

Silicon Laboratories Inc.
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Austin, TX 78735
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January 6, 2006
Via Federal Express/EDGAR

Mr. Kevin Vaughn
Reviewing Accountant
Division of Corporation Finance
Securities and Exchange Commission
Mail Stop 6010
100 F. Street, N.E.
Washington, DC 20549

**Re: Silicon Laboratories Inc.
Form 10-K for the Fiscal Year Ended January 1, 2005
Form 10-K/A for the Fiscal Year Ended January 1, 2005
Forms 10-Q for the Fiscal Quarters April 2, 2005, July 2, 2005 and October 1, 2005
File No. 000-29823**

Dear Mr. Vaughn:

This letter provides the response of Silicon Laboratories Inc. (the "**Company**") to the comments in your letter dated December 22, 2005 concerning our Annual Reports on Form 10-K and Form 10-K/A for the fiscal year ended January 1, 2005 and our Quarterly Reports on Form 10-Q for the fiscal quarters ended April 2, 2005, July 2, 2005 and October 1, 2005. For your convenience, we have restated your comments in full in italics and have included our response below each comment.

Form 10-K for the Fiscal Year Ended January 1, 2005

Consolidated Financial Statements

Consolidated Statements of Income, page F-4

1. *We note that you have presented your stock-based compensation as a separate line item in your consolidated statements of operations. Please revise future filings to present the amounts of stock-based compensation within the appropriate functional categories, i.e., cost of revenues, research and development and SG&A, based on the classification of the related cash compensation paid to the employees receiving stock-based compensation. We refer you to SAB Topic 11.F.*

We will revise our presentation in future filings in response to this comment.

Form 10-Q for the Fiscal Quarter Ended October 1, 2005

Note 5. Acquisitions, page 11

2. *We note that you acquired research and development valued at \$13.7 million as a result of your acquisition of Silicon MAGIKE, and you expensed this amount as in-process research and development expenses (IPR&D) in your consolidated statement of operations for the quarter ended October 1, 2005. In future filings, beginning with your 2005 Form 10-K, please provide the following disclosures in the notes to your financial statements:*
 - *Disclose the appraisal method used to value IPR&D costs acquired;*
 - *Discuss all significant assumptions made and estimates used in determining the assigned values to each significant IPR&D project such as the risk adjusted discount rate applied to the project's cash flows and period in which material net cash inflows from significant projects are expected to commence;*
 - *Describe each significant IPR&D project acquired; and*
 - *Present in tabular format the fair value assigned to each project acquired and projected costs to complete by project;*

For each project, disclose in MD&A the status of the development, stage of completion at acquisition date, the nature and timing of the remaining efforts for completion, anticipated completion date and the date you will begin benefiting from the projects, the risks and uncertainties associated with completing development within a reasonable period of time, and the risks involved if the IPR&D projects are not completed on a timely basis.

Additionally, in your MD&A in subsequent filings, provide a detailed discussion of the status of your efforts for completion of the R&D project(s) and the impact from any delays. Also, provide an explanation of material variations between projected results and actual results and how failure to achieve projected results impacted (or will impact) expected return on investment, future results, and financial condition.

We will expand our disclosures in future filings in response to this comment.

3. *We note that you allocated a total of \$1,143,000 of the Silicon MAGIKE purchase price to "employees with skills, knowledge and relationships" and "assembled workforce" and that you are amortizing these intangible assets over five years. These categories of intangible assets do not appear to*

qualify for recognition apart from goodwill as specified in paragraph 39 of SFAS 141. Specifically, these assets do not appear to arise from contractual or legal rights nor do they appear to be separable. Please revise your accounting in future filings as appropriate, or tell us why you believe your accounting is appropriate.

On a supplemental basis, we respectfully advise the Staff that the Company considers Silicon MAGIKE a development stage enterprise that does not meet the definition of a business as set forth in EITF 98-3, "Determining Whether a Nonmonetary Transaction Involves Receipt of Productive Assets or of a Business." The Company believes that under paragraph 9 of SFAS 141, "Business Combinations," this transaction should not be accounted for as a business combination. Silicon MAGIKE was primarily focused on research and development since its founding. It had not commenced planned principal operations and did not have products, customers or revenues. The Company applied paragraph 9 of SFAS 142, "Goodwill and Other Intangible Assets," to determine the intangible assets acquired.

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As requested, Silicon Laboratories Inc. acknowledges that:

- Silicon Laboratories Inc. is responsible for the adequacy and accuracy of the disclosure in its filings;
- 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
- Silicon Laboratories Inc. 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 or comments, please contact Philip Russell of DLA Piper Rudnick Gray Cary US LLP, our outside corporate counsel at (512) 457-7015.

Very truly yours,

/s/ Russell J. Brennan

Russell J. Brennan
Vice President and Chief Financial Officer

cc: Necip Sayiner
Philip Russell, DLA Piper Rudnick Gray Cary US LLP
Brad Lindholm, Ernst & Young LLP

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