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 Ty	pe Response	s)														
1. Name and Address of Reporting Person *- WALLACE RICHARD P				2. Issuer Name and Ticker or Trading Symbol KLA TENCOR CORP [KLAC]							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) 08/07/2014							X Officer (give title below) Other (specify below) President and CEO					
(Street) MILPITAS, CA 95035				4. If Amendment, Date Original Filed(Month/Day/Year)							_X_ Form fil	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, any (Month/Day/Yea	if Coo (Ins	(Instr. 8)		tion 4. Securities Acquire (A) or Disposed of ((Instr. 3, 4 and 5)						Ownership of Form:	Beneficial		
			(Month/Day/ i ea		Code	V	Amour	(A) or (D)		`	nu +)		Direct (D) or Indirect (I) (Instr. 4)	Ownership (Instr. 4)		
Common Stock - Restricted Stock Units (1)		08/07/2014			A		44,000 (<u>2</u>)	O A	\$ 0	155,025 (3)		D				
Common Stock											8,284	8,284		I	By Trust	
Common Stock										39,133			D			
Reminder:	Report on a s	separate line fo		Derivative Secur	ities A	t cquire	Perso conta the fo	ons whained in	o resp this f plays	orm a a curi enefici	ently valid	uired to res	formation spond unle trol numbe	ss	1474 (9-02)	
1 Title of	2	3 Transaction	· ·	e.g., puts, calls, v	varran 5.						s) Title and	& Drice of	9. Number	of 10.	11. Naturo	
Derivative Security or Exercise (Month/Day/Year) Execution Date, if Transact Code		Transaction Code			6. Date Exercisable and Expiration Date (Month/Day/Year)		Ai Ui Se	mount of nderlying scurities nstr. 3 and	Derivative I Security (Instr. 5)	9. Number Derivative Securities Beneficially Owned Following Reported Transactior (Instr. 4)	Owners Form o Derivat Security Direct (or Indir	hip of Indirect Beneficial Ownershi (Instr. 4) D)				
				Code V	(A)		Date Exerc		Expirat Date	Ti	Amount or Number of Shares					

Reporting Owners

	Relationships						
Reporting Owner Name / Address	Director	10% Owner	Officer	Other			
WALLACE RICHARD P C/O KLA-TENCOR CORPORATION ONE TECHNOLOGY DRIVE MILPITAS, CA 95035	X		President and CEO				

Signatures

Jeffrey S. Eisenberg as Attorney-In-Fact for Richard P. Wallace

**Signature of Reporting Person	Date
Signature of Reporting Letson	
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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) Each restricted stock unit ("RSU") represents a contingent right to receive one share of KLA-Tencor common stock.
- Represents a grant of RSUs subject only to service-vesting requirements. The Reporting Person will vest in twenty-five percent (25%) of the RSUs on the one-year anniversary of the grant date (August 7, 2014) and an additional twenty-five percent (25%) on each annual anniversary of the grant date thereafter through August 7, 2018, 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
- (3) 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 Form 4 within two business days of the date such assessment is made.
- (4) Shares held under the Wallace Living Trust u/a/d 03/27/01, as amended, a trust of which the Reporting Person is a trustee and beneficiary.

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.