# FORM 4

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

OMB APPR	OVAL
OMB Number:	3235-0287
Estimated average I	ourden
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

e 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 (Check all applicable) X Director 10% Owner					
		(Middle) ON, ONE	3. Date of Earliest Transaction (Month/Day/Year) 10/30/2007				0	Officer (give t	itle below)	Other	(specify below)					
S CA 050	(Street)		4. If Amendment, Date Original Filed(Month/Day/Year)							_X_ For	6. Individual or Joint/Group Filing(Check Applicable Line)  X_Form filed by One Reporting Person  Form filed by More than One Reporting Person					
)	(State)	(Zip)				Tab	ole I - Non-Dei	rivati	ve Securities A	Acquired, D	lired, Disposed of, or Beneficially Owned					
ecurity		2. Transaction Date (Month/Day/Year	Execu any	tion	Date, if	3. T Coo (Ins	Fransaction de (str. 8)	1. Sec (A) or Instr.	curities Acquire r Disposed of ( . 3, 4 and 5)	ed 5. Amo Owned Transa (Instr. 1	ount of Sec I Followin ction(s)	curities Ben	eficially 6	Dwnership of Corm: EDirect (D) or Indirect (I)	Beneficial Ownership	
Report on a se	eparate line for each		- Deriva	ıtive	Securit	ies A	Persor in this a curre	formently osed	n are not required to a series of the contract	uired to rescontrol num	spond u nber.				474 (9-02)	
Security or Exercise (Month/Day/Year) any		4. Transaction Code (Instr. 8)		5. Number		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Underlying Securities (Instr. 3 and 4)			Derivative Securities Beneficially Owned Following Reported	Form of Derivative Security: Direct (D) or Indirect	(Instr. 4)			
			Code	v	(A)	(D)	Date Exercisable			Title	Amount or Number of Shares					
\$ 52.84	10/30/2007		A		1,250		10/30/2007	7 <u>(1)</u> ]	10/30/2014	Common Stock	1,250	\$ 0	1,250	D		
	2. Conversion or Exercise Price of Derivative Security	PY KEVIN  (First)  CTENCOR CORPORATION  COLOGY DRIVE  (Street)  S.S., CA 95035  (State)  Courity  2. Conversion or Exercise of Derivative Security  3. Transaction Date (Month/Day/Year)	Address of Reporting Person* DY KEVIN  (First) (Middle) (Street)  (Street)  (Street)  (Street)  (Street)  (Street)  (Street)  (State) (Zip)  (Zip)  (Cip)  (Month/Day/Year)  (Month/Day/Year)  (Month/Day/Year)  (Month/Day/Year)	Address of Reporting Person* DY KEVIN  (First) (Middle) (Address of Reporting Person* (First) (Middle) (Address of Reporting Person* (Middle) (Address of Reporting Person* (Middle) (Street)  (Street)  (Street)  (Street)  (State)  (Zip)  2. Transaction Date (Month/Day/Year)  2. Transaction Date (Month/Day/Year)  2. Table II - Deriva (e.g., p.	d Address of Reporting Person* DY KEVIN  (First) (Middle) (-TENCOR CORPORATION, ONE DLOGY DRIVE (Street)  (State)  (State)  (Zip)  2. Transaction Date (Month/Day/Year)  Report on a separate line for each class of securities beneficially on the correction or Exercise Price of Derivative Security  2. Transaction Date (Month/Day/Year)  3. Transaction Date (Month/Day/Year)  3. Transaction Once Exercise (Month/Day/Year) (Month/Day/Year)  3. Transaction Once Exercise (Month/Day/Year)  (Month/Day/Year)  Code  Co	Address of Reporting Person* OY KEVIN  O	Address of Reporting Person* DY KEVIN  (First) (Middle) (Street)  (A. If Amendment, Date On Date of Execution Date, if (Month/Day/Year)  (Month/Day/Year)  (Month/Day/Year)  (Month/Day/Year)  (Month/Day/Year)  (Month/Day/Year)  (Month/Day/Year)  (Instr. 8)  (Code of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)  (Code of V (A) (D)	Address of Reporting Person PY KEVIN    Code   V   Code   Co	Address of Reporting Person *- DY KEVIN  1. (Siret) (Middle) 1. (First) (Middle) 1. (First) (Middle) 1. (Siret) (Siret) (Siret)  1. (Siret) (Siret) (Siret) (Siret)  2. (Siret) (Zip) (Zip) (Month/Day/Year)  2. (Sinet) (Zip) (Zip) (Another Date or Code (Month/Day/Year) (Month/Day/Year)  3. (Sinet) (Zip) (State) (Zip) (Another Date or Code (Month/Day/Year) (Month/Day/Year)  4. (Sinet) (Zip) (Another Date or Code (Month/Day/Year) (Month/Day/Year)  4. (Another Date or Code (Month/Day/Year) (Month/Day/Year)  5. (Another Date or Code (Month/Day/Year) (Month/Day/Year)  6. (Another Date or Code (Month/Day/Ye	2. Issuer Name and Ticker or Trading Symbol KLA TENCOR CORP [KLAC]  3. Date of Earliest Transaction (Month/Day/Year)  4. If Amendment, Date Original Filed(Month/Day/Year)  5. CA 95035  2. Transaction Date (Month/Day/Year)  2. Transaction Date (Month/Day/Year)  2. Transaction Date (Month/Day/Year)  2. Transaction Date (Instr. 8)  4. Securities Acquired (Instr. 8)  2. Code V Amount (A) or Disposed of (Instr. 3, 4 and 5)  2. Transaction Date (A) or Disposed of (B) or Date (Month/Day/Year)  2. Table II - Derivative Securities Acquired, Disposed of (A) or Disposed of (A) or Disposed of (B) or Date (Month/Day/Year)  2. Table II - Derivative Securities Acquired, Disposed of (A) or Disposed of (D) (Instr. 3, 4, and 5)  Code V (A) or Disposed of (D) (Instr. 3, 4, and 5)  Code V (A) or Disposed of (D) (Instr. 3, 4, and 5)  Date Exercisable Expiration Date (Month/Day/Year)  Code V (A) (D)	2. Issuer Name and Ticker or Trading Symbol KLA TENCOR CORP [KLAC]  3. Date of Earliest Transaction (Month/Day/Year)  4. If Amendment, Date Original Filed(Month/Day/Year)  5. Rel  (Street)  4. If Amendment, Date Original Filed(Month/Day/Year)  5. S. CA 95035  7. State:  7. Table I - Non-Derivative Securities Acquired, Execution Date, if (Month/Day/Year)  8. Amount (A) or Disposed of (D) (Instr. 8)  8. Code  8. Transaction (Instr. 8)  8. Code  9. Amount (A) or Price  1. Table II - Derivative Securities Acquired, Date (Instr. 8)  1. Table II - Derivative Securities Acquired (A) or Disposed of (D) (Instr. 8)  1. Table II - Derivative Securities Acquired, Date (Instr. 8)  2. Transaction Date (Instr. 8)  1. Table II - Derivative Securities Acquired, Date (Instr. 8)  2. Transaction Date (Instr. 8)  2. Transaction (Instr. 8)  2. Transaction Date (Instr. 8)  2. Transaction On Date (A) or Disposed of (D) (Instr. 8)  2. Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (A) or Beneficially Owned (B)	2. Issuer Name and Ticker or Trading Symbol KLA TENCOR CORP [KLAC]  3. Date of Earliest Transaction (Month/Day/Year)  10/30/2007  4. If Amendment, Date Original Filed(Month/Day/Year)  10/30/2007  4. If Amendment, Date Original Filed(Month/Day/Year)  10/30/2007  Table 1 - Non-Derivative Securities Acquired, Disposed of (D) (Instr. 3, 4 and 5)  (Month/Day/Year)  2. Transaction Date (Month/Day/Year)  (Month/Day/Year)  2. Transaction Date (Month/Day/Year)  2. Transaction Date (Month/Day/Year)  2. Transaction Date (Instr. 8)  (Month/Day/Year)  2. Table II - Derivative Securities Acquired, Disposed of (D) (Instr. 3 and 4)  2. Transaction Date (Instr. 8)  (Month/Day/Year)  2. Table II - Derivative Securities Acquired, Disposed of (D) (Instr. 3 and 4)  2. Table II - Derivative Securities Acquired, Disposed of (D) (Instr. 3 and 4)  2. Table II - Derivative Securities Acquired, Disposed of (D) (Instr. 3 and 4)  2. Conversion of Exercise (Month/Day/Year)  2. Table II - Derivative Securities Acquired, Disposed of (D) (Instr. 3 and 4)  2. Conversion (Month/Day/Year)  3. Transaction Execution Date, if transaction (A) or Disposed of (D) (Instr. 3 and 4)  2. Conversion (Month/Day/Year)  3. Transaction (A) or Disposed of (D) (Instr. 3 and 4)  2. Conversion (Month/Day/Year)  3. Transaction (A) or Disposed of (D) (Instr. 3 and 4)  2. Conversion (Month/Day/Year)  3. Transaction (A) or Disposed of (D) (Instr. 3 and 4)  4. Scurities Acquired (A) or Disposed of (D) (Instr. 3 and 4)  2. Conversion (Month/Day/Year)  3. Transaction (A) or Disposed of (D) (Instr. 3 and 4)  4. Scurities (Acquired, Disposed of (D) (Instr. 3 and 4)  4. Scurities (Acquired, Disposed of (D) (Instr. 3 and 4)  4. Scurities (Acquired, Disposed of (D) (Instr. 3 and 4)  4. Scurities (Acquired, Disposed of (D) (Instr. 3 and 4)  4. Scurities (Acquired, Disposed of (D) (Instr. 3 and 4)  4. Scurities (Acquired, Disposed of (D) (Instr. 3 and 4)  4. Scurities (Acquired, Disposed of (D) (Instr. 3 and 4)  4. Scurities (Acquired, Disposed of (D) (Instr. 3 and 4)  4. Scurit	2. Issuer Name and Ticker or Trading Symbol KLA TENCOR CORP [KLAC]  TENCOR CORPORATION, ONE LOGY DRIVE  4. If Amendment, Date Original Filed(Month/Day/Year)  (Spect)  (State)  2. Transaction Date (Month/Day/Year)  3. Date of Earliest Transaction (Month/Day/Year)  4. If Amendment, Date Original Filed(Month/Day/Year)  5. Relationship of Reporting (Check Officer (give title below)  7. Total I - Non-Derivative Securities Acquired, Disposed of, of the Code (Instr. 8)  8. Amount of Securities Acquired (Instr. 8)  8. Amount of Securities Beneficially owned directly or indirectly.  8. Persons who respond to the collection of informatic in this form are not required to respond unless the factor of Securities Acquired (A) or Disposed of (D) (Instr. 3 and 4)  8. Price of Code (Instr. 8)  9. Number (Check of Code (Instr. 8))  10/30/2007	Address of Reporting Person   Check all applicable   Check all app	A conversion of Reporting Persons 2 (State Name and Ticker or Trading Symbol KLA TENCOR CORP [KLAC] (Check all applicable) (Check all app	

### **Reporting Owners**

	Relationships						
Reporting Owner Name / Address	Director	10% Owner	Officer	Other			
KENNEDY KEVIN C/O KLA-TENCOR CORPORATION ONE TECHNOLOGY DRIVE MILPITAS, CA 95035	X						

## **Signatures**

/s/ Brian Martin as Attorney-in-Fact for Kevin J. Kennedy	11/01/2007		
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) The Option is immediately exercisable for all the underlying shares.

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.