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 23, 2014

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

	(Exact name of registrant as specified in its charter)									
	Delaware	000-09992	04-2564110							
	(State or other jurisdiction of incorporation)	(Commission File Number) (I.R.S. Employer Identification N								
	One Technology Drive,	Milpitas, California	95035							
	(Address of principal	executive offices)	(Zip Code)							
	Registrant's telephone number, including area code: (408) 875-3000									
	(1	Former name or former address, if changed since last report)								
Check the	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 und	ler 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 I	Rule 14d-2(b) under the Exchange Act (17 CFR 240	0.14d-2(b))							
	Pre-commencement communications pursuant to I	Rule 13e-4(c) under the Exchange Act (17 CFR 240	1.13e-4(c))							

Item 2.02 Results of Operations and Financial Condition.

On January 23, 2014, KLA-Tencor Corporation issued a press release announcing selected operating results for its second quarter of fiscal year 2014. 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 23, 2014

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

Date: January 23, 2014 By: /s/ BRIAN M. MARTIN

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 23, 2014

FOR IMMEDIATE RELEASE

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KLA-TENCOR REPORTS FISCAL 2014 SECOND QUARTER RESULTS

MILPITAS, Calif., January 23, 2014 - KLA-Tencor Corporation (NASDAQ: KLAC) today announced operating results for its second quarter of fiscal year 2014, which ended on December 31, 2013, and reported GAAP net income of \$139 million and GAAP earnings per diluted share of \$0.83 on revenues of \$705 million.

"KLA-Tencor's strong shipments, revenue and earnings during the second quarter demonstrate our market leadership and robust business model," commented Rick Wallace, President and CEO of KLA-Tencor. "As we begin 2014, the prevailing outlook is for growth in the semiconductor equipment industry, with leading device manufacturers increasing their capital expenditures to adopt complex new device architectures and process technologies at the leading edge. The heightened yield challenges associated with these transitions are driving demand for process control and positioning KLA-Tencor for continued future success as a critical business partner to our customers."

GAAP Results									
Q2 FY 2014 Q1 FY 2014 Q2 FY 2013									
Revenues	\$705 million	\$658 million	\$673 million						
Net Income	\$139 million	\$111 million	\$107 million						
Earnings per Diluted Share	\$0.83	\$0.66	\$0.63						

Non-GAAP Results									
Q2 FY 2014 Q1 FY 2014 Q2 FY 2013									
Net Income	\$143 million	\$115 million	\$106 million						
Earnings per Diluted Share	\$0.85	\$0.68	\$0.63						

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 2014 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 KLA-Tencor's ability to maintain its market leadership position; the future outlook for growth in the semiconductor equipment industry; trends in the semiconductor industry relating to capital expenditures, technological advances, process control demand and next-generation technology investment by KLA-Tencor's customers; the anticipated yield and other challenges associated with these trends; and KLA-Tencor's anticipated future 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; KLA-Tencor's ability to successfully manage its costs; 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, 2013, 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, LED 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 more than 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 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.

KLA-Tencor Corporation

Condensed Consolidated Unaudited Balance Sheets

(In thousands)	Decemb	er 31, 2013	J	une 30, 2013
ASSETS				
Cash, cash equivalents and marketable securities	\$	2,950,661	\$	2,918,881
Accounts receivable, net		573,077		524,610
Inventories		663,040		634,448
Other current assets		320,756		273,564
Land, property and equipment, net		325,856		305,281
Goodwill		326,578		326,635
Purchased intangibles, net		26,098		34,515
Other non-current assets		254,668		269,423
Total assets	\$	5,440,734	\$	5,287,357
LIABILITIES AND STOCKHOLDERS' EQUITY				
Current liabilities:				
Accounts payable	\$	141,545	\$	115,680
Deferred system profit		243,603		157,965
Unearned revenue		47,629		60,838
Other current liabilities		495,222		527,049
Total current liabilities		927,999		861,532
Non-current liabilities:				
Long-term debt		747,647		747,376
Pension liabilities		57,621		57,959
Income tax payable		62,777		59,494
Unearned revenue		58,653		42,228
Other non-current liabilities		35,830		36,616
Total liabilities		1,890,527		1,805,205
Stockholders' equity:				
Common stock and capital in excess of par value		1,193,654		1,159,565
Retained earnings		2,386,801		2,359,233
Accumulated other comprehensive income (loss)		(30,248)		(36,646)
Total stockholders' equity		3,550,207		3,482,152
Total liabilities and stockholders' equity	\$	5,440,734	\$	5,287,357

KLA-Tencor Corporation

Condensed Consolidated Unaudited Statements of Operations

		Three months ended December 31,				Six months ended December 31,			
(In thousands, except per share data)		2013		2012		2013	2012		
Revenues:									
Product	\$	544,183	\$	523,023	\$	1,045,923	\$	1,097,101	
Service		160,946		149,988		317,543		296,619	
Total revenues		705,129		673,011		1,363,466		1,393,720	
Costs and operating expenses:									
Costs of revenues		285,814		303,915		563,471		621,140	
Engineering, research and development		134,587		121,608		266,860		241,350	
Selling, general and administrative		96,746		94,241		195,242		191,426	
Total costs and operating expenses		517,147	519,764		1,025,573			1,053,916	
Income from operations		187,982		153,247		337,893		339,804	
Interest income and other, net		(11,237)		(8,373)		(21,284)		(18,388)	
Income before income taxes		176,745		144,874		316,609		321,416	
Provision for income taxes		37,499		38,244		66,166		79,419	
Net income	\$	139,246	\$	106,630	\$	250,443	\$	241,997	
Net income per share:	·						-		
Basic	\$	0.84	\$	0.64	\$	1.51	\$	1.45	
Diluted	\$	0.83	\$	0.63	\$	1.49	\$	1.43	
Cash dividends declared per share	\$	0.45	\$	0.40	\$	0.90	\$	0.80	
Weighted-average number of shares:									
Basic		166,414		166,268		166,150		166,632	
Diluted		168,206		169,076	168,478		169,702		

KLA-Tencor Corporation Condensed Consolidated Unaudited Statements of Cash Flows

Purchase of land, property and equipment

		Three months ended December 31,						
(In thousands)		2013		2012				
Cash flows from operating activities:								
Net income	\$	139,246	\$	106,630				
Adjustments to reconcile net income to net cash provided by operating activities:								
Depreciation and amortization		19,811		21,925				
Asset impairment charges		1,374		_				
Net gain on sale of assets		_		(1,160)				
Non-cash stock-based compensation expense		14,870		14,958				
Excess tax benefit from equity awards		(925)		(6,067)				
Net gain on sale of marketable securities and other investments		(1,213)		(1,048)				
Changes in assets and liabilities:								
Decrease in accounts receivable, net		(136,562)		(77,272)				
Decrease (increase) in inventories		(2,938)		28,822				
Increase in other assets		(30,567)		(19,062)				
Increase (decrease) in accounts payable		26,997		(12,314)				
Increase in deferred system profit		77,672		14,849				
Increase in other liabilities		7,506		7,182				
Net cash provided by operating activities		115,271		77,443				
Cash flows from investing activities:								
Capital expenditures, net		(14,465)		(17,091)				
Proceeds from sale of assets				1,838				
Purchase of available-for-sale securities		(448,777)		(374,904)				
Proceeds from sale of available-for-sale securities		317,034		424,900				
Proceeds from maturity of available-for-sale securities		18,831		61,604				
Purchase of trading securities		(11,256)		(8,744)				
Proceeds from sale of trading securities		12,513		10,116				
Net cash provided by (used in) investing activities		(126,120)		97,719				
Cash flows from financing activities:				Í				
Issuance of common stock		37,719		23,607				
Tax withholding payments related to vested and released restricted stock units		(945)		(9,471)				
Common stock repurchases		(60,302)		(68,283)				
Payment of dividends to stockholders		(74,983)		(66,522)				
Excess tax benefit from equity awards		925		6,067				
Net cash used in financing activities		(97,586)		(114,602)				
Effect of exchange rate changes on cash and cash equivalents		(3,132)		(3,189)				
Net increase (decrease) in cash and cash equivalents		(111,567)		57,371				
Cash and cash equivalents at beginning of period		904,949		709,942				
Cash and cash equivalents at end of period	\$		\$	767,313				
Supplemental cash flow disclosures:		,		,				
Income taxes paid, net	\$	48,189	\$	48,295				
Interest paid	\$		\$	26,682				
Non-cash investing activities:	Ψ	20,004	~	20,002				
Total cash in resting act, thes.								

5,923 \$

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				Six months ended				
	D	ecember 31, 2013	Septe	mber 30, 2013	D	ecember 31, 2012	D	ecember 31, 2013	De	ecember 31, 2012
GAAP net income	\$	139,246	\$	111,197	\$	106,630	\$	250,443	\$	241,997
Adjustments to reconcile GAAP net income to non-GAAP net income										
Acquisition related charges	a	3,599		4,169		4,242		7,768		11,128
Restructuring, severance and other related charges	b	2,002		1,237		_		3,239		3,134
Income tax effect of non-GAAP adjustments	c	(1,777)		(1,672)		(1,392)		(3,449)		(4,371)
Discrete tax items	d	_		_		(3,514)		_		(3,514)
Non-GAAP net income	\$	143,070	\$	114,931	\$	105,966	\$	258,001	\$	248,374
GAAP net income per diluted share	\$	0.83	\$	0.66	\$	0.63	\$	1.49	\$	1.43
Non-GAAP net income per diluted share	\$	0.85	\$	0.68	\$	0.63	\$	1.53	\$	1.46
Shares used in diluted shares calculation		168,206		168,734		169,076		168,478		169,702

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

	Acquisition related charges		Restructuring, severance and other related charges				ax GAAP to non- Padjustment
Three months ended December 31, 2013							
Costs of revenues	\$	1,921	\$	469	\$ 2,390		
Engineering, research and development		836		1,132	1,968		
Selling, general and administrative		842		401	1,243		
Total in three months ended December 31, 2013	\$	3,599	\$	2,002	\$ 5,601		
Three months ended September 30, 2013					 		
Costs of revenues	\$	1,921	\$	651	\$ 2,572		
Engineering, research and development		836		306	1,142		
Selling, general and administrative		1,412		280	1,692		
Total in three months ended September 30, 2013	\$	4,169	\$	1,237	\$ 5,406		
Three months ended December 31, 2012							
Costs of revenues	\$	1,921	\$	_	\$ 1,921		
Engineering, research and development		835		_	835		
Selling, general and administrative		1,486		_	1,486		
Total in three months ended December 31, 2012	\$	4,242	\$		\$ 4,242		

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 costs associated with the company's decision in the first quarter of fiscal year 2013 to exit from the solar inspection business, as well as those associated with 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.
- c. 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.
- d. 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 or other adjustments to the cumulative windfall tax benefit that are not indicative of ongoing operating results and 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.