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]							nbol	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) 08/02/2015							/Year)	X Officer (give title below) Other (specify below) President and CEO					
(Street) MILPITAS, CA 95035				4. If Amendment, Date Original Filed(Month/Day/Year)							/Day/Yea	6. Individual or Joint/Group Filing(Check Applicable Line) Form filed by One Reporting Person Form filed by More than One Reporting Person					
(City		(State)	(Zip)			Ta	ble I	- Non	-Der	ivative S	Securiti	es Acqu	l iired, Disp	osed of, or l	Beneficially	Owned	
1.Title of Security (Instr. 3)		2. Transaction Date (Month/Day/Year)	Execu any	Deemed cution Date, if	Code (Instr. 8)		tion	4. Securities Acquire (A) or Disposed of (Instr. 3, 4 and 5)		d of (D)	(D) Beneficially Owne Reported Transact		Following	Ownership Form:	Beneficial		
			(Month/Day/Year)			ode	V	Amoun	(A) or (D)	Price	(Instr. 3 a	(Instr. 3 and 4)		Direct (D) or Indirect (I) (Instr. 4)	Ownership (Instr. 4)		
Common Stock		08/02/2015]	M		11,775	5 A	\$ 0 (1)	117 1301			D		
Common Stock 08		08/02/2015					F		4,426 (3)	D	\$ 53.05	7,704		D			
Common Stock												9,182		I	By Trust		
Common Stock - Restricted Stock Units (5)												143,250) <u>(6)</u>		D		
Reminder:	Report on a s	separate line fo	or each class of secur					1	Pers cont the f	ons wh ained ir orm dis	o resp this f plays	orm ar a curre	e not requently valid	ction of inf uired to res OMB con	spond unle	ess	1474 (9-02)
	ı	T		<i>e.g.</i> , pı	uts, calls	, wa	rran	ts, opt	ions,	, convert	ible sec	curities)			Τ		
1. Title of Derivative Security (Instr. 3)	Conversion	3. Transaction Date (Month/Day/	Execution Da	te, if	Sec Acc (A) Dis of (Number and		and l	ate Exercisable Expiration Date nth/Day/Year)		Am Und Sec	Title and ount of derlying urities str. 3 and	Derivative Security (Instr. 5)	9. Number of Derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	Owners Form o Derivat Securit Direct or India	Beneficia ive Ownersh y: (Instr. 4) D)
					Code	v	(A)		Date Exer		Expirat Date	ion Titl	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

Brian M. Martin as Attorney-in-Fact for Richard P. Wallace	08/04/2015
**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 2, 2012, the Reporting Person received a grant of restricted stock units ("RSUs") covering 47,100 shares of KLA-Tencor common stock. On August 2, 2015, the Reporting Person vested in twenty-five percent (25%) of such RSUs.
- (2) Includes 355 shares acquired by the Reporting Person under the KLA-Tencor Employee Stock Purchase Plan on June 30, 2015.
 - Pursuant to the terms of the August 2, 2012 RSU grant described in note (1) above, 4,426 shares of KLA-Tencor common stock were automatically withheld at vesting to
- (3) cover required tax withholding. Because the vesting date of such RSUs occurred on a day on which the NASDAQ Stock Market was closed for trading, 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 NASDAQ Stock Market on the last completed trading day immediately prior to such vesting date.
- (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.
- (5) Each RSU represents a contingent right to receive one share of KLA-Tencor common stock.
- (6) 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.