Mail Stop 6010

October 23, 2006

By U.S. Mail and Facsimile to (408) 433-7306

Mr. Bryon Look Executive Vice President and Chief Financial Officer LSI Logic Corporation 1621 Barber Lane Milpitas, California 95035

RE: LSI Logic Corporation Form 10-Q for the quarterly period ended July 2, 2006 File No. 1-10317

Dear Mr. Look:

We have reviewed your letter dated on September 22, 2006 and have the following comments. Where indicated, we think you should revise your future documents 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. Bryon Look LSI Logic Corporation October 23, 2006 Page 2

Form 10-Q for the quarterly period ended July 2, 2006

Note 3 – Restructuring and Other Items, page 13

1. We see that you recorded a \$12.5 million gain in connection with the sale of your Gresham, Oregon facility. We also see that you entered into certain agreements with the purchaser, including a multi-year wafer supply and test agreement, intellectual property license agreement, transition services agreement and a facilities use agreement. Please revise future filings to better describe the nature of your obligations under these agreements and to disclose why you did not defer any portion of the gain from the sale of the Gresham facility. Please address how your apparent continuing involvement with the purchaser as indicated by the aforementioned agreements impacted your accounting conclusions.

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 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 Eric Atallah, Staff Accountant at (202) 551-3663 or me at (202) 551-3603 regarding comments on the financial statements and related matters. In this regard, do not hesitate to contact Angela Crane, Branch Chief, at (202) 551-3554 with any other questions.

Sincerely,

Jay Webb Review Accountant