

Limited Power of Attorney - Securities Law Compliance

This statement confirms that the undersigned, as a director (and, as of the date hereof, as a nominee for director) of KLA-Tencor Corporation (the "Corporation"), hereby appoints Brian Martin (in 1. complete and execute Forms ID, 3, 4 and 5 and other forms (including any amendments thereto) as such attorney-in-fact shall in his discretion determine to be required or advisable pursuant to 2. to do all acts necessary in order to file such forms with the SEC, or any securities exchange or national association, that the Corporation and such other person or agency as the attorney-in-fact shall determine to be necessary or advisable. The undersigned hereby ratifies and confirms all that said attorneys-in-fact and agents shall do or cause to be done by virtue hereof. The undersigned acknowledges that the foregoing attorneys-in-fact shall have the authority to execute this Limited Power of Attorney is executed at San Mateo, California as of the date set forth below.

Signature: /s/ Emiko Higashi
Print Name: Emiko Higashi
Dated: October 18, 2010

Witness:

Signature: /s/ William R. Daniels
Print Name: William R. Daniels
Dated: October 18, 2010