FORM 4

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

OMB APPROVAL
OMB Number: 3235-0287
Estimated average burden
hours per response... 0.5

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 ** KAUFMAN STEPHEN P	2. Issuer Name an KLA TENCOR				ol		5. Relationship of Reporting Person(s) to Issuer (Check all applicable) X Director 10% Owner				
(Last) (First) (Middle) C/O KLA-TENCOR CORPORATION, ONE TECHNOLOGY DRIVE		3. Date of Earliest Transaction (Month/Day/Year) 11/27/2013							her (specify belo	ow)	
(Street)		4. If Amendment, Date Original Filed(Month/Day/Year)						6. Individual or Joint/Group Filing(Check Applicable Line) _X_ Form filed by One Reporting Person _Form filed by More than One Reporting Person			
MILPITAS, CA 95035								round med by shore than one responding round			
(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)		Date, if Code (Instr. 8)		4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) (A) or			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	Ownership Form: Direct (D) or Indirect (I)	Beneficial Ownership	
			Code	V	Amount	` ′	Price		(Instr. 4)		
Common Stock	11/27/2013		M		2,500	A	\$ 40.68	6,039	D		
Common Stock	11/27/2013		S		2,500	D	\$ 63.913 (1)	3,539	D		
Common Stock	11/27/2013		M		2,500	A	\$ 44.76	6,039	D		
Common Stock	11/27/2013		S		2,500	D	\$ 63.894 (2)	3,539	D		
Common Stock	11/27/2013		M		2,500	A	\$ 40.24	6,039	D		
Common Stock	11/27/2013		S		2,500	D	\$ 63.881	3,539	D		
Common Stock	11/27/2013		M		1,250	A	\$ 55.88	4,789	D		
Common Stock	11/27/2013		S		1,250	D	\$ 63.871	3,539	D		
Common Stock	11/27/2013		M		1,250	A	\$ 56.79	4,789	D		
Common Stock	11/27/2013		S		1,250	D	\$ 63.857 (5)	3,539	D		
Common Stock	11/27/2013		M		1,250	A	\$ 52.84	4,789	D		
Common Stock	11/27/2013		S		1,250	D	\$ 63.867 (6)	3,539	D		
Common Stock								17,782	I	By Trust	
Common Stock - Restricted Stock Units (8)								1,856	D		
Reminder: Report on a separate line for eac	h class of securities	beneficially owned	directly or i	indire	etly						
and report on a separate line for each	Table of Securities	- Indiana of the control of the cont		Pers	ons who	are no	t required	e collection of information conta I to respond unless the form MB control number.	ined SEC	1474 (9-02)	

	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	Code		5. Number of Expiration Date Expiration Date (Month/Day/Year) Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)		7. Title and Amount of Underlying Securities (Instr. 3 and 4)			9. Number of Derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	Form of Derivative Security: Direct (D) or Indirect	11. Nature of Indirect Beneficial Ownership (Instr. 4)		
				Code	V	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares				
Non- Qualified Stock Option (Right to Buy)	\$ 40.68	11/27/2013		М			2,500	<u>(9)</u>	10/18/2014	Common Stock	2,500	\$ 0	0	D	
Non- Qualified Stock Option (Right to Buy)	\$ 44.76	11/27/2013		М			2,500	<u>(10)</u>	01/25/2015	Common Stock	2,500	\$ 0	0	D	
Non- Qualified Stock Option (Right to Buy)	\$ 40.24	11/27/2013		М			2,500	(11)	05/11/2015	Common Stock	2,500	\$ 0	0	D	
Non- Qualified Stock Option (Right to Buy)	\$ 55.88	11/27/2013		M			1,250	(12)	05/01/2014	Common Stock	1,250	\$ 0	0	D	
Non- Qualified Stock Option (Right to Buy)	\$ 56.79	11/27/2013		М			1,250	(13)	07/31/2014	Common Stock	1,250	\$ 0	0	D	
Non- Qualified Stock Option (Right to Buy)	\$ 52.84	11/27/2013		М			1,250	(14)	10/30/2014	Common Stock	1,250	\$ 0	0	D	

Reporting Owners

	Relationships						
Reporting Owner Name / Address	Director	10% Owner	Officer	Other			
KAUFMAN STEPHEN P C/O KLA-TENCOR CORPORATION ONE TECHNOLOGY DRIVE MILPITAS, CA 95035	X						

Signatures

Brian M. Martin as Attorney-in-Fact for Stephen P. Kaufman	12/02/2013
**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).
- This transaction was executed in multiple trades at prices ranging from \$63.88 to \$63.94. The price reported above reflects the weighted-average sales price. The Reporting 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.
- This transaction was executed in multiple trades at prices ranging from \$63.88 to \$63.91. The price reported above reflects the weighted-average sales price. The Reporting Person (2) 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
- This transaction was executed in multiple trades at prices ranging from \$63.87 to \$63.90. The price reported above reflects the weighted-average sales price. The Reporting Person (3) 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.
- This transaction was executed in multiple trades at prices ranging from \$63.87 to \$63.88. The price reported above reflects the weighted-average sales price. The Reporting Person (4) 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.
- This transaction was executed in multiple trades at prices ranging from \$63.84 to \$63.87. The price reported above reflects the weighted-average sales price. The Reporting 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.
- This transaction was executed in multiple trades at prices ranging from \$63.86 to \$63.87. The price reported above reflects the weighted-average sales price. The Reporting 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.
- (7) By The Stephen P. Kaufman Trust UAD 5/24/2002, of which the Reporting Person is a trustee and beneficiary.
- (8) Each RSU represents a contingent right to receive one share of KLA-Tencor common stock.
- (9) Represents a stock option granted on October 18, 2004, granting the Reporting Person the right to purchase up to 2,500 shares of KLA-Tencor common stock. All of the shares subject to this stock option vested immediately and were exercisable on October 18, 2004.
- (10) Represents a stock option granted on January 25, 2005, granting the Reporting Person the right to purchase up to 2,500 shares of KLA-Tencor common stock. All of the shares subject to this stock option vested immediately and were exercisable on January 25, 2005.
- (11) Represents a stock option granted on May 11, 2005, granting the Reporting Person the right to purchase up to 2,500 shares of KLA-Tencor common stock. All of the shares subject to this stock option vested immediately and were exercisable on May 11, 2005.
- (12) Represents a stock option granted on May 1, 2007, granting the Reporting Person the right to purchase up to 1,250 shares of KLA-Tencor common stock. All of the shares subject to this stock option vested immediately and were exercisable on May 1, 2007.
- (13) Represents a stock option granted on July 31, 2007, granting the Reporting Person the right to purchase up to 1,250 shares of KLA-Tencor common stock. All of the shares subject to this stock option vested immediately and were exercisable on July 31, 2007.
- (14) Represents a stock option granted on October 30, 2007, granting the Reporting Person the right to purchase up to 1,250 shares of KLA-Tencor common stock. All of the shares subject to this stock option vested immediately and were exercisable on October 30, 2007.

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

Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.