FORM 4

(Print or Type Pecnonces)

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

(1 IIII OI I y	pe response	3)														
1. Name and Address of Reporting Person* Bell Bobby R				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					
(Last) (First) (Middle) C/O KLA-TENCOR CORPORATION, ONE TECHNOLOGY DRIVE				3. Date of Earliest Transaction (Month/Day/Year) 02/06/2017							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 Person Form filed by More than One Reporting Person					
(City) (State) (Zip)				Table I - Non-Derivative Securities Acquire								red, 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)		(Instr. 8)		(A) or Disposed o		of	5. Amount of Securities Beneficially Owned Fo Reported Transaction(s (Instr. 3 and 4)		ollowing Ow (s) For (Dir	Ownership Form: Direct (D)	7. Nature of Indirect Beneficial Ownership		
					C	Code	V	Amour	(A) or (D)	Price				or Indirect (I) (Instr. 4)	(Instr. 4)	
Common Stock		02/06/2017				M		6,250 (1)	A	\$ 0	19,028.917		D			
Common Stock		02/06/2017				F		2,400 (2)	D	\$ 87	16,628.917		D			
Common Stock - Restricted Stock Units (3)											86,606	6,606		D		
Reminder:	Report on a s	separate line fo		Derivative S	ecurit	ies Ac	cquire	Personta conta the fo	ons whained in	o respo n this for splays a	rm are curre reficial	not requesting ntly valid	ction of inf uired to res OMB con	spond unl	ess	1474 (9-02)
1. Title of	2	3. Transaction		e.g., puts, ca		arran 5.			convert te Exerc			itle and	8. Price of	9. Number	of 10.	11. Natu
	Conversion or Exercise Price of Derivative Security	on se (Month/Day/Year) Execution any (Month/Day/Day/Year)		te, if Transa Code	ection 8)			and Expiration Date (Month/Day/Year)		Ame Und Secu	ount of erlying urities tr. 3 and	Derivative Security (Instr. 5)	Derivative Securities Beneficially Owned Following Reported Transaction(s (Instr. 4)	Owners Form of Derivat Security Direct (or Indir	hip of Indire Beneficiative Ownersh (Instr. 4)	
				Code	V	(A)	(D)	Date Exerc		Expiratio Date	Title	Amount or Number of Shares				

Reporting Owners

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

Signatures

/s/ Teri A. Little as Attorney-In-Fact for Bobby R. Bell	02/07/2017	
**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 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.
- 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 (3) 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.