UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of The Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): January 26, 2012

KLA-TENCOR CORPORATION

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation) 000-09992 (Commission File Number)

04-2564110 (I.R.S. Employer Identification No.)

One Technology Drive, Milpitas, California (Address of principal executive offices)

95035 (Zip Code)

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

(Former name or former address, if changed since last report)

Check	the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:
	Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
	Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
	Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
	Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 2.02 Results of Operations and Financial Condition.

On January 26, 2012, KLA-Tencor Corporation issued a press release announcing selected operating results for its second quarter of fiscal year 2012, which ended on December 31, 2011. A copy of the press release is furnished as Exhibit 99.1 to this Current Report on Form 8-K.

The information in Item 2.02 of this Current Report on Form 8-K and the exhibit attached hereto shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities under that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, regardless of any general incorporation language in such filing.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

The following exhibit is furnished herewith:

Exhibit No. Description

99.1 Text of press release issued by KLA-Tencor Corporation dated January 26, 2012

SIGNATURES

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

KLA-TENCOR CORPORATION

By: /s/ BRIAN M. MARTIN

Date: January 26, 2012

Name: Brian M. Martin
Title: Executive Vice President and General Counsel

EXHIBIT INDEX

Exhibit No. Description

99.1 Text of press release issued by KLA-Tencor Corporation dated January 26, 2012

FOR IMMEDIATE RELEASE

Investor Relations:

Ed Lockwood Sr. Director, Investor Relations (408) 875-9529 ed.lockwood@kla-tencor.com **Media Relations:**

Meggan Powers Sr. Director, Corporate Communications (408) 875-8733 meggan.powers@kla-tencor.com

KLA-TENCOR REPORTS FISCAL 2012 SECOND QUARTER RESULTS

MILPITAS, Calif., January 26, 2012 —KLA-Tencor Corporation (NASDAQ: KLAC) today announced operating results for its second quarter of fiscal year 2012, which ended on December 31, 2011, and reported GAAP net income of \$111 million and GAAP earnings per diluted share of \$0.66 on revenues of \$642 million.

"A resurgence in demand from foundry customers drove strong order growth in the second quarter and has given KLA-Tencor excellent momentum as we begin calendar 2012," said Rick Wallace, KLA-Tencor's president and CEO. "The increasing costs, complexity and competitive pressures our customers are facing at the leading edge are helping to drive higher adoption of process control and position KLA-Tencor to continue to deliver superior financial performance."

	GAAP Results			
		Q2 FY 2012	Q1 FY 2012	Q2 FY 2011
Revenues		\$ 642 million	\$ 796 million	\$ 766 million
Net Income		\$ 111 million	\$ 192 million	\$ 185 million
Earnings per Diluted Share		\$ 0.66	\$ 1.13	\$ 1.09
	Non-GAAP Results			
		Q2 FY 2012	Q1 FY 2012	Q2 FY 2011
Net Income		\$ 122 million	\$ 198 million	\$ 187 million
Earnings per Diluted Share		\$ 0.72	\$ 1.17	\$ 1.10

A reconciliation between GAAP operating results and non-GAAP operating results is provided following the financial statements that are part of this release. Non-GAAP results include the impact of stock-based compensation, but exclude the impact of acquisitions, restatement and restructuring related items, and certain discrete tax items.

KLA-Tencor will discuss the results for its fiscal year 2012 second quarter, along with its outlook, on a conference call today beginning at 2:00 p.m. Pacific Standard Time. A webcast of the call will be available at: www.kla-tencor.com

Forward-Looking Statements:

Statements in this press release other than historical facts, such as statements regarding the expectation that KLA-Tencor's strong operating performance will continue into calendar year 2012, the business and technological trends faced by KLA-Tencor's customers, the anticipation that KLA-Tencor's customers will continue to invest in process control and KLA-Tencor's ability to benefit from those continuing investments in the form of future successful financial performance, are forward-looking statements, and are subject to the Safe Harbor

provisions created by the Private Securities Litigation Reform Act of 1995. These forward-looking statements are based on current information and expectations, and involve a number of risks and uncertainties. Actual results may differ materially from those projected in such statements due to various factors, including but not limited to: the demand for semiconductors; the financial condition of the global capital markets and the general macroeconomic environment; new and enhanced product and technology offerings by competitors; cancellation of orders by customers; the ability of KLA-Tencor's research and development teams to successfully innovate and develop technologies and products that are responsive to customer demands; market acceptance of the company's existing and newly issued products; and changing customer demands. For other factors that may cause actual results to differ materially from those projected and anticipated in forward-looking statements in this release, please refer to KLA-Tencor's Annual Report on Form 10-K for the year ended June 30, 2011, subsequently filed Quarterly Reports on Form 10-Q and other filings with the Securities and Exchange Commission (including, but not limited to, the risk factors described therein). KLA-Tencor assumes no obligation to, and does not currently intend to, update these forward-looking statements.

About KLA-Tencor:

KLA-Tencor Corporation (NASDAQ: KLAC), a leading provider of process control and yield management solutions, partners with customers around the world to develop state-of-the-art inspection and metrology technologies. These technologies serve the semiconductor, data storage, LED, photovoltaic, and other related nanoelectronics industries. With a portfolio of industry-standard products and a team of world-class engineers and scientists, the company has created superior solutions for its customers for over 35 years. Headquartered in Milpitas, California, KLA-Tencor has dedicated customer operations and service centers around the world. Additional information may be found at www.kla-tencor.com. (KLAC-F)

Use of Non-GAAP Financial Information:

The non-GAAP and supplemental information provided in this press release is a supplement to, and not a substitute for, KLA-Tencor's financial results presented in accordance with United States GAAP.

To supplement KLA-Tencor's condensed consolidated financial statements presented in accordance with GAAP, the company provides certain non-GAAP financial information, which is adjusted from results based on GAAP to exclude certain costs and expenses, as well as other supplemental information. The non-GAAP and supplemental information is provided to enhance the user's overall understanding of KLA-Tencor's operating performance and its prospects in the future. Specifically, KLA-Tencor believes that the non-GAAP information provides useful measures to both management and investors regarding financial and business trends relating to KLA-Tencor's financial performance by excluding certain costs and expenses that the company believes are not indicative of its core operating results. The non-GAAP information is among the budgeting and planning tools that management uses for future forecasting. However, because there are no standardized or generally accepted definitions for most non-GAAP financial metrics, definitions of non-GAAP financial metrics (for example, determining which costs and expenses to exclude when calculating such a metric) are inherently subject to significant discretion. As a result, non-GAAP financial metrics may be defined very differently from company, or even from period to period within the same company, which can potentially limit the usefulness of such information to an investor. The presentation of non-GAAP and supplemental information is not meant to be considered in isolation or as a substitute for results prepared and presented in accordance with United States GAAP.

KLA-Tencor Corporation Condensed Consolidated Unaudited Balance Sheets

(In thousands)	December 31, 2011	June 30, 2011
ASSETS		
Cash, cash equivalents and marketable securities	\$ 2,176,645	\$2,038,535
Accounts receivable, net	544,098	583,270
Inventories, net	639,641	575,730
Other current assets	388,675	478,475
Land, property and equipment, net	267,629	257,358
Goodwill	327,813	328,156
Purchased intangibles, net	70,218	85,902
Other non-current assets	286,269	328,095
Total assets	\$ 4,700,988	\$4,675,521
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 129,064	\$ 142,945
Deferred system profit	190,718	192,338
Unearned revenue	48,165	44,264
Other current liabilities	462,033	499,314
Total current liabilities	829,980	878,861
Non-current liabilities:		
Long-term debt	746,561	746,290
Income tax payable	38,736	78,337
Unearned revenue	36,881	34,905
Other non-current liabilities	80,358	76,235
Total liabilities	1,732,516	1,814,628
Stockholders' equity:		
Common stock and capital in excess of par value	1,050,788	1,010,659
Retained earnings	1,928,396	1,852,633
Accumulated other comprehensive income (loss)	(10,712)	(2,399)
Total stockholders' equity	2,968,472	2,860,893
Total liabilities and stockholders' equity	\$ 4,700,988	\$4,675,521

KLA-Tencor Corporation Condensed Consolidated Unaudited Statements of Operations

		Three months ended			Six months ended			
(In thousands, except per share data)	Decer	nber 31, 2011	Decei	mber 31, 2010	Dece	ember 31, 2011	Dec	cember 31, 2010
Revenues:	<u> </u>							
Product	\$	500,659	\$	627,857	\$	1,150,915	\$	1,178,466
Service		141,823		138,470		288,043		270,203
Total revenues		642,482		766,327		1,438,958		1,448,669
Costs and operating expenses:								
Costs of revenues		272,855		311,398		613,204		575,367
Engineering, research and development		116,363		94,897		224,125		189,617
Selling, general and administrative		93,801		91,166		187,877		179,203
Total costs and operating expenses		483,019		497,461		1,025,206		944,187
Income from operations		159,463		268,866		413,752		504,482
Interest income and other, net		(12,556)		(17,675)		(19,583)		(29,979)
Income before income taxes		146,907		251,191		394,169		474,503
Provision for income taxes		36,110		65,699		91,377		134,815
Net income	\$	110,797	\$	185,492	\$	302,792	\$	339,688
Net income per share:								
Basic	\$	0.67	\$	1.11	\$	1.82	\$	2.03
Diluted	\$	0.66	\$	1.09	\$	1.78	\$	2.00
Cash dividends declared per share	\$	0.35	\$	0.25	\$	0.70	\$	0.50
Weighted average number of shares:								
Basic		166,343		166,886		166,513		167,052
Diluted		169,103		169,513		169,650		169,685

KLA-Tencor Corporation Condensed Consolidated Unaudited Statements of Cash Flows

		Three months ended December 31.	
(In thousands)	2011	2010	
Cash flows from operating activities:		· <u></u>	
Net income	\$ 110,797	\$ 185,492	
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	23,267	21,653	
Asset impairment charges	1,378	6,800	
Non-cash stock-based compensation expense	19,646	19,431	
Net loss (gain) on sale of marketable securities and other investments	106	(430)	
Gain on sale of real estate assets	_	(1,372)	
Changes in assets and liabilities:			
Increase in accounts receivable, net	(83,819)	(28,890)	
Increase in inventories, net	(33,142)	(39,710)	
Decrease (increase) in other assets	31,658	(10,151)	
Increase (decrease) in accounts payable	14,580	(15,416)	
Increase in deferred system profit	54,596	39,831	
Increase in other liabilities	48,165	16,687	
Net cash provided by operating activities	187,232	193,925	
Cash flows from investing activities:			
Capital expenditures, net	(14,918)	(11,552)	
Proceeds from sale of assets	2,228	18,185	
Purchase of available-for-sale securities	(287,987)	(189,361)	
Proceeds from sale and maturity of available-for-sale securities	287,236	123,677	
Purchase of trading securities	(16,852)	(12,397)	
Proceeds from sale of trading securities	18,353	13,905	
Net cash used in investing activities	(11,940)	(57,543)	
Cash flows from financing activities:	` ' '		
Issuance of common stock	39,396	28,768	
Tax withholding payments related to vested and released restricted stock units	(11,544)	(10,732)	
Common stock repurchases	(63,580)	(57,017)	
Payment of dividends to stockholders	(58,101)	(41,809)	
Net cash used in financing activities	(93,829)	(80,790)	
Effect of exchange rate changes on cash and cash equivalents	(2,424)	2,128	
Net increase in cash and cash equivalents	79,039	57,720	
Cash and cash equivalents at beginning of period	745,947	538,384	
Cash and cash equivalents at end of period	\$ 824,986	\$ 596,104	
Supplemental cash flow disclosures:			
Income taxes paid (refund received), net	\$ (29,746)	\$ 71,309	
Interest paid	\$ 26,904	\$ 26.095	
increst para	\$ 20,504	Ψ 20,093	

KLA-Tencor Corporation Condensed Consolidated Unaudited Supplemental Information (In thousands, except per share data)

Reconciliation of GAAP Net Income to Non-GAAP Net Income

			Three months ended				
		Decen	December 31, 2011 September 30, 2011		December 31, 2010		
GAAP net income		\$	110,797	\$	191,995	\$	185,492
Adjustments to reconcile GAAP net income to non-GAAP net income							
Acquisition related charges	a		7,406		7,628		8,178
Restructuring, severance and other related charges	b		1,476		2,556		(974)
Restatement related charges	c		_		135		1,147
Income tax effect of non-GAAP adjustments	d		(2,886)		(4,063)		(2,921)
Discrete tax items	e		5,079				(3,706)
Non-GAAP net income		\$	121,872	\$	198,251	\$	187,216
GAAP net income per diluted share		\$	0.66	\$	1.13	\$	1.09
Non-GAAP net income per diluted share		\$	0.72	\$	1.17	\$	1.10
Shares used in diluted shares calculation			169,103		169,835		169,513

Pre-tax impact of items included in Consolidated Statements of Operations

		Restructuring,		Total pre-tax
	Acquisition	severance and	Restatement	GAAP to
	related	other related	related	non-GAAP
	charges	charges	charges	adjustment
Three months ended December 31, 2011				
Costs of revenues	\$ 5,018	\$ 243	\$ —	\$ 5,261
Engineering, research and development	898	241	_	1,139
Selling, general and administrative	1,490	992		2,482
Total in three months ended December 31, 2011	<u>\$ 7,406</u>	\$ 1,476	<u>\$ —</u>	\$ 8,882
Three months ended September 30, 2011				
Costs of revenues	\$ 5,240	\$ 947	\$ —	\$ 6,187
Engineering, research and development	898	1,475	_	2,373
Selling, general and administrative	1,490	134	135	1,759
Total in three months ended September 30, 2011	\$ 7,628	\$ 2,556	<u>\$ 135</u>	\$ 10,319
Three months ended December 31, 2010				
Costs of revenues	\$ 5,790	\$ —	\$ —	\$ 5,790
Engineering, research and development	898	_	_	898
Selling, general and administrative	1,490	(974)	1,147	1,663
Total in three months ended December 31, 2010	\$ 8,178	\$ (974)	\$ 1,147	\$ 8,351

To supplement our condensed consolidated financial statements presented in accordance with GAAP, we provide certain non-GAAP financial information, which is adjusted from results based on GAAP to exclude certain costs and expenses, as well as other supplemental information. The non-GAAP and supplemental information is provided to enhance the user's overall understanding of our operating performance and our prospects in the future. Specifically, we believe that the non-GAAP information provides useful measures to both management and investors regarding financial and business trends relating to our financial performance by excluding certain costs and expenses that we believe are not indicative of our core operating results. The non-GAAP information is among the budgeting and planning tools that management uses for future forecasting. However, because there are no standardized or generally accepted definitions for most non-GAAP financial metrics, definitions of non-GAAP financial metrics (for example, determining which costs and expenses to exclude when calculating such a metric) are inherently subject to significant discretion. As a result, non-GAAP financial metrics may be defined very differently from company to company, or even from period to period within the same company, which can potentially limit the usefulness of such information to an investor. The presentation of non-GAAP and supplemental information is not meant to be considered in isolation or as a substitute for results prepared and presented in accordance with United States GAAP.

- a Acquisition related charges include amortization of intangible assets associated with acquisitions. Management believes that the expense associated with the amortization of acquisition related intangible assets is appropriate to be excluded because a significant portion of the purchase price for acquisitions may be allocated to intangible assets that have short lives, and exclusion of the amortization expense allows comparisons of operating results that are consistent over time for both KLA-Tencor's newly acquired and long-held businesses. Management believes excluding these items helps investors compare our operating performance with our results in prior periods as well as with the performance of other companies.
- b Restructuring, severance and other related charges include gains and costs associated with the company's facilities divestment and consolidation program and reductions in force. Management believes that it is appropriate to exclude these items as they are not indicative of ongoing operating results and therefore limit comparability. Management believes excluding these items helps investors compare our operating performance with our results in prior periods as well as with the performance of other companies.
- Restatement related charges include legal and other expenses related to the investigation regarding the company's historical stock option granting process and related stockholder litigation and other matters. KLA-Tencor has paid or reimbursed legal expenses incurred by a number of its current and former directors, officers and employees in connection with the investigation of the company's historical stock option practices and the related litigation and government inquiries. Management believes that it is appropriate to exclude these items as they are not indicative of ongoing operating results and therefore limit comparability. Management believes excluding these items helps investors compare our operating performance with our results in prior periods as well as with the performance of other companies.
- d Income tax effect of non-GAAP adjustments includes the income tax effects of the excluded items noted above. Management believes that it is appropriate to exclude the tax effects of the items noted above in order to present a more meaningful measure of non-GAAP net income.
- e Discrete tax items include the tax impact of shortfalls in excess of cumulative windfall tax benefits recorded as provision for income taxes during the period. Windfall tax benefits arise when a company's tax deduction for employee stock activity exceeds book compensation for the same activity and are generally recorded as increases to capital in excess of par value. Shortfalls arise when the tax deduction is less than book compensation and are recorded as decreases to capital in excess of par value to the extent that cumulative windfalls exceed cumulative shortfalls. Shortfalls in excess of cumulative windfalls are recorded as provision for income taxes. When there are shortfalls recorded as provision for income taxes during an earlier quarter, windfalls arising in subsequent quarters within the same fiscal year are recorded as a reduction to income taxes to the extent of the shortfalls recorded. Management believes that it is appropriate to exclude these items as they are not indicative of ongoing operating results and therefore limit comparability. Management believes excluding these items helps investors compare our operating performance with our results in prior periods as well as with the performance of other companies.