



Silicon Laboratories Inc.
400 West Cesar Chavez
Austin, TX 78701

September 10, 2010

Via EDGAR

Jay Mumford, Senior Attorney
Joseph McCann, Staff Attorney
Division of Corporation Finance
Securities and Exchange Commission
Mail Stop 3030
100 F Street, N.E.
Washington, DC 20549-3030

**Re: Silicon Laboratories Inc.
Form 10-K for the Year Ended January 2, 2010
Filed February 10, 2010
SEC File No. 000-29823**

Dear Gentlemen:

This letter provides the response of Silicon Laboratories Inc. (the "**Company**") to the comments in your letter dated August 27, 2010. For your convenience, we have restated your comments in full in italics and have included our response below your comments.

Executive Compensation, page 51

1. *We note your response to prior comment 3 that Item 402(s) of Regulation S-K does not impose an affirmative disclosure obligation. Nonetheless, we ask that you tell us the basis for your conclusion that disclosure is not necessary and describe the process you undertook to reach that conclusion.*

Our compensation committee, in consultation with the our vice president of human resources and outside legal counsel, reviewed the Company's compensation policies and practices and did not identify any policies or practices that the committee believed would be reasonably likely to have a material adverse effect on the Company.

2. *Please expand your response to prior comment 6 to analyze the specific events that occurred that would cause disclosure of 2009 targets to result in competitive harm.*

We would like to emphasize that we participate in a highly competitive industry in which a few pennies of pricing can make the difference between success and failure. Our annual operating plan, upon which our performance targets are based, is highly confidential and such confidentiality is maintained even following the completion of the applicable year. If we were to disclose prior year targets that indicated that our actual revenue or gross margin performance exceeded our expectations, our customers and suppliers would have increased leverage in future pricing negotiations. Conversely, if we were to disclose that our revenue and gross margin performance was below our targeted levels, our competitors would know that they were harming us and could lead to further pricing pressure and competitive harm.

In addition, as we noted in our prior response, significant events such as the disposition of our AERO product lines in 2007 may be factored into a given year's performance targets. If we were to follow a practice of generally disclosing prior year performance targets and then withheld those performance targets in a given year, our competitors could point to that omission to support rumors of such a disposition. Accordingly, we believe that disclosing prior year targets in certain years and not in others could lead to competitive harm.

The Company acknowledges that:

- the Company is responsible for the adequacy and accuracy of the disclosure in its 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.

If you have any further questions, please contact me at (512) 464-9295.

Very truly yours,

/s/ Nestor F. Ho

Nestor F. Ho
General Counsel

cc: Philip Russell, DLA Piper LLP (US)
