

Mail Stop 6010

July 2, 2008

Mohan R. Maheswaran
Chief Executive Officer
Semtech Corporation
200 Flynn Road
Camarillo, California 93012-8790

Re: Semtech Corporation
Form 10-K for the Fiscal Year Ended January 27, 2008
Filed March 27, 2008
File No. 1-06395

Dear Mr. Maheswaran:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your documents in response to these comments. If you disagree, we will consider your explanation as to why our comments are 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.

Item 1. Business

Customers, Sales Data and Backlog, page 7

1. Please provide us with your analysis as to how you determined that the customers identified in the table here, as well as on pages 2 and 27, are representative of your customer base.

2. You disclose that one end-customer, which is a major manufacturer of handheld systems and consumer equipment, accounted for 13% of your net sales in fiscal year 2008, 10% of net sales in fiscal year 2007, and 11% of net sales in fiscal year 2006. You also disclose that one of your Asian distributors accounted for approximately 16% of your net sales in fiscal year 2008 and 12% of net sales in fiscal year 2007. In all applicable future filings, please disclose the name of any customer and its relationship, if any, with you and your subsidiaries, if sales to the customer by one or more segments are made in an aggregate amount equal to 10% or more of your consolidated revenues and the loss of such customer would have a material adverse effect on you and your subsidiaries taken as a whole. Refer to Item 101(c)(vii) of Regulation S-K.

Management's Discussion & Analysis, page 27

Fiscal Year 2008 Compared With Fiscal Year 2007, page 32

3. In future filings, to the extent practicable, separately quantify the components of your line item results. For instance, how much of the 12% increase in net sales in 2008 was attributable to market conditions, and how much was attributable to improvements in your execution? Further, clarify phrases such as "improvements in the Company's overall execution."

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 comment 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.

Please contact Mary Beth Breslin at (202) 551-3625, or me at (202) 551-3635 with any questions.

Sincerely,

Tim Buchmiller
Senior Attorney