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

	pe Response	8)														
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)Director10% Owner					
(Last) (First) (Middle) C/O KLA-TENCOR CORPORATION, ONE TECHNOLOGY DRIVE				3. Date of Earliest Transaction (Month/Day/Year) 11/05/2014					[X Officer (give title below) Other (specify below) Executive Vice President			elow)			
(Street)			4. If	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						
MILPITAS, CA 95035 (City) (State) (Zip)				Table I - Non-Derivative Securities Acqu						Acqui	dred, Disposed of, or Beneficially Owned					
1.Title of Security (Instr. 3) 2. Transaction Date (Month/Day/Year)		Execution Execut	2A. Deemed 3. T Execution Date, if Coc any (Ins		Transaction de (A) or Disposed of (I (Instr. 3, 4 and 5)			Beneficially Owned Following Reported Transaction(s)		Ownership Form:	Beneficial					
			(Mo	(Month/Day/Year				(A) or Amount (D)		Price	(Instr. 3 a	and 4)		Direct (D) or Indirect (I) (Instr. 4)	Ownership (Instr. 4)	
Common	Stock		11/05/2014			S	(1)	5	5,204	D \$	0.32	24,747			D	
	Stock - R	estricted											(2)			
Common Stock Un		estricted										74,062	(3)		D	
Stock Un	nits (2)		r each class of se	- Deriv	rative Securi	ties Ac	quire	Person contai the for d, Disp	ns who ined in rm dis	respon this form plays a co	m are currer	the collect not requ	ction of inf	ormation spond unle rol numbe	SEC ss	1474 (9-02)
Stock Un Reminder: 1. Title of	nits (2) Report on a s	separate line fo	Table II	- Deriv (<i>e.g.</i> ,) d Date, if	vative Securi puts, calls, w 4. Transaction Code	ties Ac	equire ts, opt per ative ities ired r osed)	Person contain the for d, Disputions, contains 6. Date and Ex	ns who ined in rm dis	o respon this for plays a c f, or Bene ible secur isable n Date	eficiallities) 7. Ti Amo Under	the collect not requ	ction of inf ired to res OMB conf	pond unle	SEC ss r. of 10. Ownersl Form of Derivati Security Direct (l or Indire	11. Natur of Indire Benefici Ownersl (Instr. 4)

	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

Brian M. Martin as Attorney-In-Fact for Bobby R. Bell	11/07/2014

**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 May 7, 2014.
- (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 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.