

FORM 4

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

OMB APPROVAL	
OMB Number:	3235-0287
Estimated average burden hours per response...	0.5

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

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

(Print or Type Responses)

1. Name and Address of Reporting Person * Hall Jeffrey			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 <input checked="" type="checkbox"/> Officer (give title below) <u>VP, Corporate Finance</u> ____ Other (specify below)		
(Last)	(First)	(Middle)	3. Date of Earliest Transaction (Month/Day/Year) 08/19/2005					
C/O KLA-TENCOR CORPORATION, 160 RIO ROBLES								
(Street)			4. If Amendment, Date Original Filed(Month/Day/Year)			6. Individual or Joint/Group Filing(Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person		
SAN JOSE, CA 95130								
(City)	(State)	(Zip)	Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned					

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock	08/19/2005		M		3,000	A	\$ 29.31	4,791	D	
Common Stock	08/19/2005		S		3,000	D	\$ 49.3988	1,791	D	
Common Stock-Restricted Stock Units (1)								10,000	D	

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)

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

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (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. Title and Amount of Underlying Securities (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Number of Derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form of Derivative Security: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	V	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares						
Non-Qualified Stock Option (right to buy)	\$ 29.31	08/19/2005		M				3,000	10/02/2002	10/02/2011	Common Stock	3,000	\$ 49.3988	14,200	D		
Non-Qualified Stock Option (right to buy)	\$ 34.67								11/08/2003	01/28/2013	Common Stock	5,500		5,500	D		
Non-Qualified Stock Option (right to buy)	\$ 37.05								11/08/2003	11/08/2012	Common Stock	3,250		3,250	D		

Non-Qualified Stock Option (right to buy)	\$ 40.66							10/27/2004	08/02/2014	Common Stock	1,950		1,950	D
Non-Qualified Stock Option (right to buy)	\$ 41.79							09/21/2005	09/21/2014	Common Stock	20,000		20,000	D
Non-Qualified Stock Option (right to buy)	\$ 45.16							10/26/2004	04/26/2014	Common Stock	3,250		3,250	D
Non-Qualified Stock Option (right to buy)	\$ 46.67							11/10/2001	07/10/2011	Common Stock	35,811		35,811	D
Non-Qualified Stock Option (right to buy)	\$ 51.229							11/08/2003	07/30/2013	Common Stock	3,250		3,250	D
Non-Qualified Stock Option (right to buy)	\$ 53.86							10/27/2004	10/27/2013	Common Stock	5,200		5,200	D
Non-Qualified Stock Option (right to buy)	\$ 58.10							10/27/2004	01/27/2014	Common Stock	2,600		2,600	D

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
Hall Jeffrey C/O KLA-TENCOR CORPORATION 160 RIO ROBLES SAN JOSE, CA 95130			VP, Corporate Finance	

Signatures

By: Stuart J. Nichols For: Jeffrey Hall		08/22/2005
<small>Signature of Reporting Person</small>		<small>Date</small>

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.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

