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

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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 Responses	s)													
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) 03/16/2017							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) Form filed by One Reporting Person Form filed by More than One Reporting Person					
(City) (State) (Zip)			Table I - Non-Derivative Securities Acqui						ired, Disposed of, or Beneficially Owned						
1.Title of Security (Instr. 3)		2. Transaction Date (Month/Day/Year)		Code (Instr. 8)		4. Securities Acquires (A) or Disposed of (I (Instr. 3, 4 and 5)		of (D)	(D) Beneficially Owned For Reported Transaction(s		ollowing O (s) Fo	Form:	7. Nature of Indirect Beneficial		
				(Month/Day/Year) Code V		Amoun	(A) or (D)	Price	or Indi (I)			Direct (D) or Indirect (I) (Instr. 4)	Ownership (Instr. 4)		
Common	Stock		03/16/2017			S		10,933 (1)	, ,	\$ 93.61	5,695.9	17		D	
						ies Acquire	the f	form dis	splays a	curre neficial	ntly valid		spond unle trol numbe		
1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security		3A. Deemed Execution Da	(e.g., puts, calls	e, if Code 4.		and Expiration Date (Month/Day/Year) Am Un Sec		7. Ti Amo Und Secu (Inst		8. Price of	9. Number o Derivative Securities Beneficially Owned Following Reported Transaction(f 10. Ownershi Form of Derivativ Security: Direct (D or Indirec))	
													(Instr. 4)	(Instr. 4))
				Code	V	(A) (D)	Date Exer	•	Expiration Date	On Title	Amount or Number of Shares				
Repor	ting O	wners				·									
					Re	lationships	3								
Ranc	rting Owne	r Name / Addı	ress	1.00/											

	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	03/20/2017
**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) This sale was effected pursuant to the terms of a Rule 10b5-1 trading plan adopted by the Reporting Person on October 26, 2016.

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.