FORM 4

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

(Print or Ty	pe Response	s)			1											
Name and Address of Reporting Person * Kirloskar Virendra A				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) 09/06/2017							X Officer (give title below) Other (specify below) SVP & Chief Accounting Officer					
(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					
(City		(State)	(Zi	ip)	Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned								Owned			
1.Title of Security (Instr. 3)			2. Transaction Date (Month/Day/Ye			Date, if	Code (Instr. 8)		4. Securities Acquire (A) or Disposed of ((Instr. 3, 4 and 5)		d of (D)	Benefic Reporte	cially Owned F ed Transaction	nt of Securities Illy Owned Following Transaction(s)		7. Nature of Indirect Beneficial
				(Month/D	(Month/Day/Year)		V	Amoun	(A) or t (D)	Price	(Instr. :	(Instr. 3 and 4)			Ownership (Instr. 4)	
Common	Stock		09/06/2	2017			S		1,020 (1)	D	\$ 93.73	297			D	
Common Stock - Restricted Stock Units (2)												17,94	7,943 (3)		D	
			Т				ies Acquire	the f	form dis	splays a	a curre	ently val	quired to res id OMB conf ed			
Derivative Conversion Date		3. Transaction Date (Month/Day/Y	Transaction 3A. Deemed Execution D. any		(e.g., puts, calls, wa 4. Ite, if Transaction Code (Instr. 8)		5. 6. I Number and		Expiration Date Donth/Day/Year) S		7. T Am Und Sec		8. Price of	9. Number Derivative Securities Beneficially Owned Following Reported Transaction (Instr. 4)	Owners Form of Derivati Security Direct (I or Indire	Beneficial Ownershij (Instr. 4)
					Coo		(A) (D)	Date Exer	e rcisable	Expirati Date	ion Titl	Amour or Numb of Shares	er			
Repor	ting O	wners														
					Relationships											
Reporting Owner Name / Address Director			10% Owner Officer							Other						

SVP & Chief Accounting Officer

Signatures

Kirloskar Virendra A

C/O KLA-TENCOR CORPORATION

ONE TECHNOLOGY DRIVE MILPITAS, CA 95035

Teri Little as Attorney-in-Fact for Virendra A. Kirloskar	09/07/2017
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) This sale was effected pursuant to the terms of a Rule 10b5-1 trading plan adopted by the Reporting Person on November 25, 2016.
- (2) Each RSU represents a contingent right to receive one share of KLA-Tencor common stock.
- (3) 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.