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 Type Responses)												
1. Name and Address of Reporting P 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) 08/06/2018						X Officer (give title below) Other (specify below) SVP & Chief Accounting Officer				
(Street)	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						
MILPITAS, CA 95035							-	Form file	ed by More than	One Reporting I	rerson	
(City) (State)	(Zip)	Ta	ble I - Noi	n-De	rivative S	ecuriti	es Acqui	red, Disp	osed of, or E	Beneficially (Owned	
1.Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transac Code (Instr. 8)		4. Securi (A) or D (Instr. 3,	4 and 5 (A) or	of (D)	5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)		Following n(s)		7. Nature of Indirect Beneficial Ownership (Instr. 4)
Common Stock	08/06/2018		S		1,537 (1)	D	\$ 118.87	297			D	
Common Stock - Restricted Stock Units (2)	08/06/2018		M		2,728 (3)	D	\$ 0	19,824 (4)			D	
Common Stock	08/06/2018		M		2,728 (3)	A	\$ 0	3,025			D	
Common Stock	08/06/2018		F		944 (5)	D	\$ 118.27	2,081			D	
Common Stock - Restricted Stock Units (2)	08/06/2018		M		1,100 (6)	D	\$ 0	18,724	<u>(4)</u>		D	
Common Stock	08/06/2018		M		1,100 (6)	A	\$ 0	3,181			D	
Common Stock	08/06/2018		F		546 ⁽⁵⁾	D	\$ 118.27	2,635			D	
Reminder: Report on a separate line	for each class of secur	rities beneficially ov		Pers	sons wh tained ir	o resp	orm are	not requ		ormation spond unleader	ss	1474 (9-02)
		Derivative Securiti (e.g., puts, calls, wa						y Owned				
1. Title of Derivative Security (Instr. 3) 2. Conversion Date (Month/Day Price of Derivative Security	on 3A. Deemed Execution Da any	Year) 4. Transaction Code (Instr. 8) Year) (Instr. 8) Code Deriva Securi Acquii (A) or Dispos of (D) (Instr. 4, and		and Expiration Date (Month/Day/Year) and Expiration Date (Month/Day/Year) S (1)		7. Tit Amo Unde Secu	tle and ount of erlying rities r. 3 and	Derivative Security (Instr. 5)	9. Number of Derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	Owners Form of Derivati Security Direct (1) or Indire	Ownershi (Instr. 4) D)	
		Code V	(A) (D)	Dat Exe		Expirati Date	ion Title	Amount or Number of Shares				

Reporting Owners

Relationships

Reporting Owner Name / Address	Director	10% Owner	Officer	Other
Kirloskar Virendra A C/O KLA-TENCOR CORPORATION ONE TECHNOLOGY DRIVE MILPITAS, CA 95035			SVP & Chief Accounting Officer	

Signatures

/s/ Teri Little as Attorney-in-Fact for Virendra A. Kirloskar	08/08/2018	
**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 January 31, 2018.
- (2) Each RSU represents a contingent right to receive one share of KLA-Tencor common stock.
 - On August 6, 2015, in addition to the RSUs granted on that date that were subject only to service-vesting requirements (which RSUs were previously reported on Form 4), the Reporting Person was also grantedRSUs covering up to a maximum of 5,500 shares (based on 125% of the target shares of 4,400) of KLA-Tencor common stock, subject
- (3) to both performance-vesting and service-vesting requirements. On August 2, 2018 the Compensation Committee of the KLA-Tencor Board of Directors determined the level at which the corporate performance goals were attained and, based on the assessment, determined that the number of shares subject to the RSUs is 5,456. On August 6, 2018, 50% of the RSUs vested.
- (4) 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.
- Pursuant to the terms of the grant, shares of KLA-Tencor common stock were automatically withheld at vesting to cover required tax withholding. The fair market value of (5) 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 August 6. 2018.
- (6) On August 6, 2015, the Reporting Person was granted an RSU for 4,400 shares of KLA-Tencor Common Stock. On August 6, 2018, 25% of those shares vested.

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.