

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

November 4, 2010

Necip Sayiner Chief Executive Officer Silicon Laboratories Inc. 400 West Cesar Chavez Austin, TX 78701

Re: Silicon Laboratories Inc.

Form 10-K for the Year Ended January 2, 2010

Filed February 10, 2010 File No. 000-29823

Dear Mr. Sayiner:

We have limited our review of your filing to those issues we have addressed in our 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 amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comment applies to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to the comment, we may have additional comments.

Executive Compensation, page 51

- 1. We continue to evaluate your response to prior comment 1. With a view towards disclosure, please expand your response to tell us:
 - how you calculated Adjusted Operating Income;
 - what were the actual MBO's for each of your executive officers other than your CEO and CFO and how would disclosure of such information cause competitive harm;
 - how you calculated the amounts of additional special bonus payments awarded in December 2009;

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- how you calculated the threshold amounts disclosed in your Grants of Plan Based Awards tables; and
- how your guidance to investors about your financial outlook compared to the compensation targets you provided in your prior response. If such targets were substantially similar, please tell us why disclosure of the targets is likely to cause substantial competitive harm. If, however, the amounts were not substantially similar, please tell us why you believe you need not disclose the extent to which you are paying officers for performance that is not similar to the projections you are providing investors.

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.

Please contact Joseph McCann, Staff Attorney, at (202) 551-6262, or Jay Mumford, Senior Attorney, at (202) 551-3637 if you have questions on the comments.

Sincerely,

Russell Mancuso Branch Chief

cc: Nester Ho, Esq. - General Counsel