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

Name and Address of Reporting Person * Lorig Brian			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						
-			3. Date of Earliest Transaction (Month/Day/Year) 08/04/2017						X Officer (give title below) Other (specify below) SVP						
(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 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, any	if Code (Inst	Code (Instr. 8)		4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)					Ownership of Form:	Beneficial		
				(Month/Day/Year)		ode	V	Amoun	(A) or t (D)	Price	(Instr. 3 a	ind 4)		Direct (D) or Indirect (I) (Instr. 4)	Ownership (Instr. 4)
Common	Stock		08/04/2017		N	Л		1,550 (1)	A	\$ 0	2,116			D	
Common Stock 08		08/04/2017		I	7		583 (2	D D	\$ 88.83	1,533		D			
Common Stock - Restricted Stock Units (3)									22,748 (4)		D				
Reminder:	Report on a s	separate line fo	or each class of secur			I c	Pers cont the f	ons wh ained ir form dis	o resp n this fo splays	orm are a curre	e not requ ntly valid	ction of inf uired to res OMB conf	spond unle	ess	1474 (9-02)
				Derivative Secur e.g., puts, calls, v							lly Owned				
Derivative Conversion Date Exec Security or Exercise (Month/Day/Year) any		Year) Execution Da	4. Transaction Code (Instr. 8)	Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)		and Expiration Date (Month/Day/Year)		Am Und Sec	ount of derlying urities tr. 3 and Derivative Security (Instr. 5) Amount		9. Number of Derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	Owners Form of Derivati Security Direct (or Indire	Beneficia Ownersh (Instr. 4)		
				Code V	(A)		Date Exer		Expirati Date	Title	or Number of Shares				

Reporting Owners

	Relationships					
Reporting Owner Name / Address	Director	10% Owner	Officer	Other		
Lorig Brian ONE TECHNOLOGY DRIVE MILPITAS, CA 95035			SVP			

Signatures

/s/ Teri A. Little, attorney-in-fact for Brian Lorig	08/07/2017

**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) On August 4, 2016, the Reporting Person received a grant of RSUs covering 6,200 shares of KLA-Tencor common stock. On August 4, 2017, the Reporting Person vested in 25% of such RSUs.
- (2) Pursuant to such terms of the August 4, 2016 RSU grant, 583 shares of KLA-Tencor common stock were automatically withheld at vesting to cover required tax withholding.
- (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. 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.

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.