VIA U.S. MAIL and FACSIMILE

Timothy Morse Altera Corporation Chief Financial Officer 101 Innovation Drive San Jose, CA 95134

RE: Altera Corporation

Form 10-K for the fiscal year ended December 29, 2006

Filed February 27, 2007

Form 10-K/A for the year ended December 30, 2005

File No. 0-16617

Dear Mr. Morse:

We have reviewed your response dated April 27, 2007 and related filings and have the following comments. We have limited our review of your filing to those issues we have addressed in our comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Mr. Morse Altera Corporation May 8, 2007 Page 2

Form 10-K/A for the year ended December 30, 2005

Consolidated Financial Statements

Note 3. Restatement of Previously Issued Financial Statements, page 76

1. We reference your response to prior comment one in our letter dated April 6, 2007. In your next Form 10-Q, please disclose for each annual period preceding the most recent three years the restated stock compensation cost that should have been reported for each fiscal year, as required by paragraph 45.c.2 of SFAS 123. We reference the sample letter sent in response to inquiries related to filing restated financial statements for errors in accounting for stock option grants, available at http://sec.gov/divisions/corpfin/guidance/oilgasltr012007.htm

As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter with your response that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your responses to our comments.

You may contact Kristin Lochhead at (202) 551-3664 or me at (202) 551-3676 if you have questions. In this regard, please do not hesitate to contact Martin James, Senior Assistant Chief Accountant, at (202) 551-3671 with any other questions.

Sincerely,

Brian Cascio Accounting Branch Chief