FORM 4

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

OMB APPROVAL
OMB Number: 3235-0287
Estimated average burden
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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]							mbol	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) 08/07/2015							y/Year)	X Officer (give title below) Other (specify below) President and CEO					
(Street)				4. If Amendment, Date Original Filed(Month/Day/Year)							n/Day/Yea	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	AS, CA 95	(State)	(Zip)			Т	able I	- Non	-Der	ivative :	Securiti	es Acai	uired Disn	osed of, or I	Reneficially	Owned	
1.Title of Security (Instr. 3)		2. Transaction Date (Month/Day/Year)	Execut any	Deemed attion Date, if	3. Transac Code (Instr. 8)		4. Securities Acquir (A) or Disposed of (Instr. 3, 4 and 5)		equired	5. Amour Beneficia Reported	t of Securities lly Owned Following Transaction(s)		6. Ownership Form:	Beneficial			
			(Month/Day/Year)			ode	V	Amour	(A) or (D)	Price	(Instr. 3 and 4)			Direct (D) or Indirect (I) (Instr. 4)	Ownership (Instr. 4)		
Common Stock 08		08/07/2015]	M		11,00	0 A	\$ 0 (1)	50,403			D		
Common Stock		08/07/2015					F		5,740 (2)	D	\$ 52.35	44,663	44,663		D		
Common Stock												9,182	9,182		I	By Trust	
Common Stock - Restricted Stock Units (4)												119,975	<u>; (5)</u>		D		
Reminder:	Report on a s	separate line fo	or each class of secur	ities be	neficial	ly ov	wned		-		_	and to	the collec	ction of inf	formation	SEC	1474 (9-02)
								- 6	cont	ained i	n this f	orm ar	e not requ	uired to res	spond unle	ess	1474 (9-02)
			Table II - I							isposed , conver							
Derivative Conversion		3. Transaction Date (Month/Day/	n 3A. Deemed Execution Da any	4. Transaction Code Year) (Instr. 8)		5.		6. Date Exercisab and Expiration Da (Month/Day/Year		cisable on Date	7. T Am Und Sec	Title and count 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 of Derivat Securit Direct of Or India	Beneficia Ownershi y: (Instr. 4)	
					Code	V	(A)		Date Exer		Expirat Date	ion Tit	Amount or e 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	08/11/2015
**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 7, 2014, the Reporting Person received a grant of restricted stock units ("RSUs") covering 44,000 shares of KLA-Tencor common stock. On August 7, 2015, the Reporting Person vested in twenty-five percent (25%) of such RSUs.
 - Pursuant to such terms of the August 7, 2014 RSU grant, 5,740 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 NASDAQ Stock Market on such vesting date.
- (3) 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.
- (4) Each RSU represents a contingent right to receive one share of KLA-Tencor common stock.
- (5) 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.