(Print or Type Pasnonses)

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

OMB APPROVAL OMB Number: 3235-0287 Estimated average burden hours per response... 0.5

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

3)												
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) 01/04/2016						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 PersonForm filed by More than One Reporting Person				
(State)	(Zip)	Ta	ıble I - No	n-Der	ivative S	Securities	Acqui	ired, Disp	osed of, or l	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)		4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		Reported Transaction(s)			Ownership Form:	Beneficial	
			Code	V	Amoun	(A) or t (D)	Price	(Instr. 3 a	ind 4)		or Indirect (I) (Instr. 4)	Ownership (Instr. 4)
	01/04/2016		S ⁽¹⁾		6,343	D	\$ 68.05	6,690.9	17		D	
estricted								67,398	(3)		D	
separate line for	Table II - 1	Derivative Securit	ies Acqui	Pers cont the t	sons wh tained ir form dis	o respo n this fo splays a	rm are curren	not requesting noting valid	uired to res	spond unle	ss	1474 (9-02)
Date	te Execution Date Ionth/Day/Year) any	4. Transaction Code Year) (Instr. 8)	5. Number of		6. Date Exercisable and Expiration Date			ount of erlying urities r. 3 and	Derivative Security (Instr. 5)	Derivative Securities Beneficially Owned Following Reported	Owners Form o Derivat Security Direct (or Indir	Beneficia Ownersh (Instr. 4)
								Amount				
	(First) R CORPOR. DRIVE (Street) (335 (State) 3. Transaction Date	(First) (Middle) R CORPORATION, ONE DRIVE (Street) (Street) 2. Transaction Date (Month/Day/Year) 01/04/2016 separate line for each class of secur Table II - 1 3. Transaction Date (Month/Day/Year) 3A. Deemed Execution Date (Month/Day/Year)	(First) (Middle) R CORPORATION, ONE RIVE (Street) (Street) 2. Transaction Date (Month/Day/Year) (Month/Day/Year) Table II - Derivative Securities beneficially on the company of the	(First) (Middle) R CORPORATION, ONE ORIVE (Street) 4. If Amendment, Date Original Structure (Street) 4. If Amendment, Date Original Structure (Month/Day/Year) 2. Transaction Date (Month/Day/Year) 3. Transaction Date (e.g., puts, calls, warrants, or Date (Month/Day/Year) 3. Transaction Date (Month/Day/Year) 3. Transaction Date (Month/Day/Year) 3. Transaction Date (Month/Day/Year) 4. Transaction Code of Derivative Securities Acquired (A) or Disposed	(First) (Middle) R CORPORATION, ONE RIVE (Street) 2. Transaction Date (Month/Day/Year) 2. Transaction Date (Execution Date, if any (Month/Day/Year) 3. Transaction Code (Instr. 8) Personnt Code (Reg., puts, calls, warrants, options 3. Transaction Date (Month/Day/Year) 3. Transaction Code (Instr. 8) Personnt Code (Instr. 8) Personnt Code (Instr. 8) Code (Instr. 8) Personnt Code (Instr. 8) Personnt Code (Instr. 8) Code (Instr. 8) Personnt Code (Instr. 8) Personnt Code (Instr. 8) Code (Instr. 8) Personnt Code (Instr. 8)	State Code Code	KLA TENCOR CORP [KLAC]	KLA TENCOR CORP [KLAC]	KLA TENCOR CORP [KLAC] Direct	KLA TENCOR CORP [KLAC] Check	Check all applic Check all a	KLA TENCOR CORP [KLAC] Director 10% Owner 10%

	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

Teri A. Little as Attorney-In-Fact for Bobby R. Bell

01/05/2016

**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) This transaction was effected pursuant to a Rule 10b5-1 trading plan adopted by the Reporting Person on June 5, 2015.
- (2) 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.