

Non-Qualified Stock Option (right to buy)	\$ 10.63	12/16/2005					2,500	08/31/1999	08/31/2008	Common Stock	2,500	\$ 50.8944	44,813	D
Non-Qualified Stock Option (right to buy)	\$ 10.63	12/16/2005				2,813	08/31/1999	08/31/2008	Common Stock	2,813	\$ 50.8944	42,000	D	
Non-Qualified Stock Option (right to buy)	\$ 10.63	12/16/2005				10,000	08/31/1999	08/31/2008	Common Stock	10,000	\$ 50.8944	32,000	D	
Non-Qualified Stock Option (right to buy)	\$ 10.63	12/16/2005				10,000	08/31/1999	08/31/2008	Common Stock	10,000	\$ 50.8944	22,000	D	
Non-Qualified Stock Option (right to buy)	\$ 10.63	12/16/2005				22,000	08/31/1999	08/31/2008	Common Stock	22,000	\$ 50.8944	0	D	
Non-Qualified Stock Option (right to buy)	\$ 22.25	12/16/2005				7,500	04/30/1998	04/30/2007	Common Stock	7,500	\$ 50.8944	0	D	
Non-Qualified Stock Option (right to buy)	\$ 26.25						11/10/2001	11/10/2010	Common Stock	8,750		8,750	D	
Non-Qualified Stock Option (right to buy)	\$ 29.31						10/02/2002	10/02/2011	Common Stock	22,500		22,500	D	
Non-Qualified Stock Option (right to buy)	\$ 32.75						04/04/2002	04/04/2011	Common Stock	8,750		8,750	D	
Non-Qualified Stock Option (right to buy)	\$ 33.75						10/27/2000	10/27/2009	Common Stock	24,000		24,000	D	
Non-Qualified Stock Option (right to buy)	\$ 34.67						11/08/2003	01/28/2013	Common Stock	12,500		12,500	D	

Non-Qualified Stock Option (right to buy)	\$ 37.05						11/08/2003	11/08/2012	Common Stock	6,250		6,250	D	
Non-Qualified Stock Option (right to buy)	\$ 40.66						10/27/2004	08/02/2014	Common Stock	6,000		6,000	D	
Non-Qualified Stock Option (right to buy)	\$ 41.79						09/21/2005	09/21/2014	Common Stock	75,000		75,000	D	
Non-Qualified Stock Option (right to buy)	\$ 44.6875						08/13/2001	08/13/2010	Common Stock	17,500		17,500	D	
Non-Qualified Stock Option (right to buy)	\$ 45.16						10/27/2004	04/26/2014	Common Stock	10,000		10,000	D	
Non-Qualified Stock Option (right to buy)	\$ 47.95						09/26/2006	09/26/2012	Common Stock	75,000		75,000	D	
Non-Qualified Stock Option (right to buy)	\$ 51.229						11/08/2003	07/30/2013	Common Stock	6,250		6,250	D	
Non-Qualified Stock Option (right to buy)	\$ 53.86						10/27/2004	10/27/2013	Common Stock	16,000		16,000	D	
Non-Qualified Stock Option (right to buy)	\$ 58.10						10/27/2004	01/27/2014	Common Stock	8,000		8,000	D	

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
COHEN AVI C/O KLA-TENCOR CORPORATION 160 RIO ROBLES SAN JOSE, CA 95130			VP, Pattern Solutions Group	

Signatures

By: Stuart J. Nichols For: Avi Cohen	12/16/2005
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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.

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.