and \$5 million in external funding received under certain strategic development programs funded by KLA-Tencor's customers and government agencies in the six-month periods ended December 31, 2001 and December 31, 2000.

EARNINGS PER SHARE Basic earnings per share ("EPS") is calculated by dividing net income available to common stockholders by the weighted average number of common shares outstanding during the period. Diluted earnings per share is calculated by using the weighted average number of common shares outstanding during the period and gives effect to all dilutive potential common shares outstanding during the period. The reconciling difference between the computation of basic and diluted earnings per share for all periods presented is the inclusion of the dilutive effect of stock options issued to employees under employee stock option plans.

During the three- and six-month periods ended December 31, 2000, options to purchase 10,875,333 and 4,580,198 shares, respectively, at prices ranging from \$33.75 to \$68.00, were not included in the computation of diluted earnings per share because the exercise price was greater than the average market price of the common stock for the period. During the three- and six-month periods ended December 31, 2001, options to purchase 2,060,890 and 876,102, respectively, at prices ranging from \$45.84 to \$68.00, were not included in the computation of diluted earnings per share because the exercise price was greater than the average market price of the common stock for the period.

RECLASSIFICATIONS Certain amounts in fiscal years prior to 2001 have been reclassified to conform to the current financial statement presentation.

RECENT ACCOUNTING PRONOUNCEMENTS In August 2001, the Financial Accounting Standards Board (FASB) issued Statement No. 143 ("SFAS 143"), "Accounting for Asset Retirement Obligations," which is effective for fiscal years beginning after June 15, 2002. SFAS 143 applies to all entities and

addresses financial accounting and reporting for obligations associated with the retirement of tangible long-lived assets and the associated asset retirement costs. It applies to legal obligations associated with the retirement of long-lived assets that result from the acquisition, construction, development, and/or the normal operation of a long-lived asset, except for certain obligations of lessees. KLA-Tencor does not expect the adoption of SFAS 143 to have a significant impact on its financial position and results of operations.

In October 2001, the FASB issued Statement No. 144 ("SFAS 144"), "Accounting for the Impairment or Disposal of Long-Lived Assets." SFAS 144 addresses financial accounting and reporting for the impairment of long-lived assets and for long-lived assets to be disposed. SFAS 144 will be effective for fiscal years beginning after December 15, 2001. KLA-Tencor is currently evaluating the impact of SFAS 144, but does not expect that its adoption on July 1, 2002 will have a material effect on its financial statements.

NOTE 2 -- INVENTORIES

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

<TABLE>
<CAPTION>

(in thousands)	December 31, 2001	June 30, 2001
<S>	<C>	<C>
Inventories		
Customer service parts	\$108,890	\$ 99,099
Raw materials	89,014	140,765
Work-in-process	61,251	61,453
Demonstration equipment	45,310	60,228
Finished goods	31,005	32,861
	-----	-----
	\$335,470	\$394,406
	=====	=====

</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 six-month periods ended December 31, 2001 and 2000, the Company repurchased 3,130,000 and 4,450,000 shares of its common stock at a cost of approximately \$111 million and \$150 million, respectively.

NOTE 4 -- COMPREHENSIVE INCOME (LOSS)

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

<TABLE>
<CAPTION>

(in thousands)	Three months ended December 31,		Six months ended December 31,	
	2001	2000	2001	2000
<S>	<C>	<C>	<C>	<C>
Net Income (loss)	\$ 49,048	\$ 77,851	\$ 135,513	
\$(199,607)	-----	-----	-----	-----
Other comprehensive loss				
Currency translation adjustments	(6,586)	(3,986)	(2,659)	
(5,847)				
Gain on cash flow hedging instruments, net	3,977	--	1,235	-
Unrealized losses on investments, net of tax benefits				
of \$80 and \$281 for the three- and six- month periods				
ended December 31, 2001, and \$982 and \$3,913 for the				
three- and six- month periods ended December 31, 2000	(126)	(1,556)	(445)	
(5,058)	-----	-----	-----	-----
Other comprehensive loss	(2,735)	(5,542)	(1,869)	
(10,905)	-----	-----	-----	-----

</TABLE>

Total Comprehensive Income (Loss)	\$ 46,313	\$ 72,309	\$ 133,644
\$(210,512)			

=====
</TABLE>

NOTE 5 -- NONRECURRING ACQUISITION, RESTRUCTURING AND OTHER COSTS

ACQUISITIONS

On November 20, 2001, KLA-Tencor acquired QC Optics, Inc., a publicly traded company (AMEX: OPC), for \$4 million in cash and other consideration, to acquire certain intellectual property related to our business, including intellectual property rights. The acquisition was accounted for as a

10

purchase. QC Optics, Inc. was a manufacturer of laser-based inspection systems for the semiconductor, flat panel and computer hard disk manufacturing industries. The total purchase price was allocated to intellectual property and amortized over three years. The estimated fair value of the assets acquired and liabilities assumed were included in KLA-Tencor's Condensed Consolidated Balance Sheet as of December 31, 2001 and the results of operations from November 20, 2001 through December 31, 2001 were included in the Company's Condensed Consolidated Statement of Operations. Pro forma results of operations have not been presented as QC Optics Inc.'s operations were not significant to the Company's Condensed Consolidated Statements of Operations, and therefore, the pro forma results would not significantly differ from the Company's historical results.

RESTRUCTURING AND OTHER CHARGES

In the fourth quarter of fiscal 2001 KLA-Tencor entered into a restructuring plan to address the downturn in the semiconductor industry. The plan included consolidation of facilities, writedown of assets associated with affected programs and a reduction in the Company's global workforce, all resulting in a restructuring charge of \$8 million. As of December 31, 2001, the remaining balance of the restructuring reserve was \$1 million.

NOTE 6 -- COMMITMENTS AND CONTINGENCIES

The Company is currently 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 7 -- GOODWILL AND OTHER INTANGIBLE ASSETS

Effective July 1, 2001, KLA-Tencor elected early adoption of Statement of Financial Accounting Standards No. 141, "Business Combinations," and No. 142, "Goodwill and Other Intangible Assets." Under the new accounting standards, KLA-Tencor ceased amortization of goodwill recorded for business combinations consummated prior to July 1, 2001, and reclassified intangible assets acquired prior to July 1, 2001 that do not meet the criteria for recognition under SFAS 141 to goodwill. The net carrying value of goodwill recorded through acquisitions is \$15.1 million as of December 31, 2001. In the year of adoption, SFAS 142 requires the first step of the goodwill impairment test to be completed within the first six months and the final step to be completed with twelve months of adoption. KLA-Tencor completed the first step of the impairment test during the quarter ended December 31 2001 and has determined that goodwill is not impaired. Therefore, step two of the goodwill impairment test is not applicable.

The following table reflects consolidated results adjusted as though the adoption of SFAS 141 and SFAS 142 occurred as of the beginning of the three- and six- month period ended December 31, 2000 (in thousands, except per share amounts):

<TABLE>
<CAPTION>

31,	Three months ended December 31,			Six months ended December		
	2001	2000		2001	2000	
	As Reported	As Reported	As Adjusted	As Reported	As Reported	As
Adjusted						

<S>	<C>	<C>	<C>	<C>	<C>	
<C>						
Operating income	\$ 56,280	\$ 94,196	\$ 94,798	\$ 160,573	\$ 122,357	\$
123,508						
Net income	49,048	77,851	78,224	135,513	(199,607)	
(198,893)						
Basic earning per share	0.26	0.42	0.42	0.72	(1.08)	
(1.08)						
Diluted earning per share	0.25	0.41	0.41	0.70	(1.03)	
(1.03)						

11

The following table reflects the components of other intangible assets as of December 31, 2001 (in thousands):

<TABLE>		
<CAPTION>		
	Gross Carrying Amount	Accumulated Amortization
	-----	-----
<S>	<C>	<C>
Existing technology	\$6,062	\$1,850
Patents	4,035	168
Trademark	625	105
Favorable leases and other	270	95

Other intangible assets are amortized on a straight-line basis over their estimated useful lives of three to five years. For the three months ended December 31, 2001 and 2000, amortization expense for other intangible assets was \$0.5 million and \$0.3 million. For the six months ended December 31, 2001 and 2000, amortization expense for other intangible assets was \$0.9 million and \$0.5 million. Estimated amortization expense for each of the five succeeding fiscal years is as follows:

<TABLE>	
<CAPTION>	
Fiscal year ended June 30:	Amount
-----	-----
<S>	<C>
2002	\$2,064
2003	2,400
2004	2,400
2005	2,141
2006	632

12

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, as well as market acceptance of new products; anticipated revenue from various domestic and international regions; international sales and operations; maintenance of competitive advantage; success of our product offerings; creation of programs for research and development; attraction and retention of employees; management of risks involved in acquisitions of third parties, or the technology or assets thereof; benefits received from any acquisitions and development of acquired technologies; the outcome of any litigation to which we are a party; results of our investment in leading edge technologies and strategic acquisitions and alliances; our future income tax rate; sufficiency of our existing cash balance, investments and cash generated from operations to meet our operating 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 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.

Currently we continue to face a significant downturn in the semiconductor industry which started early in calendar year 2001. For several quarters, there has been a worldwide softening in demand for semiconductors resulting in excess capacity and reduced demand for semiconductor manufacturing equipment. Consequently we experienced declines in both revenue and bookings in the second fiscal quarter compared to the prior quarter.

Despite the market fluctuations, our financial position has remained strong and we continue to have no long-term debt. In response to the downturn in the semiconductor industry, we have implemented initiatives to reduce costs and control spending. However, we continued our new product development by investing in leading edge technologies and by strategic acquisitions and alliances. These investments, acquisitions and alliances should position our extensive product line to address the critical initiatives that are key to our customers.

Effective July 1, 2000 KLA-Tencor changed its revenue recognition policy, based on guidance provided in SEC Staff Accounting Bulletin No. 101 ("SAB 101"). KLA-Tencor changed its method of accounting for system sales to generally recognize revenue upon a positive affirmation by the customer

13

that the system has been installed and is operating according to pre-determined specifications. The deferred profit balance at of December 31, 2001 was \$292 million which included deferred revenue of \$444 million and deferred product and warranty costs of \$152 million. The deferred profit balance decreased from \$422 million at June 30, 2001 primarily due to lower shipments than acceptances.

Revenues decreased \$97 million, or 19% to \$404 million, in the three-month period ended December 31, 2001 from \$501 million in the same period of the prior fiscal year. The revenue decline was primarily the result of reduced capital spending by our customers as a result of the continuing semiconductor industry downturn. Revenues increased \$23 million, or 3% to \$907 million, in the six-month period ended December 31, 2001 from \$884 million for the same period of the prior fiscal year. This increase primarily resulted from improved customer acceptance although shipments declined approximately 37% versus the same period of the prior fiscal year. International revenues increased to 75% of revenues, in the three-month period ended December 31, 2001 from 69% in the same period of the prior fiscal year, due to higher revenues in Japan and Europe partially offset by lower revenues in Korea. International revenues increased to 74% of revenues, in the six-month period ended December 31, 2001 from 71% in the same period of the prior fiscal year, due to higher revenues in Japan, Europe and Korea partially offset by lower revenues in other parts of the Asia Pacific region. In the three- and six-month periods ended December 31, 2001 and 2000, no single customer accounted for more than 10 percent of our revenues.

Gross margins as a percentage of revenues were 50% and 51% for the three- and six-month periods ended December 31, 2001, compared to 57% and 55% for the same periods in the prior fiscal year. Gross margins decreased primarily due to unfavorable overhead absorption in our system gross margin as production volume decreased, and reserves for potential excess inventory due to the 200mm to 300mm transition and other new product introductions. Higher warranty and installation costs also contributed due to higher complexity and lower utilization of recently introduced products. We continue to focus on the productivity and efficiency of our manufacturing and service operations as we ramp our new products in the face of lower overall volumes due to the industry downturn.

Engineering, research and development ("R&D") expenses were \$74 million and \$147 million for the three- and six-month periods ended December 31, 2001, compared to \$96 million and \$177 million for the same periods in the prior fiscal year. As a percentage of revenues, R&D expenses were 18% and 16% for the three- and six-month periods ended December 31, 2001, compared to 19% and 20% for the same periods in the prior fiscal year. The decrease in R&D expenses was primarily attributable to temporary shutdowns, management paycuts, reductions in temporary labor and discretionary spending as well as other cost saving measures implemented over the last several quarters, and a lower level of non-recurring engineering expenses due to products reaching the Beta stage (initial customer installations). Our investment in R&D represents a continued commitment to product development in new and emerging market segments and enhancements to existing products for 0.18 micron and lower, copper development and 300mm wafers.

Selling, general and administrative expenses were \$72 million and \$153 million for the three- and six-month periods ended December 31, 2001, compared

to \$95 million and \$185 million for the same periods in the prior fiscal year. As a percentage of revenues, selling, general and administrative expenses were 18% and 17% for the three- and six-month periods ended December 31, 2001, compared to 19% and 21% for the same periods in the prior fiscal year. The decrease was primarily due to temporary shutdowns, management paycuts, reductions in temporary labor and discretionary spending as well as other cost saving measures implemented over the last several quarters in response to the industry slowdown.

In the fourth quarter of fiscal 2001 we entered into a restructuring plan to address the downturn in the semiconductor industry. The plan included consolidation of facilities, writedown of assets associated with affected programs and a reduction in our global workforce, resulting in a restructuring

14

charge of \$8 million. As of December 30, 2001, the remaining balance of the restructuring reserve was \$1 million.

Interest income and other, net, was \$10 million and \$23 million for the three- and six-month periods ended December 31, 2001, compared to \$14 million and \$26 million in the same periods in the prior fiscal year. The decrease was due primarily to decreased interest income resulting from declining interest rates.

During the three- and six-month periods ended December 31, 2001, we realized an effective 26% tax rate. This is lower than the effective 28% tax rate realized in the same periods of the prior fiscal year due primarily to the greater relative benefits expected to be realized from tax exempt interest and from benefits related to sales and operations overseas.

LIQUIDITY AND CAPITAL RESOURCES

During the six-month period ended December 31, 2001, cash, cash equivalents, short-term investments and marketable securities balances decreased to \$1.07 billion from \$1.14 billion at June 30, 2001. Net cash provided by operating activities for the six-month period ended December 31, 2001 was \$55 million, compared to \$45 million for the same period of the prior fiscal year. The increase primarily resulted from success in lowering accounts receivable and inventory offset by lower deferred profit. Accounts receivable declined primarily due to lower shipment. Reduction in inventory was driven primarily in production inventory, despite increased service inventory levels to support newer products now being installed in our customers' facilities. Deferred profit decreased primarily due to lower shipments than acceptances. Net cash used in investing activities for the six-month period ended December 31, 2001 was \$202 million, compared to \$110 million for the same period of the prior fiscal year primarily from increased net purchases of marketable securities. Net cash used in financing activities for the six-month period ended December 31, 2001 was \$77 million, compared to \$118 million for the same period of the prior fiscal year, due primarily to lower stock repurchases. We received \$34 million from sales of common stock issued through our employee stock purchase program and through stock option exercises during the six-month period ended December 31, 2001, and we paid \$111 million for the repurchase of our common stock under our stock repurchase program during the same period.

Working capital was \$866 million as of December 31, 2001, compared to \$913 million at June 30, 2001. We believe that existing liquid capital resources and funds generated from operations combined with our 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 December 31, 2001. 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 fluctuating demand for semiconductors impacts the need for our customers to order our products;

15

- the change 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.

Currently we are in a significant industry down cycle. We are not able to predict when the semiconductor industry will recover. During a down cycle, 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 annual 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.

16

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

17

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.

Manufacturing Disruption

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. In addition, this year, California suffered from a severe energy shortage, causing rolling blackouts through the state. 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.

18

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.

Terrorism

The threat of terrorism targeted at the regions of the world in which we do business, including the United States increase the uncertainty in our markets, could result in significant losses and may delay any recovery in the market. It is too early to determine the direct or indirect impacts of the

events of September 11, 2001 or other terrorist acts on our business.

EFFECTS OF RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS

In August 2001, the Financial Accounting Standards Board (FASB) issued Statement No. 143 ("SFAS 143"), "Accounting for Asset Retirement Obligations," which is effective for fiscal years beginning after June 15, 2002. SFAS 143 applies to all entities and addresses financial accounting and reporting for obligations associated with the retirement of tangible long-lived assets and the associated asset retirement costs. It applies to legal obligations associated with the retirement of long-lived assets that result from the acquisition, construction, development, and/or the normal operation of a long-lived asset, except for certain obligations of lessees. We do not expect the adoption of SFAS 143 will have a significant impact on our financial position and results of operations.

In October 2001, the FASB issued Statement No. 144 ("SFAS 144"), "Accounting for the Impairment or Disposal of Long-Lived Assets." SFAS 144 addresses financial accounting and reporting for the impairment of long-lived assets and for long-lived assets to be disposed. SFAS 144 will be effective for fiscal years beginning after December 15, 2001. We are currently evaluating the impact of SFAS 144, but do not expect that our adoption on July 1, 2002 will have a material effect on our financial statements.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to financial market risks, including changes in interest rates, foreign currency exchange rates and marketable equity security prices. 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, 2001 and at December 31, 2001. Actual results may differ materially.

As of June 30, 2001 and December 31, 2001, we had an investment portfolio of fixed income securities of \$575 million and \$738 million, respectively, excluding those classified as cash and 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, 2001 and December 31, 2001, the fair value of each portfolio would decline by \$5 million.

As of June 30, 2001 and December 31, 2001, we had net forward contracts to sell U.S. dollar equivalent \$159 million and \$171 million, respectively, in foreign currency in order to hedge our currency exposures. If we had entered into these contracts on June 30, 2001 and December 31, 2001, the U.S. dollar equivalent would be \$151 million and \$160 million, respectively. The fair market value we would have received if we had sold the contracts on June 30, 2001 and December 31, 2001, would have been \$8 million and \$11 million, respectively. A 10% adverse move in currency exchange rates affecting the contracts from their June 30, 2001 and December 31, 2001 levels would decrease the fair value of the contracts by \$19 million. However, if this occurred, the fair value of the underlying exposures hedged by the contracts would increase by a similar amount. Accordingly, we believe that the hedging of our foreign currency exposure should have no material impact to 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 our Annual Report on Form 10-K for the fiscal year ended June 30, 2001. Since the fiscal year ended June 30, 2001, certain material developments have occurred with respect to the legal proceedings described in our Annual Report and we have 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 KLA-Tencor in the U.S. District Court in Delaware. ADE claimed damages and sought an injunction under U.S. Patent No. 6,118,525. We filed a counterclaim in the same court alleging that ADE has infringed four of our patents. We claimed damages and are seeking a permanent injunction against ADE. In addition, we are seeking a declaration from the District Court that ADE's patent is invalid and not infringed by KLA-Tencor. On October 22, 2001, we filed a separate action for declaratory judgment against ADE in the Northern District of California. ADE has moved to consolidate the California case with the Delaware case. While we cannot predict the outcome, we believe that we have valid defenses and further believe that our counterclaims

have merit.

Schlumberger, Inc. and Rigg Systems, Inc.

On August 30, 1999, we were named as a defendant in a lawsuit filed in the U.S. District Court in the Northern District of California 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 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 the plaintiff prevails. On January 26, 2000, we filed a complaint against Philip Rigg, RIGG Systems and Schlumberger 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 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 KLA-Tencor. Were an unfavorable ruling to occur in one or more of the pending claims, there exists the possibility of a material impact on our operating results for the period in which the ruling occurred.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

The Annual Meeting of Stockholders of KLA-Tencor Corporation was held on November 9, 2001 at the Company's offices in Milpitas, California. Of the 188,175,083 shares of Common Stock outstanding as of September 14, 2001 (the record date), 163,286,263 shares (87%) were present or represented by proxy at the meeting.

21

1. The table below presents the results of the election to the Company's board of directors.

<TABLE>
<CAPTION>

	Votes for	Votes Withheld
	-----	-----
<S>	<C>	<C>
Edward W. Barnholt	161,669,814	1,616,449
Dean O. Morton	161,846,182	1,440,081
Kenneth L. Schroeder	131,156,000	32,130,263

</TABLE>

The terms of Kenneth Levy, H. Raymond Bingham, Robert T. Bond, Richard J. Elkus, Jr., Jon D. Tompkins and Lida Urbanek, as directors of the Company, continued after the meeting.

2. The stockholders ratified the appointment of PricewaterhouseCoopers LLP as the Company's independent accountants for the fiscal year ended June 30, 2002. This proposal received 153,547,754 votes for and 4,654,805 votes against.

ITEM 6. EXHIBITS AND REPORTS ON FORM 8-K

(a) Exhibits
None

(b) Form 8-K
None

22

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)

February 13, 2002

(Date)

/s/ JOHN H. KISPERT

John H. Kispert
Executive Vice President
and Chief Financial Officer

23

