KLA TENCOR CORP

Form 4

November 19, 2007

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

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF

SECURITIES

OMB APPROVAL

OMB Number:

3235-0287

Expires:

January 31, 2005

0.5

Estimated average burden hours per

response...

if no longer subject to Section 16. Form 4 or Form 5 obligations

Check this box

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section

30(h) of the Investment Company Act of 1940

may continue. See Instruction

1(b).

(Last)

(Print or Type Responses)

1. Name and Address of Reporting Person * KENNEDY KEVIN

2. Issuer Name and Ticker or Trading Symbol

KLA TENCOR CORP [KLAC]

5. Relationship of Reporting Person(s) to

Issuer

(First)

3. Date of Earliest Transaction

(Check all applicable)

C/O KLA-TENCOR CORPORATION, ONE (Month/Day/Year) 11/15/2007

X_ Director 10% Owner Officer (give title Other (specify below)

TECHNOLOGY DRIVE

(Street) 4. If Amendment, Date Original

(Month/Day/Year)

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

MILPITAS, CA 95035

(City) (State) (Zip) Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned 5. Amount of 6. Ownership 7. Nature of 1. Title of 2. Transaction Date 2A. Deemed 3. 4. Securities

Security (Instr. 3) (Month/Day/Year) Execution Date, if

(Middle)

TransactionAcquired (A) or Code Disposed of (D) (Instr. 3, 4 and 5) (Instr. 8)

Securities Beneficially Owned Following

Form: Direct Indirect (D) or Beneficial Ownership Indirect (I) (Instr. 4) (Instr. 4)

(A) or

Reported Transaction(s) (Instr. 3 and 4)

Code V Amount (D) Price

Common

Stock -Restricted

11/15/2007

2,036 A 2,475 D

Stock Units (1)

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control number.

SEC 1474 (9-02)

Edgar Filing: KLA TENCOR CORP - Form 4

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of	2.	3. Transaction Date	3A. Deemed	4.	5.	6. Date Exerc	cisable and	7. Title	and	8. Price of	9. Nu
Derivative	Conversion	(Month/Day/Year)	Execution Date, if	TransactionNumber		Expiration D	ate	Amoun	t of	Derivative	Deriv
Security	or Exercise		any	Code	of	(Month/Day/	Year)	Underly	ying	Security	Secui
(Instr. 3)	Price of		(Month/Day/Year)	(Instr. 8) Derivative		e		Securit	ies	(Instr. 5)	Bene
	Derivative				Securities Acquired			(Instr. 3	3 and 4)		Own
	Security										Follo
	•				(A) or						Repo
					Disposed						Trans
					of (D)						(Instr
					(Instr. 3,						
					4, and 5)						
									A manuat		
									Amount		
					Date	Date	Expiration	Or Title Nesselves			
						Exercisable Date	Date		Number		
				C + V	(A) (D)				of		
				Code V	(A) (D)				Shares		

Reporting Owners

Relationships Reporting Owner Name / Address 10% Owner Officer Other Director

KENNEDY KEVIN C/O KLA-TENCOR CORPORATION ONE TECHNOLOGY DRIVE MILPITAS, CA 95035

X

Signatures

Brian M. Martin as Attorney-in-Fact for Kevin J. Kennedy

11/19/2007

**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) Each restricted stock unit represents a contingent right to receive one share of KLAC common stock.
- (2) The restricted stock units will fully vest one year from date of grant and will be deliverable on such date.

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.

Reporting Owners 2