FORM	4
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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).

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

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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

1. Name and Address of Reporting P Kirk Michael	2. Issuer Name an KLA TENCOR			0.	bol	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner				
(Last) (First) C/O KLA-TENCOR CORPO TECHNOLOGY DRIVE	3. Date of Earliest 7 02/06/2017	Fransaction	ı (Mo	onth/Day/Y	Year)	X Officer (give title below) Other (specify below) Executive Vice President				
(Street) MILPITAS, CA 95035	4. If Amendment, Date Original Filed(Month/Day/Year)						6. Individual or Joint/Group Filing(Check Applicable Line) _X_Form filed by One Reporting PersonForm 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)	Code (Instr. 8)		4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		of	5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price		(I) (Instr. 4)	(1150.4)
Common Stock	02/06/2017		М		6,250 (<u>1)</u>	А	\$ 0	6,695	D	
Common Stock	02/06/2017		F		2,400 (2)	D	\$ 87	4,295	D	
Common Stock - Restricted Stock Units ⁽³⁾								86,606	D	

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

SEC 1474 (9-02)

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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	2.	3. Transaction	3A. Deemed	4.	5	5.		6. Date Exer	cisable	7. Tit	le and	8. Price of	9. Number of	10.	11. Nature
Derivative	Conversion	Date	Execution Date, if	Transactio	n N	Numb	er	and Expiration	on Date	Amo	unt of	Derivative	Derivative	Ownership	of Indirect
Security	or Exercise	(Month/Day/Year)	any	Code	С	of (Mon		(Month/Day	/Year)	Underlying		Security	Securities	Form of	Beneficial
(Instr. 3)	Price of		(Month/Day/Year)	(Instr. 8)	Ι	Derivative		Securities (Instr. 5)		Beneficially	Derivative	Ownership			
	Derivative					Securities (1		(Instr. 3 and			2	(Instr. 4)			
	Security				Acquired				4)			0	Direct (D)		
					(A) or							1	or Indirect		
					Disposed								Transaction(s)	× /	
					of (D)							(Instr. 4)	(Instr. 4)		
					(Instr. 3,		-								
					4, and 5)		. 5)								
											Amount				
								Date	Expiration		or				
								Exercisable		Title	Number				
								Exclusable	Date		of				
				Code V	V	(A)	(D)				Shares				

Reporting Owners

	Relationships							
Reporting Owner Name / Address	Director	10% Owner	Officer	Other				
Kirk Michael C/O KLA-TENCOR CORPORATION ONE TECHNOLOGY DRIVE MILPITAS, CA 95035			Executive Vice President					

Signatures

---Signature of Reporting Person

02/07/2017

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) On February 6, 2013, the Reporting Person received a grant of RSUs covering 25,000 shares of KLA-Tencor common stock. On February 6, 2017, the Reporting Person vested in twenty-five percent (25%) of such RSUs.
- Pursuant to such terms of the February 6, 2013 RSU grant, 2,400 shares of KLA-Tencor common stock were automatically withheld at vesting to cover required tax (2) withholding. The fair market value of KLA-Tencor common stock used for purposes of calculating the number of shares to be withheld was the closing price of KLA-Tencor common stock as reported on the vesting date.
- (3) Each restricted stock unit ("RSU") represents a contingent right to receive one share of KLA-Tencor common stock. 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.

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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