

FORM 4

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

OMB APPROVAL	
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Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person * Kirk Michael	2. Issuer Name and Ticker or Trading Symbol KLA TENCOR CORP [KLAC]	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) ____ Director _____ 10% Owner <input checked="" type="checkbox"/> Officer (give title below) _____ Other (specify below) Executive Vice President
(Last) (First) (Middle) ONE TECHNOLOGY DRIVE	3. Date of Earliest Transaction (Month/Day/Year) 08/08/2013	
(Street) MILPITAS, CA 95035	4. If Amendment, Date Original Filed(Month/Day/Year) 08/12/2013	6. Individual or Joint/Group Filing(Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person ____ Form filed by More than One Reporting Person
(City) (State) (Zip)	Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned	

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock	08/08/2013		S(1)		3,586	D	\$ 58,395 (2)	491	D	
Common Stock - Restricted Stock Units (3)								98,525 (4) (5)	D	

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

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Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned
(e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Underlying Securities (Instr. 3 and 4)	8. Price of Derivative Security (Instr. 5)	9. Number of Derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form of Derivative Security: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	V	(A)	(D)	Date Exercisable	Expiration Date					

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
Kirk Michael ONE TECHNOLOGY DRIVE MILPITAS, CA 95035			Executive Vice President	

Signatures

Brian M. Martin as Attorney-in-Fact for Michael Kirk	08/28/2013
**Signature of Reporting Person	Date

Explanation of Responses:

* If the form is filed by more than one reporting person, *see* Instruction 4(b)(v).

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations. *See* 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

(1) This transaction was effected pursuant to a Rule 10b5-1 trading plan adopted by the Reporting Person on December 6, 2012.

This transaction was executed in multiple trades at prices ranging from \$58.11 to \$58.67. The price reported above reflects the weighted-average sales price. The Reporting

(2) Person hereby undertakes to provide upon request to the SEC staff, the issuer or a security holder of the issuer, full information regarding the number of shares and prices at which the transaction was effected.

(3) Each restricted stock unit ("RSU") represents a contingent right to receive one share of KLA-Tencor common stock.

Amount has been revised to reflect RSUs covering 13,350 shares of KLA-Tencor common stock, which RSUs were not included in the Reporting Person's holdings reported in the original Form 4 or in the Reporting Person's Form 3 filed with the SEC on August 12, 2013. The Reporting Person will vest in twenty-five percent (25%) of these

(4) RSUs on the one-year anniversary of the grant date (August 6, 2013) and an additional twenty-five percent (25%) on each annual anniversary of the grant date thereafter through August 6, 2017, in each case subject to the Reporting Person continuing as a service provider to KLA-Tencor through the applicable vesting date. The shares of common stock will be issued as the RSUs vest.

(5) Does not include performance-based RSUs, if any, held by the Reporting Person for which an assessment has not yet been made regarding the achievement of the applicable performance goals. Any such holdings will be reported on a Form 4 within two business days of the date such assessment is made.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure.

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