FORM 4

(Print or Type Pecnonces)

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

(I IIII OI I y	pe response	3)													
1. Name and Address of Reporting Person * Khan Ahmad 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) 02/05/2016						X Officer (give title below) Other (specify below) EVP, Patterning Division						
(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 Person Form filed by More than One Reporting Person iired, Disposed of, or Beneficially Owned						
(City) (State) (Zip)				Table I - Non-Derivative Securities Acqui											
1.Title of Security (Instr. 3)		2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, any (Month/Day/Yea	if Coo (Ins	f Code (Instr. 8)		4. Securities Acqu (A) or Disposed o (Instr. 3, 4 and 5)		of (D) 5)	Beneficia	ount of Securities sially Owned Following ed Transaction(s) 3 and 4)		or Indirect	7. Nature of Indirect Beneficial Ownership (Instr. 4)	
Commor	n Stock		02/05/2016			M	V	6,250	<u> </u>	\$ 0 (1)	19,835			(Instr. 4)	
Common Stock		02/05/2016			F		2,408 (2)	D	\$ 65.51	17,427		D			
Common Stock - Restricted Stock Units (3)										40,714	(4)		D		
Reminder:	Report on a s	separate line fo		Derivative Securi	ties A	equire	Pers cont the f	ons whatained in	o responding this for this for the splays and the splays and the splays and the splays are splays and the splays are spla	orm are a currei eneficial	not requesting noting valid	ction of inf uired to res OMB con	spond unl	ess	1474 (9-02)
1. Title of Derivative Security (Instr. 3)	ative Conversion Date Execution Date or Exercise (Month/Day/Year)		4. Transaction Code Year) (Instr. 8)	5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Ti Amo Und Secu (Inst 4)	itle and 8. Price ount of Derivative Security	8. Price of Derivative Security (Instr. 5)		Owners Form of Derivat Security Direct (or Indir	Benefici Ownersh (Instr. 4)		

Reporting Owners

	Relationships						
Reporting Owner Name / Address	Director	10% Owner	Officer	Other			
Khan Ahmad A. C/O KLA-TENCOR CORPORATION ONE TECHNOLOGY DRIVE MILPITAS, CA 95035			EVP, Patterning Division				

Signatures

Teri Little as Attorney-in-Fac	02/09/2016		
**Signature of Reporting	ng 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) On February 6, 2013, the Reporting person received a grant of restricted stock units ("RSUs") covering 25,000 shares of KLA-Tencor common stock. On February 5, 2016, the Reporting Person vested twenty-five percent (25%) of such RSUs.
 - Pursuant to such terms of the February 6, 2013 RSU grant, 2,406 shares of KLA-Tencor common stock were automatically withheld at vesting to cover required tax
- (2) withholding. The fair market value of 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 the NASDAQ Stock Market on such determination date (February 5, 2016).
- (3) Each RSU represents a contingent right to receive one share of KLA-Tencor common stock.
- (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.

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.