

August 9, 2007



KLA-Tencor Declares Regular Cash Dividend for First Quarter Fiscal Year 2008 and Announces an Additional 10 Million Share Repurchase Program

MILPITAS, Calif.--(BUSINESS WIRE)--

KLA-Tencor Corporation (NASDAQ:KLAC) today announced that its Board of Directors has declared a quarterly cash dividend of \$0.15 per share on its common stock, an increase from \$0.12 per share, payable on September 1, 2007 to KLA-Tencor stockholders of record on August 20, 2007.

KLA-Tencor further announced that its Board of Directors has approved an additional 10 million share repurchase. The 10 million share repurchase authorization is in addition to previous authorizations.

About KLA-Tencor: KLA-Tencor is the world leader in yield management and process control solutions for semiconductor manufacturing and related industries. Headquartered in San Jose, Calif., the company has sales and service offices around the world. An S&P 500 company, KLA-Tencor is traded on the NASDAQ Global Select Market under the symbol KLAC. Additional information about the company is available on the Internet at <http://www.kla-tencor.com>.

Source: KLA-Tencor Corporation