



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

June 24, 2010

Via Facsimile and U.S. Mail

Mr. Emeka Chukwu
Chief Financial Officer
Semtech Corporation
200 Flynn Road
Camarillo, California 93012-8790

**Re: Semtech Corporation
Form 10-K for the Fiscal Year Ended January 31, 2010
Filed April 1, 2010
Form 8-K filed on March 10, 2010
File No. 001-06395**

Dear Dr. Chukwu:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Form 10-K for the Fiscal Year Ended January 31, 2010

Note 1. Business and Significant Accounting Policies, page 43

-Segment Information, page 43

1. We note your disclosures here and on page 64 that you operate in one reportable segment. However, we note your disclosure regarding goodwill on page 44 that you have determined the reporting units at the operating segment level, which is the level that your

management regularly reviews operating results and makes resource allocation decisions. You further state that the goodwill associated with the Xemics SA acquisition is included in one reporting unit and the goodwill associated with the SMI acquisition is included in a separate reporting unit. Please explain to us in more clear and concise terms if you operate in one segment or within two segments. To the extent you have determined you have two operating segments, discuss how you have considered the guidance in paragraphs 280-10-50-10 through 280-10-50-19 in concluding that you have only one reportable segment.

Note 4. Acquisitions, page 49

2. We note that you acquired \$59.9 million of core technology related to your acquisition of Sierra Monolithics, Inc. Please revise future filings to explain in greater detail the nature of this core technology, including a discussion of how you determined the fair value of this technology and how it meets the definition of an intangible asset that should be recognized separately from goodwill. Refer to the guidance in 805-20-55-2 through 55-5 and 805-20-55-38 of the FASB Accounting Standards Codification.
3. With a view towards disclosure, please revise your future filings within your critical accounting policies in MD&A to disclose in more detail how you determined the fair value of the intangible assets assumed including the methodology utilized and a discussion the significant assumptions utilized in the valuation model.

Note 9. Stock Option Awards, page 54

4. Please revise this note in future filings to disclose the how you determined the significant assumptions such as the risk free interest rate, dividend rate, expected life, etc. utilized in the Black-Scholes Model used to value your outstanding stock options. Refer to the guidance in 718-10-50-2 of the FASB Accounting Standard Codification.

Note 10. Income Taxes, page 53

5. We note your disclosures here that in connection with your acquisition of Sierra Monolithics, Inc., you concluded that \$120 million of the foreign earnings were not permanently reinvested offshore and that it resulted in \$38.3 million increase in your tax provision in fiscal 2010. Please explain to us in greater detail the factors that caused you to change these assertions. Clarify for us if the change in assertion was made for the purpose of funding the acquisition or to fund other initiatives in connection with the acquisition. In this regard, tell us how you considered this change in assertion in connection with your disclosures under "Liquidity and Capital Resources" within MD&A.

Form 8-K filed on March 10, 2010

6. We note that you have provided a forward-looking non-GAAP financial measure of non-GAAP earnings per diluted share for the first quarter ended May 2, 2010. However, we do not see where you have provided a reconciliation of this forward-looking non-GAAP financial measure with the corresponding forward-looking GAAP financial measure as required by Regulation G or otherwise provided the disclosures required by Regulation G for forward-looking non-GAAP financial measures. Please revise future filings to comply by providing reconciling information that is available without unreasonable effort. As applicable, include clear disclosure of why any forward-looking GAAP information is not accessible. Identify such information that is unavailable and disclose its probable significance. Refer to the guidance in Regulation G.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

You may contact Tara Harkins, Staff Accountant, at (202) 551-3639 or me at (202) 551-3643 if you have questions regarding these comments. In this regard, do not hesitate to contact Martin James, Senior Assistant Chief Accountant, at (202) 551-3671.

Sincerely,

Kevin L. Vaughn
Accounting Branch Chief