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

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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 Person *- BARNHOLT EDWARD W		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			
(Last) (First) (Midd C/O KLA-TENCOR CORPORATION, 160 ROBLES		3. Date of Earliest Transaction (Month/Day/Year) 11/04/2005						Officer (give title below) Oth	ner (specify belo	w)	
(Street) SAN JOSE, CA 95130	4.	4. If Amendment, Date Original Filed(Month/Day/Year)						6. Individual or Joint/Group Filing/Check Applicable Line) _X_Form filed by One Reporting PersonForm filed by More than One Reporting Person			
(City) (State) (Zi	ip)	Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned									
(Instr. 3) Date		Execution Date, if	(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)	Ownership Form:	7. Nature of Indirect Beneficial Ownership	
		,	Code	V	Amount	(A) or (D)	Price	,	or Indirect (I) (Instr. 4)	(Instr. 4)	
Common Stock-Restricted Stock Units (1)	4/2005		A		1,000	A	\$ 0 (2)	1,000	D		
Reminder: Report on a separate line for each class of	securities ben	eficially owned dire	ctly or indire	ctly.							
			Po in	ersoi this	form ar	e not re	equired	e collection of information contain to respond unless the form displa ol number.		1474 (9-02)	

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

4. 5. Number 6. Date Exercisable and 7.

(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)	Code	tion	5. Num of Derivat Securiti Acquire (A) or Dispose of (D) (Instr. 3 and 5)	ive ies ed		Expiration Date		7. Title and Amount of Underlying Securities (Instr. 3 and 4)		9. Number of Derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	Security: Direct (D) or Indirect	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)	\$ 49.99	11/04/2005		A		1,250		11/04/2005	11/04/2012	Common Stock	1,250	\$ 0	1,250	D	
Non- Qualified Stock Option (right to buy)	\$ 10.63							04/25/1997	10/25/2006	Common Stock	10,000		10,000	D	
Non- Qualified Stock Option (right to buy)	\$ 11.66							09/21/1999	09/21/2008	Common Stock	5,000		5,000	D	
Non- Qualified Stock Option (right to buy)	\$ 17.59							11/17/1998	11/17/2008	Common Stock	5,832		5,832	D	

Non- Qualified Stock Option (right to buy)	\$ 26.25			11/10/2000	11/10/2010	Common Stock	10,000	10,000	D	
Non- Qualified Stock Option (right to buy)	\$ 34.94			09/19/1998	09/19/2007	Common Stock	5,000	5,000	D	
Non- Qualified Stock Option (right to buy)	\$ 37.05			11/08/2002	11/08/2012	Common Stock	10,000	10,000	D	
Non- Qualified Stock Option (right to buy)	\$ 40.24			05/11/2005	05/11/2015	Common Stock	2,500	2,500	D	
Non- Qualified Stock Option (right to buy)	\$ 40.68			10/18/2004	10/18/2014	Common Stock	2,500	2,500	D	
Non- Qualified Stock Option (right to buy)	\$ 44.76			01/25/2005	01/25/2015	Common Stock	2,500	2,500	D	
Non- Qualified Stock Option (right to buy)	\$ 46.28			11/16/1999	11/16/2009	Common Stock	10,000	10,000	D	
Non- Qualified Stock Option (right to buy)	\$ 47.23			11/09/2001	11/09/2011	Common Stock	10,000	10,000	D	
Non- Qualified Stock Option (right to buy)	\$ 51.35			08/02/2005	08/02/2012 <sup>(3)</sup>	Common Stock	2,500	2,500	D	
Non- Qualified Stock Option (right to buy)	\$ 59.44			11/05/2003	11/05/2013	Common Stock	10,000	10,000	D	

# **Reporting Owners**

		Relationsh	nips	
D (1 0 N (41)	Director	10% Owner	Officer	Other
Reporting Owner Name / Address				

BARNHOLT EDWARD W C/O KLA-TENCOR CORPORATION	X		
160 RIO ROBLES SAN JOSE, CA 95130			

## **Signatures**

By: Stuart J. Nichols For: Edward W. Barnholt	11/07/2005
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 not be deliverable until three years from the date of grant.
- (3) Option expiration date was reported incorrectly on the original Form 4.

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.