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

October 23, 2007

Via FEDEX /EDGAR

Ms. Hanna T. Teshome Special Counsel Division of Corporation Finance Securities and Exchange Commission Mail Stop 3561 450 Fifth Street, N.W. Washington, DC 20549-3561

Re: Silicon Laboratories Inc. Definitive 14A Filed March 14, 2007 SEC File No. 000-29823

Dear Ladies and Gentlemen:

This letter provides the response of Silicon Laboratories Inc. (the "*Company*") to the comments in your letter dated August 21, 2007 concerning the Company's definitive proxy statement. For your convenience, we have restated your comments in full in italics and have included our response below each comment.

Policies and Procedures, page 14

1. Please provide the information required by Item 404(b) of Regulation S-K. Describe your policies and procedures for the review, approval, or ratification of any transaction required to be reported under Item 404(a), including, to the extent applicable, the material features described in Item 404(b)(1).

In future proxy statements, we will expand our disclosure in response to this comment. The material features of our policies and procedures with respect to such transactions are set forth in our 2007 proxy statement under the heading "Policies and Procedures with Respect to Related Party Transactions." Pursuant to the Audit Committee Charter, the Audit Committee shall review and approve any transaction that would be required to be disclosed pursuant to Item 404(a). As a function of the fiduciary duties imposed by law on the members of the Audit Committee in their capacity as directors of the Company, the standard to be applied is whether any such proposed transaction is in the best interest of the Company and its stockholders. The Audit Committee is responsible for applying such policies and procedures. Apart from the Audit Committee Charter, Code of Business Conduct and Ethics and Corporate Governance Policy described in the proxy statement, there is no additional written policy with respect to such transactions.

To assist with the identification of potential related party transactions, the Company solicits information through questionnaires in connection with the appointment of new directors and executive officers and on an annual basis with respect to existing directors and executive officers.

Compensation Discussion and Analysis, page 18

Compensation Philosophy, page 18

2. You indicate that the compensation arrangements for all named executive officers, except for the CEO, are based on the recommendations of the CEO to the compensation committee. Please revise your disclosure to further clarify the CEO's role in this regard. Please refer to Item 402(b)(2)(xv) of Regulation S-K.

In future proxy statements, we will expand our disclosure in response to this comment. The competitive market data prepared by the Compensation Committee's independent compensation consultant is the most important factor used in determining compensation. The CEO reviews the competitive market data and reviews the performance of each executive officer and considers market competitive pressures, business conditions, the vesting and value of current equity grants, our overall performance and the potential financial impact and then makes recommendations regarding adjustments to base salary, cash incentives or equity incentives relative to the compensation levels set forth in the competitive market data. The CEO conducts this review with assistance from the Company's human resources department. The CEO discusses his recommendations regarding compensation and the underlying rationale with the Compensation Committee. The Compensation Committee has full discretion to accept or reject the CEO's recommendations. The Compensation Committee conducts its own analysis and has full access to the competitive market data as well as the CEO's proposed adjustments. The Compensation Committee meets with the compensation consultant in executive session (without the CEO present) before making the ultimate decision regarding compensation.

3. With respect to the engagement of Aon Consulting and Watson Wyatt, please describe in greater detail the nature and the scope of their assignment and the material elements of the instructions and directions given to them with respect to the performance of their duties under the engagement. While you indicate that the consultant "assessed the competitiveness of [y]our executive compensation programs," this does not provide sufficient insight into the role of these entities in your compensation processes and procedures. Please refer to Item 407(e)(3)(iii) of Regulation S-K.

In future proxy statements, we will expand our disclosure in response to this comment. The compensation consultants were engaged to provide competitive market analysis and advice regarding each material element of compensation.

Competitive Analysis

At the direction of the Compensation Committee, the compensation consultants developed a proposed peer group based upon companies with comparable revenues in the Company's industry and circulated the list to the CEO and the director of human resources for their comments. The consultants had independent discussions with the Compensation Committee regarding such comments and final approval of the peer group was made by the Compensation Committee.

Consultation with Management

With the approval of the Compensation Committee, the compensation consultants provided advice to the CEO and the director of human resources regarding pay positioning, both by element and in total, so that management's final recommendations reflect the Company's compensation philosophy.

Discussions included potential adjustments in the cash incentive plan to reinforce the Company's pay for performance culture. Watson Wyatt also provided advice regarding the mix between RSUs and stock options associated with the Company's equity grants. Discussions were held to ensure that management was fully acquainted with the relative merits of using options versus RSUs as well as the mix between these two forms of equity incentives in relation to the Company's compensation philosphy.

Advice to the Compensation Committee

The consultants provided advice to the Compensation Committee regarding:

- development of the peer group and competitive market data;
- discussions with the Compensation Committee regarding interpretation of the competitive data and how the compensation levels established helped to promote the goals espoused in the company's compensation philosophy, both as to specific compensation elements as well as regarding total compensation;
- the potential implications of adopting the CEO's and management's recommendations regarding adjustments to the cash incentive plan;
- review of the CEO's and management's recommendations regarding type and magnitude of the equity grants, including how the suggested grants would compare to those of the peer group; and
- direct and independent discussions with the Compensation Committee regarding their proposed adjustments to each element of the CEO's pay package.
- 4. You state that you use peer group information and rely on it to determine various elements of compensation. You should specify how each element of compensation relates to the data you have analyzed from the comparator companies. Your disclosure should include a discussion of where actual payments fall within targeted parameters. To the extent actual compensation was outside a targeted percentile range, please explain why. Please refer to Item 402(b)(2)(xiv) of Regulation S-K.

In future proxy statements, we will expand our disclosure in response to this comment. As disclosed in the 2007 proxy statement, the Company targets base salaries at the median level, cash incentives as a percentage of base salary at the 75th percentile and long term incentives at the 75th percentile, in each case, relative to the comparator companies. For 2006, targeted cash incentives as a percentage of base salary were somewhat higher than the 75th percentile, but the bonuses were subject to an adjusted operating income multiplier which could materially reduce the bonus. As a result of the multiplier and the Company's actual financial results, actual cash incentives as a percentage of base salary were substantially lower than the 75th percentile. The degree to which the applicable targeted cash incentives were achieved can be seen through a comparison of the "Non-equity Incentive Plan Compensation" column of the Summary Compensation Table for Fiscal 2006 on page 22 against the "Estimated Future Payouts Under Non-equity Incentive Plan Awards" columns of the Grants of Plan-Based Awards Table for Fiscal 2006 on page 23. As disclosed in the 2007 proxy statement, after reviewing competitive practices and consulting with Watson Wyatt, the Compensation Committee concluded that the use of such multiplier for 2007.

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Concurrent with the removal of the multiplier, the Compensation Committee reduced the target bonus as a percentage of base salary from 100% to 75% for the Vice President of Worldwide Sales and the Vice President of Worldwide Operations (the two executive offices whose performance metrics do not include any adjusted operating income component). The Company does not believe that the variance with respect to the other elements of compensation was material.

Elements of Compensation, page 19

5. You have not provided a quantitative discussion of the terms of the necessary target or performance objectives to be achieved in order for your executive officers to earn their incentive compensation for 2006 or 2007. Please disclose the specific items of company performance, such as those relating to adjusted operating income, corporate revenue, and gross margin and how your incentive awards are specifically structured around such performance goals. To the extent you believe that disclosure of performance targets is not required because it would result in competitive harm such that it could be excluded under Instruction 4 to Item 402(b) of Regulation S-K, please provide a supplementary analysis supporting your conclusion. You should provide detailed explanation for your conclusion as to competitive harm and also revise your disclosure to discuss how difficult it would

be for the named executive officers or how likely it will be for you to achieve the undisclosed target levels or other factors. General statements regarding the level of difficulty, or ease associated with achieving performance goals, are not sufficient. In discussing how difficult it will be for an executive or how likely it will be for you to achieve the target levels or other factors, you should provide as much detail as necessary without providing information that would result in competitive harm.

In future proxy statements, we will expand our disclosure in response to this comment to elaborate further regarding the difficulty associated with achieving the undisclosed target levels. These performance targets are set at levels that represent challenging performance goals linked to achievement of the Company's operating plan. This "pay for performance" philosophy has been adhered to consistently over the Company's history and bonuses have been less than target in three of the past six years.

We have not disclosed specific targets with respect to adjusted operating income, corporate revenue, gross margin and MBOs as we believe this disclosure would result in competitive harm for the Company. The Company has not disclosed and does not intend to publicly disclose such confidential information. The targets contained in the confidential information are based upon the Company's internal financial plan which, even following the period covered by the financial plan, is not publicly disclosed by the Company.

The Company is a mixed-signal semiconductor company and is a relatively small company compared to many of its competitors. One of the more significant business risks to the Company is competition. The Company is subject to competition on a number of levels, including competition for employees (including executives), customers, contract manufacturers and suppliers. Many of the Company's competitors have far greater financial resources, name recognition and support services than the Company and are able to leverage such advantages in their pursuit of customer targets.

Public disclosure of such confidential information would cause substantial harm to the competitive position of the Company since disclosure could compromise not only the Company's ability to attract and retain qualified employees, including executive employees, but also reveal to competitors the Company's internal plans. Following the end of the compensation period, if such targets were disclosed, a competitor could use this information against the Company in competitive situations or where the competitor is seeking to hire an employee of the Company.

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Disclosure of such confidential information would furnish the Company's current and potential competitors with valuable forecast, business planning and other financial information which would otherwise remain confidential. For example, revenue objectives might reveal important insight into our new product introduction and growth strategies. Combined with gross margin objectives, competitors could also glean insight into our pricing strategies. Disclosure of this information would thereby benefit competitors at a great expense to the Company and the Company's stockholders.

6. You provide little discussion and analysis of the effect of individual performance on incentive compensation despite disclosure suggesting it is a significant factor considered by the committee. Please provide additional detail and an analysis of how individual performance contributed to actual 2006 compensation for the named executive officers. For example, disclose the elements of individual performance, both quantitative and qualitative, and specific contributions the compensation committee considered in its evaluation, and if applicable, how they were weighted and factored into specific compensation decisions. Please refer to Item 402(b)(2)(vii) of Regulation S-K.

In future proxy statements, we will expand our disclosure in response to this comment.

The cash incentives represented the actual performance relative to the applicable performance metrics established under the bonus plan (which were established at the beginning of the year and which are confidential as described under Comment 5 above) without any discretionary adjustment by the Compensation Committee. In 2006, achievement of MBOs represented 20% of the bonus criteria for the Vice President of Worldwide Sales and the Vice President of Worldwide Operations and 71% of the bonus criteria for the Vice President of Finance. The extent to which our executives achieved their MBOs was determined by our CEO during the performance of his annual review of the named executive officers.

Individual performance was one of the factors in determining the size of the equity awards allocated to each named executive officer as described in the 2007 proxy statement. The ultimate equity award was subjectively determined by the Compensation Committee, as there was no defined formula used to weight individual performance relative to the other factors mentioned in the 2007 proxy statement.

7. Although you discuss your compensation philosophy and the objectives of your compensation program, your disclosure does not have sufficient analysis of how the committee determined specific levels of compensation and how decisions regarding each component of compensation affected determinations regarding other elements. For example, you do not disclose how you arrived at and why you paid the compensation awarded under the cash incentive plan and little, if any, disclosure relating to how you determined specific equity awards. Although you disclose the existence of a variety of factors the committee considered in determining the appropriate amount and mix of equity compensation, you do not discuss the specific quantitative or qualitative factors upon which the committee based its determinations. Please provide a complete analysis of the factors considered by the committee in ultimately approving specific pieces of each named executive officers' compensation package and analyze the reasons why the committee believes that the amounts paid are appropriate in light of the various items it considered in making specific compensation decisions. Please refer to Item 402(b)(1) of Regulation S-K and revise your disclosure accordingly.

In future proxy statements, we will expand our disclosure in response to this comment. The Compensation Committee determined the compensation (including base salary, cash incentives and equity) of our named executive officers based upon the competitive market data prepared by the Compensation Committee's independent compensation consultant (and the Company's targeted percentile level with respect to each element of compensation as described in the response to Comment 4 above), the CEO's performance review of each executive officer, the market competitive pressures, business conditions, the vesting and value of current equity grants, our overall performance and the potential financial impact of the compensation decisions.

The cash incentive plan targets are established based upon the combination of the Company's targeted performance bonus and the Company's annual operating plan. The ultimate bonuses paid to such officers under the cash incentive plan were a function of the Company's actual financial performance during 2006 combined with, as applicable, the executive's achievement of the applicable MBOs.

There was no defined formula with respect to the relative weighting of the factors considered by the Compensation Committee in setting base salary, cash incentives and equity awards. The Compensation Committee ultimately exercised its judgment and established compensation levels consistent with the Company's short-term and long-term strategic goals and values and to reward and retain talented individuals.

8. We refer you to Securities Act Release 8732A, Section II.B.I. As noted in that section, the compensation discussion and analysis should be sufficiently precise to identify material differences in compensation policies for individual executive officers. We would expect to see a more detailed discussion of how and why the compensation of your highest-paid named executive officers differs from that of the other named executive officers. If policies or decisions relating to a named executive officer are materially different than the other officers, this should be discussed on an individualized basis.

In future proxy statements, we will expand our disclosure in response to this comment. The variation in compensation among the executive officers is a function of the Compensation Committee's judgment, following the Committee's review of competitive market data, review of the CEO's performance, review of the CEO's performance evaluations for each executive officer, and consideration of the market competitive pressures, business conditions, the vesting and value of current equity grants, overall Company performance and the potential financial impact of its compensation decisions. A key contributor to the variance amongst the officers is the variance in the competitive market data for each position.

9. You provide disclosure relating to the various post-employment termination benefits starting on page 25. In the compensation discussion and analysis, please describe and explain how the appropriate payment and benefit levels are determined under the various circumstances that trigger payments or provision of benefits under the employment agreements. Please refer to paragraphs (b)(1)(v) and (j)(3) of Item 402 of Regulation S-K. Also discuss how these arrangements fit into your overall compensation objectives and affect the decisions you made regarding other compensation elements and the rationale for decisions made in connection with these arrangements.

In future proxy statements, we will expand our disclosure in response to this comment. With respect to the employment agreements with the CEO and CFO, such post-employment termination benefits were determined through arms-length negotiations between the applicable executive and the Company's management and the Company's Compensation Committee in connection with the hiring of each such executive.

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With respect to the acceleration provided generally under 2000 Stock Incentive Plan in the event that (a) the equity awards are not assumed in connection with a change in control or (b) the employee is demoted, relocated or terminated other than for misconduct within 18 months following a change in control, such acceleration is based upon the Company's philosophy that such provisions ensure that the executives remain focused on their responsibilities and maximize the return for our shareholders.

Cash Incentives, page 20

10. With respect to amounts awarded under the cash bonus plan, please revise your disclosure to address how the committee determined the specific awards based upon the achievement or non-achievement of the relevant performance metric. We would expect to see disclosure addressing the extent to which target or maximum levels of performance goals were achieved and how achievement of the various corporate performance objectives and individual goals resulted in specific payouts under the plan. Please refer to Item 402(b)(1)(v) of Regulation S-K.

In future proxy statements, we will expand our disclosure in response to this comment. The specific dollar amount of the awards are determined based upon achievement of the applicable performance metrics which were established at the beginning of the year and which have been described in the "Cash Incentives" section of the 2007 proxy statement. With respect to financial metrics, such amounts are determined by reference to the Company's recorded financial performance. With respect to MBOs, such amounts are determined based upon the CEO's assessment of the executive officer's achievement of the applicable MBO. No additional discretion was exercised by the Board or Compensation Committee to increase or decrease the size of the specific award. The degree to which the applicable targeted performance goals were achieved can be seen through a comparison of the "Non-equity Incentive Plan Compensation" column of the Summary Compensation Table for Fiscal 2006 on page 22 against the "Estimated Future Payouts Under Non-equity Incentive Plan Awards" columns of the Grants of Plan-Based Awards Table for Fiscal 2006 on page 23.

11. Please discuss whether discretion can be or has been exercised by the board or compensation committee either to award compensation absent attainment of the relevant performance goal(s) or to reduce or increase the size of any award or payout. Identify any particular exercise of discretion, and state whether it applied to one or more specified named executive officers or to all compensation subject to the relevant performance goal(s). Please refer to Item 402(b)(2)(vi) of Regulation S-K.

In future proxy statements, we will expand our disclosure in response to this comment. Such discretion can be exercised by the Board or the Compensation Committee, but was not exercised with respect to the period covered by the 2007 proxy statement. Given the standard, broad discretion of the Board with respect to compensation under applicable law and the lack of exercise of such discretion during the relevant period, no further disclosure regarding this topic was deemed material with respect to the 2007 proxy statement.

Equity Incentives, page 20

12. It does not appear as though you have addressed the timing of equity awards as it relates to release of material non-public information. Please refer to Section II. A of Release 33-8732A, which discusses the concepts you should consider when drafting disclosure relating to option timing. Please give adequate consideration to the elements and questions set forth in this section of the Release when drafting the appropriate corresponding disclosure.

In future proxy statements, we will expand our disclosure in response to this comment. The Company does not have a program, plan or practice designed to (a) set the exercise price of stock options at a price other than the fair market value on the grant date or (b) alter the timing of the grant of stock options to take advantage of positive or negative material non-public information.

As requested, Silicon Laboratories Inc. acknowledges that:

- Silicon Laboratories Inc. is responsible for the adequacy and accuracy of the disclosure in its filing;
- Staff comments or changes to disclosure in response to staff comments in the filings reviewed by the staff 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 US LLP at (512) 457-7015, our outside corporate counsel.

Very truly yours,

/s/ William G. Bock

William G. Bock Senior Vice President of Finance and Administration and Chief Financial Officer

cc: Necip Sayiner, CEO of Silicon Laboratories Inc. Philip Russell, DLA Piper US LLP