

SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

FORM 8-K/A

AMENDMENT  
FOR 8-K  
CURRENT REPORT

PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934

KLA-TENCOR CORPORATION  
(EXACT NAME OF REGISTRANT AS SPECIFIED IN CHARTER)

<TABLE>			
<S>	<C>	<C>	
DELAWARE	000-09992	04-2564110	
(STATE OR OTHER JURISDICTION OF INCORPORATION)	(COMMISSION FILE NUMBER)	(IRS EMPLOYER IDENTIFICATION NUMBER)	
</TABLE>			

160 RIO ROBLES  
SAN JOSE, CALIFORNIA 95134  
(ADDRESS OF PRINCIPAL EXECUTIVE OFFICES)

(408) 468-4200  
(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

The undersigned registrant hereby amends the following items, financial statements, exhibits or other portions of its Current Report on Form 8-K dated May 2, 1997 as set forth in the pages attached hereto.

ITEM 7. FINANCIAL STATEMENTS AND EXHIBITS.

The following financial statements and exhibits are filed as part of this Report, where indicated.

- (a) Financial statements of business acquired, prepared pursuant to Rule 3-05 of Regulation S-X:

Financial statements for the period ended December 31, 1996 are incorporated by reference to the Annual Report on Form 10-K filed by Tencor Instruments on March 10, 1997 (File No. 000-20007).

The following Unaudited Condensed Consolidated Interim Financial Statements of Tencor Instruments are included herein:

Condensed Consolidated Interim Balance Sheets at March 31, 1997 and December 31, 1996.

Condensed Consolidated Interim Statements of Operations for the three months ended March 31, 1997 and 1996.

Consolidated Interim Statements of Cash Flows for the three months ended March 31, 1997 and 1996.

Notes to Condensed Consolidated Interim Financial Statements.

- (b) Pro forma financial information required pursuant to Article 11 of Regulation S-X:

Unaudited Pro Forma Combined Condensed Balance Sheets at March 31, 1997 and June 30, 1996.

Unaudited Pro Forma Combined Condensed Statement of Operations for the

years ended June 30, 1996, 1995 and 1994, and the nine month periods ended March 31, 1997 and 1996.

Notes to Unaudited Pro Forma Combined Condensed Financial Statements.

(c) Exhibits in accordance with Item 601 of Regulation S-K:

<TABLE>  
<CAPTION>

EXHIBIT NO.	DESCRIPTION
<S>	<C>
2.1	Agreement and Plan of Reorganization, dated as of January 14, 1997, among KLA Instruments Corporation, Tiger Acquisition Corp. and Tencor Instruments. (Incorporated herein by reference to Registrant's Current Report on Form 8-K filed on January 22, 1997, File No. 000-09992.)
2.2	Form of Agreement of Merger between Tencor Instruments and Tiger Acquisition Corp. (Incorporated herein by reference to Registrant's Current Report on Form 8-K filed on May 2, 1997, File No. 000-09992.)

</TABLE>

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INDEX TO EXHIBITS

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<CAPTION>

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</TABLE>

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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 hereunto duly authorized.

KLA-TENCOR CORPORATION

By: /s/ JON D. TOMPKINS

-----  
Jon D. Tompkins  
Chief Executive Officer

Dated: May 20, 1997

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TENCOR INSTRUMENTS

CONDENSED CONSOLIDATED INTERIM STATEMENTS OF OPERATIONS  
(IN THOUSANDS, EXCEPT PER SHARE DATA)  
(UNAUDITED)

<TABLE>  
<CAPTION>

	THREE MONTHS ENDED MARCH 31,	
	1997	1996
<S>	<C>	<C>
Revenues.....	\$94,585	\$106,283
Cost of goods sold.....	41,783	40,847
Gross profit.....	52,802	65,436
Operating expenses:		
Research and development.....	12,390	10,995
Marketing and selling.....	15,115	16,120
General and administrative.....	7,068	6,952
Total operating expenses.....	34,573	34,067

	-----	-----
Income from operations.....	18,229	31,369
Other income, net.....	2,539	1,293
	-----	-----
Income before income taxes.....	20,768	32,662
Provision for income taxes.....	7,477	12,411
	-----	-----
Net income.....	\$13,291	\$ 20,251
	=====	=====
Net income per share.....	\$ 0.41	\$ 0.64
Weighted average common shares and equivalents.....	32,813	31,721

</TABLE>

See accompanying notes to consolidated interim financial statements.

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TENCOR INSTRUMENTS

CONDENSED CONSOLIDATED INTERIM BALANCE SHEETS  
(IN THOUSANDS)  
(UNAUDITED)

ASSETS

<TABLE>  
<CAPTION>

	MARCH 31, 1997	DECEMBER 31, 1996
	-----	-----
	<C>	<C>
<S>		
Current assets:		
Cash and cash equivalents.....	\$168,796	\$ 141,407
Short-term investments.....	62,488	82,370
Accounts receivable, net.....	97,976	87,623
Inventories.....	47,427	51,668
Deferred income taxes.....	19,056	19,056
Prepaid expenses and other assets.....	7,149	10,165
	-----	-----
Total current assets.....	402,892	392,289
Property and equipment, net.....	44,071	41,601
Other assets.....	41,052	50,529
	-----	-----
Total assets.....	\$488,015	\$ 484,419
	=====	=====

LIABILITIES AND SHAREHOLDERS' EQUITY

Current liabilities:

Notes payable.....	\$ 27,039	\$ 28,162
Accounts payable.....	10,294	11,936
Accrued liabilities.....	48,967	54,525
Income taxes payable.....	25,463	23,428
	-----	-----
Total current liabilities.....	111,763	118,051
	-----	-----

Long-term obligations.....	1,106	1,335
	-----	-----

Shareholders' equity:

Common stock.....	155,558	152,756
Retained earnings.....	213,315	200,024
Accumulated unrealized gain on investments, net.....	9,043	14,602
Cumulative translation adjustment.....	(2,770)	(2,349)
	-----	-----
Total shareholders' equity.....	375,146	365,033
	-----	-----

Total liabilities and shareholders' equity.....	\$488,015	\$ 484,419
	=====	=====

</TABLE>

See accompanying notes to consolidated interim financial statements.

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TENCOR INSTRUMENTS

CONDENSED CONSOLIDATED INTERIM STATEMENTS OF CASH FLOWS  
INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS  
(IN THOUSANDS)  
(UNAUDITED)

<TABLE>  
<CAPTION>

	THREE MONTHS ENDED	
	MARCH 31,	
	1997	1996
<S>	<C>	<C>
Cash flows from operating activities:		
Net income.....	\$ 13,291	\$ 20,251
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization.....	1,208	2,290
Retirement of assets.....	2,771	--
Changes in assets and liabilities:		
Accounts receivable.....	(9,052)	3,048
Inventories.....	3,096	(11,648)
Prepaid expenses and other assets.....	(1,438)	(1,338)
Accounts payable.....	(1,586)	(1,266)
Accrued liabilities.....	(5,367)	3,292
Income taxes payable.....	6,349	6,872
Net cash provided by operating activities.....	9,272	21,501
Cash flows from investing activities:		
Purchases of property and equipment.....	(5,988)	(7,105)
Purchases of short-term investments.....	(266,952)	(13,891)
Proceeds from sale of short-term investments.....	286,978	18,632
Net cash provided by (used in) investing activities.....	14,038	(2,364)
Cash flows from financing activities:		
Issuance of common stock, net.....	1,973	1,010
Repurchase of common stock.....	--	(5,456)
Proceeds from debt obligations.....	7,354	7,379
Payments under debt obligations.....	(6,705)	(5,548)
Net cash provided by (used in) financing activities.....	2,622	(2,615)
Effect of exchange rate changes on cash.....	1,457	1,220
Net increase in cash and cash equivalents.....	27,389	17,742
Cash and cash equivalents at beginning of period.....	141,407	86,944
Cash and cash equivalents at end of period.....	\$168,796	\$104,686
Supplemental cash flow disclosures:		
Income taxes paid.....	\$ 597	\$ 5,370
Interest paid.....	\$ 226	\$ 438

</TABLE>

See accompanying notes to consolidated interim financial statements.

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## TENCOR INSTRUMENTS

### NOTES TO CONDENSED CONSOLIDATED INTERIM FINANCIAL STATEMENTS

#### NOTE 1. BASIS OF PRESENTATION

The unaudited condensed consolidated interim financial statements included herein have been prepared by Tencor Instruments ("Tencor"), without audit, pursuant to the rules and regulations of the Securities and Exchange Commission. Certain information and footnote disclosures, normally included in financial statements prepared in accordance with generally accepted accounting principles, have been condensed or omitted as permitted by such rules and regulations. Tencor believes the disclosures included herein are adequate; however, these condensed consolidated interim financial statements should be read in conjunction with the audited financial statements and the notes thereto for the year ended December 31, 1996, included in Tencor's Annual Report on Form 10-K.

In the opinion of management, these unaudited condensed consolidated financial statements of Tencor and its subsidiaries contain all of the adjustments necessary to present fairly the financial position of Tencor at March 31, 1997, the results of their operations, changes in shareholders' equity and cash flows for the periods presented. The results of operations for the periods presented may not be indicative of those which may be expected for the full year.

#### NOTE 2. INVENTORIES

Inventories consist of the following (in thousands):

<TABLE>  
<CAPTION>

	MARCH 31, 1997	DECEMBER 31, 1996
	-----	-----
<S>	<C>	<C>
Raw materials.....	\$24,537	\$ 26,010
Work-in-process.....	12,261	15,100
Finished goods.....	10,629	10,558
	-----	-----
	\$47,427	\$ 51,668
	=====	=====

</TABLE>

#### NOTE 3. EARNINGS PER SHARE

In February 1997, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 128, "Earnings per Share." The Statement redefines earnings per share under generally accepted accounting principles, and would have been effective for the Company's fiscal year ending December 31, 1997. Under the new standard, primary earnings per share is replaced by basic earnings per share and fully diluted earnings per share is replaced by diluted earnings per share. If the Company had adopted this Statement for the three month periods ended March 31, 1997 and 1996, the Company's earnings per share would have been as follows:

<TABLE>  
<CAPTION>

	THREE MONTHS ENDED	
	MARCH 31, 1997	MARCH 31, 1996
	-----	-----
<S>	<C>	<C>
Earnings per share:		
Basic.....	\$ 0.43	\$0.66
Diluted.....	\$ 0.41	\$0.64

</TABLE>

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#### TENCOR INSTRUMENTS

##### NOTES TO CONDENSED CONSOLIDATED INTERIM FINANCIAL STATEMENTS (CONTINUED)

#### NOTE 4. FACTORING ARRANGEMENTS

The Company's Japanese subsidiary has entered into an agreement with a bank to sell, with recourse, certain of its trade receivables. The amount of proceeds received was the yen equivalent of approximately \$7.6 million for the three month period ended March 31, 1997. As of March 31, 1997, the yen equivalent of approximately \$15.8 million of the factored trade receivables remains uncollected by the bank.

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#### UNAUDITED PRO FORMA COMBINED CONDENSED FINANCIAL INFORMATION

The following unaudited pro forma combined condensed financial statements of KLA-Tencor Corporation ("KLA-Tencor") have been prepared to give effect to the merger between Tencor and a wholly-owned subsidiary of KLA Instruments Corporation ("KLA") (the "Merger"), using the pooling of interests method of accounting.

The unaudited pro forma combined condensed balance sheets as of June 30, 1996 and March 31, 1997 gives effect to the Merger as if it had occurred on June 30, 1996, and combines the unaudited condensed consolidated balance sheets of KLA and the balance sheets of Tencor as of June 30, 1996 and March 31, 1997.

The unaudited pro forma combined condensed statements of operations combine the historical consolidated statements of operations of KLA and Tencor for each of the years in the three-year period ended June 30, 1996 and the nine months ended March 31, 1996 and 1997, in each case as if the Merger had occurred at the beginning of the earliest period presented.

KLA and Tencor estimate that they will incur direct transaction costs of approximately \$45 million associated with the Merger, which will be charged to operations upon consummation of the Merger. This is a preliminary estimate only and is therefore subject to change. There can be no assurance that KLA-Tencor will not incur additional charges to reflect costs associated with the Merger or that management will be successful in its efforts to integrate the operations of the two companies.

Such unaudited pro forma combined condensed financial information is presented for illustrative purposes only and is not necessarily indicative of the financial position or results of operations that would have actually been

reported had the Merger occurred at the beginning of the periods presented, nor is it necessarily indicative of future financial position or results of operations. These unaudited pro forma combined condensed financial statements are based upon the respective historical consolidated financial statements of KLA and Tencor and should be read in conjunction with the respective historical consolidated financial statements and notes thereto of KLA and Tencor included in the Joint Proxy Statement/Prospectus and do not incorporate any benefits from cost savings or synergies of operations of the combined company.

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UNAUDITED PRO FORMA COMBINED CONDENSED BALANCE SHEET  
MARCH 31, 1997  
(IN THOUSANDS)

ASSETS

<TABLE>  
<CAPTION>

	KLA	TENCOR	PROFORMA ADJUSTMENTS	COMBINED
<S>	<C>	<C>	<C>	<C>
<b>Current assets:</b>				
Cash and cash equivalents.....	\$149,573	\$168,796	\$ --	\$ 318,369
Short-term investments.....	11,003	62,488	--	73,491
Accounts receivable, net.....	122,027	97,976	--	220,003
Inventories.....	118,289	47,427	--	165,716
Deferred income taxes.....	27,909	19,056	--	46,965
Other current assets.....	14,756	7,149	--	21,905
	-----	-----	-----	-----
Total current assets.....	443,557	402,892	--	846,449
Land, property and equipment, net.....	73,428	44,071	--	117,499
Marketable securities.....	257,795	27,798	--	285,593
Other assets.....	13,512	13,254	--	26,766
	-----	-----	-----	-----
Total assets.....	\$788,292	\$488,015	\$ --	\$1,276,307
	=====	=====	=====	=====

LIABILITIES AND SHAREHOLDERS' EQUITY

<b>Current liabilities:</b>				
Notes payable.....	\$ 2,115	\$ 27,039	\$ --	\$ 29,154
Accounts payable.....	19,732	10,294	--	30,026
Income taxes payable.....	34,762	25,463	--	60,225
Other current liabilities.....	113,725	48,967	--	162,692
	-----	-----	-----	-----
Total current liabilities.....	170,334	111,763	--	282,097
	-----	-----	-----	-----
Deferred income taxes.....	6,316	--	--	6,316
Long-term obligations.....	--	1,106	--	1,106
	-----	-----	-----	-----
<b>Shareholders' equity:</b>				
Common stock and additional paid-in capital.....	285,377	155,558	--	440,935
Retained earnings.....	328,789	213,315	--	542,104
Treasury stock.....	(581)	--	--	(581)
Net unrealized gain (loss) on investments...	(1,181)	9,043	--	7,862
Cumulative translation adjustment.....	(762)	(2,770)	--	(3,532)
	-----	-----	-----	-----
Total shareholders' equity.....	611,642	375,146	--	986,788
	-----	-----	-----	-----
Total liabilities and shareholders' equity.....	\$788,292	\$488,015	\$ --	\$1,276,307
	=====	=====	=====	=====

</TABLE>

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UNAUDITED PRO FORMA COMBINED CONDENSED BALANCE SHEET  
June 30, 1996  
(In thousands)

ASSETS

<TABLE>  
<CAPTION>

	KLA	TENCOR	PRO FORMA ADJUSTMENTS	PRO FORMA COMBINED
<S>	<C>	<C>	<C>	<C>
<b>Current assets:</b>				
Cash and cash equivalents.....	\$109,404	\$ 92,300	\$ --	\$ 201,704
Short-term investments.....	14,279	94,012	--	108,291
Accounts receivable.....	203,470	106,607	--	310,077
Inventories.....	132,377	65,426	--	197,803

Deferred income taxes.....	27,246	8,869	--	36,115
Other current assets.....	6,783	4,055	--	10,838
	-----	-----	-----	-----
Total current assets.....	493,559	371,269	--	864,828
Land, property and equipment, net.....	71,825	33,012	--	104,837
Marketable securities.....	137,728	24,056	--	161,784
Other assets.....	9,660	11,438	--	21,098
	-----	-----	-----	-----
	\$712,772	\$439,775	\$ --	\$1,152,547
	=====	=====	=====	=====

LIABILITIES AND STOCKHOLDERS' EQUITY

Current liabilities:				
Notes payable.....	\$ 3,111	\$ 32,714	\$ --	\$ 35,825
Accounts payable.....	27,330	17,488	--	44,818
Income taxes payable.....	34,595	5,321	--	39,916
Other current liabilities.....	104,167	48,214	--	152,381
	-----	-----	-----	-----
Total current liabilities.....	169,203	103,737	--	272,940
	-----	-----	-----	-----
Deferred income taxes.....	6,320	--	--	6,320
Long-term obligations.....	--	2,288	--	2,288
	-----	-----	-----	-----
Stockholders' equity:				
Common stock and additional paid-in capital.....	227,943	149,068	--	427,011
Retained earnings.....	259,777	177,533	--	437,310
Treasury stock.....	(581)	--	--	(581)
Net unrealized gain (loss) on investments.....	(131)	9,334	--	9,203
Cumulative translation adjustments.....	241	(2,185)	--	(1,944)
	-----	-----	-----	-----
Total stockholders' equity.....	537,249	333,750	--	870,999
	-----	-----	-----	-----
	\$712,772	\$439,775	\$ --	\$1,152,547
	=====	=====	=====	=====

</TABLE>

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UNAUDITED PRO FORMA COMBINED CONDENSED STATEMENTS OF OPERATIONS  
(IN THOUSANDS, EXCEPT PER SHARE DATA)

<TABLE>  
<CAPTION>

	NINE MONTHS ENDED MARCH 31,	
	1997	1996
	-----	-----
<S>	<C>	<C>
Net Sales.....	\$755,641	\$792,528
	-----	-----
Costs and expenses:		
Cost of sales.....	347,343	336,123
Engineering, research and development.....	96,240	84,278
Selling, general and administrative.....	160,643	152,233
Restructuring and other charges.....	8,500	--
	-----	-----
Total costs and expenses.....	612,726	572,634
	-----	-----
Income from operations.....	142,915	219,894
Interest income and other, net.....	18,693	14,428
	-----	-----
Income before income taxes.....	161,608	234,322
Provision for income taxes.....	56,814	88,140
	-----	-----
Net income.....	\$104,794	\$146,182
	=====	=====
Net income per share.....	\$ 1.23	\$ 1.73
	=====	=====
Shares used in computing net income per share.....	85,149	84,264
	=====	=====

</TABLE>

See Notes to Unaudited Pro Forma Combined Condensed Financial Statements

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UNAUDITED PRO FORMA COMBINED CONDENSED STATEMENTS OF OPERATIONS  
(IN THOUSANDS, EXCEPT PER SHARE DATA)

<TABLE>  
<CAPTION>

YEAR ENDED JUNE 30,

	1994	1995	1996
<S>	<C>	<C>	<C>
Net sales.....	\$376,454	\$695,950	\$1,094,492
Costs and expenses:			
Cost of sales.....	190,903	299,571	469,681
Engineering, research and development.....	42,784	73,945	115,920
Selling, general and administrative.....	84,683	140,585	212,625
Write-off of acquired in-process technology.....	--	25,240	--
Restructuring and other charges.....	2,300	--	--
Total costs and expenses.....	320,670	539,341	798,226
Income from operations.....	55,784	156,609	296,266
Interest income and other, net.....	1,195	10,417	17,834
Income before income taxes.....	56,979	167,026	314,100
Provision for income taxes.....	16,536	62,215	117,466
Net income.....	\$ 40,443	\$104,811	\$ 196,634
Net income per share.....	\$ 0.59	\$ 1.34	\$ 2.34
Shares used in computing net income per share.....	69,076	78,427	84,195

</TABLE>

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NOTES TO UNAUDITED PRO FORMA COMBINED CONDENSED FINANCIAL STATEMENTS

1. PERIODS PRESENTED

KLA's fiscal year ends on June 30. Tencor's fiscal year ends on December 31. The unaudited pro forma combined condensed statements of operations combine the results of operations of KLA for each of the three years in the period ended June 30, 1994, 1995 and 1996 and the nine months ended March 31, 1997 and 1996 with the results of Tencor for the same periods. The unaudited pro forma combined condensed balance sheet is based upon the historical balance sheet data of KLA and Tencor as of March 31, 1997.

2. PRO FORMA NET INCOME PER SHARE

The unaudited pro forma combined net income per share is based upon the weighted average number of common and common equivalent shares outstanding of KLA and Tencor for each period using an exchange ratio of one share of KLA Common Stock for each share of Tencor Common Stock.

3. CONFORMING ADJUSTMENTS AND INTERCOMPANY TRANSACTIONS

There are no material intercompany transactions included in the unaudited pro forma combined condensed financial statements. There were no material adjustments required to conform the accounting policies of KLA and Tencor.

4. TRANSACTION COSTS

Total costs associated with the Merger are expected to be approximately \$45 million. This amount is a preliminary estimate only and is, therefore, subject to change. These expenses will be charged against net income in the fourth quarter of fiscal 1997. Accordingly, the effects of these expenses have not been reflected in these unaudited pro forma combined condensed interim financial statements.

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