

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM S-8**REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933****SILICON LABORATORIES INC.**

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

74-2793174

(I.R.S Employer Identification No.)

400 West Cesar Chavez**Austin, Texas 78701**

(Address, including zip code, of registrant's principal executive offices)

**SILICON LABORATORIES INC.
2009 STOCK INCENTIVE PLAN****SILICON LABORATORIES INC.
2009 EMPLOYEE STOCK PURCHASE PLAN**

(Full Title of the Plans)

Necip Sayiner**Chief Executive Officer and President****400 West Cesar Chavez****Austin, Texas 78701**

(Name and Address of Agent for Service)

(512) 416-8500

(Telephone Number, Including Area Code, of Agent for Service)

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a small reporting company. See definition of "large accelerated filer," "accelerated filer" and "small reporting company" in Rule 12b-2 of the Exchange Act (Check One):

Large accelerated filer Accelerated filer Non-accelerated filer Small Reporting Company

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	Amount to be Registered (1)	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock, \$0.0001 par value per share	6,800,000(2)	\$ 28.01	\$ 190,468,000	\$ 10,628.11(4)
	1,250,000(3)	\$ 23.81	\$ 29,762,500	\$ 1,660.75(5)
	8,050,000			\$ 12,288.86

- (1) Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement on Form S-8 (this "Registration Statement") shall also cover any additional shares of Common Stock, par value \$0.0001 per share (the "Common Stock"), of Silicon Laboratories Inc. (the "Registrant") which become issuable under the Silicon Laboratories Inc. 2009 Stock Incentive Plan (the "2009 Stock Plan") and the Silicon Laboratories Inc. 2009 Employee Stock Purchase Plan (the "2009 ESPP") by reason of any stock dividend, stock split, recapitalization or other similar transaction effected without the Registrant's receipt of consideration which results in an increase in the number of outstanding shares of the Registrant's Common Stock.
- (2) Represents the aggregate number of shares of Common Stock of the Registrant available for issuance under the 2009 Stock Plan.
- (3) Represents the aggregate number of shares of Common Stock of the Registrant available for issuance under the 2009 ESPP.
- (4) Estimated in accordance with Rule 457(c) and Rule 457(h) under the Securities Act solely for the purpose of calculating the registration fee of shares of the Registrant's Common Stock reserved for future issuance under the 2009 Stock Plan. The computation is based on the average of the high and low prices of the Registrant's Common Stock as reported on NASDAQ Global Select Market on April 24, 2009.
- (5) Estimated in accordance with Rule 457(c) and Rule 457(h) under the Securities Act solely for the purposes of calculating the registration fee of the

Registrant's Common Stock reserved for future issuance under the 2009 ESPP. The computation is based on 85% of the average of the high and low prices of the Registrant's Common Stock as reported on NASDAQ Global Select Market on April 24, 2009. Pursuant to the 2009 ESPP, the purchase price of a share of the Registrant's Common Stock is 85% of the fair market value of the Common Stock.

PART I

INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

The documents containing the information specified in Part I of this Registration Statement on Form S-8 (this "Registration Statement") will be delivered or made available to participants as specified by Rule 428(b)(1) of the Securities Act of 1933, as amended (the "Securities Act"). Such documents need not be filed with the Securities and Exchange Commission (the "Commission") either as part of this Registration Statement or as prospectuses or prospectus supplements pursuant to Rule 424 of the Securities Act. These documents and the documents incorporated by reference in this Registration Statement pursuant to Item 3 (Part II of this Registration Statement), taken together, constitute a prospectus that meets the requirements of Section 10(a) of the Securities Act.

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PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents filed by Silicon Laboratories Inc. (the "Registrant") with the Commission are incorporated by reference into this Registration Statement:

(a) The Registrant's Annual Report on Form 10-K for the fiscal year ended January 3, 2009, filed with the Commission on February 11, 2009;

(b) The Registrant's Quarterly Report on Form 10-Q for the quarter ended April 4, 2009, filed with the Commission on April 30, 2009, and the Registrant's Current Reports on Form 8-K filed with the Commission on January 29, 2009 and April 27, 2009, and all other reports filed pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") since the end of the fiscal year covered by the Registrant's latest Annual Report referred to in (a) above, provided that any portions of such reports that are deemed furnished and not filed pursuant to the instructions to Form 8-K shall not be incorporated by reference into this Registration Statement;

(c) The description of the Registrant's Common Stock which is contained in its Registration Statement No. 000-29823 on Form 8-A filed with the Commission on March 7, 2000 pursuant to Section 12 of the Exchange Act, including any amendment or report filed for the purpose of updating such description.

In addition, all documents filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act after the date of this Registration Statement, and prior to the filing of a post-effective amendment which indicates that all securities offered hereby have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference in this Registration Statement and to be a part hereof from the date of filing of such documents.

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

Not applicable.

Item 6. Indemnification of Directors and Officers.

Section 145 of the Delaware General Corporation Law (the "DGCL") provides, in effect, that any person made a party to any action by reason of the fact that he is or was a director, officer, employee or agent of the Registrant may and, in some cases, must be indemnified by the Registrant against, in the case of a non-derivative action, judgments, fines, amounts paid in settlement and reasonable expenses (including attorneys' fees) incurred by him as a result of such action, and in the case of a derivative action, against expenses (including attorneys' fees), if in either type of action he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the Registrant. This indemnification does not apply, in a derivative action, to matters as to which it is adjudged that the director, officer, employee or agent is liable to the Registrant, unless upon court order it is determined

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that, despite such adjudication of liability, but in view of all the circumstances of the case, he is fairly and reasonably entitled to indemnity for expenses, and, in a non-derivative action, to any criminal proceeding in which such person had no reasonable cause to believe his conduct was unlawful.

The Registrant's certificate of incorporation provides that no director shall be liable to the Registrant or its stockholders for monetary damages for breach of fiduciary duty as a director to the fullest extent permitted by the DGCL. The Registrant's bylaws require it to indemnify its directors and executive officers to

the fullest extent permitted by Delaware law. The Registrant has entered into indemnification agreements with all of its directors and executive officers and has purchased directors' and officers' liability insurance.

Reference is made to the underwriting agreement filed as Exhibit 1.1 to Registrant's Registration Statement No. 333-94853, pursuant to which the underwriters have agreed to indemnify the Registrant's officers and directors against certain liabilities under the Securities Act.

Item 7. Exemption From Registration Claimed.

Not applicable.

Item 8. Exhibits.

Exhibit Number	Description
4.1	Form of Fourth Amended and Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.1 to the Registrant's Registration Statement on Form S-1 (SEC File No. 333-94853))
4.2	Second Amended and Restated Bylaws of the Registrant (incorporated by reference to Exhibit 3.2 to the Registrant's Annual Report on Form 10-K for the fiscal year ended January 3, 2004)
5.1	Opinion of Baker & McKenzie LLP
23.1	Consent of Baker & McKenzie LLP (included in Exhibit 5.1)
23.2	Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm
24.1	Power of Attorney (included within signature page to this Registration Statement)
99.1*	Silicon Laboratories Inc. 2009 Stock Incentive Plan
99.2**	Silicon Laboratories Inc. 2009 Employee Stock Purchase Plan

* Exhibit 99.1 is incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K filed with the Commission on April 27, 2009.

** Exhibit 99.2 is incorporated by reference to Exhibit 10.2 to the Registrant's Form 8-K filed with the Commission on April 27, 2009.

Item 9. Undertakings.

(A) The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement;

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement;

Provided, however, that paragraphs (1)(i) and (1)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the Registrant pursuant to section 13 or section 15(d) of the Exchange Act that are incorporated by reference in the Registration Statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(B) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(C) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions or otherwise, the Registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any

action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question of whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant, Silicon Laboratories Inc., certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Austin, State of Texas, on April 30, 2009.

SILICON LABORATORIES INC.

By: /s/ Necip Sayiner
 Necip Sayiner
 Chief Executive Officer, President and Director

POWER OF ATTORNEY

Each person whose signature appears below constitutes and appoints Necip Sayiner and William G. Bock, and each of them, acting individually, as his or her attorney-in-fact, each with the power of substitution, for him in any and all capacities, to sign any amendment to this Registration Statement and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting to said attorneys-in-fact full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming the said attorney-in-fact or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Capacity</u>	<u>Date</u>
<u>/s/ Navdeep S. Sooch</u> Navdeep S. Sooch	Chairman of the Board	April 30, 2009
<u>/s/ Necip Sayiner</u> Necip Sayiner	Chief Executive Officer, President and Director (Principal Executive Officer)	April 30, 2009
<u>/s/ William G. Bock</u> William G. Bock	Senior Vice President and Chief Financial Officer (Principal Financial Officer)	April 30, 2009
<u>/s/ Paul V. Walsh, Jr.</u> Paul V. Walsh, Jr.	Chief Accounting Officer and Vice President of Finance (Principal Accounting Officer)	April 30, 2009
<u>/s/ David R. Welland</u> David R. Welland	Director	April 30, 2009
<u>/s/ Harvey B. Cash</u> Harvey B. Cash	Director	April 30, 2009

<u>/s/ Nelson C. Chan</u> Nelson C. Chan	Director	April 30, 2009
<u>/s/ Robert Ted Enloe, III</u> Robert Ted Enloe, III	Director	April 30, 2009
<u>/s/ Kristen M. Onken</u> Kristen M. Onken	Director	April 30, 2009
<u>/s/ Laurence G. Walker</u> Laurence G. Walker	Director	April 30, 2009
<u>/s/ William P. Wood</u> William P. Wood	Director	April 30, 2009

INDEX TO EXHIBITS

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- 23.1 Consent of Baker & McKenzie LLP (included in Exhibit 5.1)
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Asia PacificBangkok
Beijing
Hanoi
Ho Chi Minh City
Hong Kong
Jakarta
Kuala Lumpur
Manila
Melbourne
Shanghai
Singapore
Sydney
Taipei
Tokyo

April 23, 2009

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

RE: RE: Silicon Laboratories Inc. - Registration Statement on Form S-8

Ladies and Gentlemen:

We have acted as counsel to Silicon Laboratories Inc., a Delaware corporation (the "Company"), in connection with the registration on Form S-8 (the "Registration Statement") under the Securities Act of 1933, as amended, of an aggregate of 8,050,000 shares of the Company's common stock (the "Shares"), 6,800,000 of which are pursuant to the Company's 2009 Stock Incentive Plan (the "2009 Stock Plan") and 1,250,000 of which are pursuant to the Company's 2009 Employee Stock Purchase Plan (the "2009 ESPP," and, together with the 2009 Stock Plan, the "Plans"). This opinion is being furnished in accordance with the requirements of Item 8 of Form S-8 and Item 601(b)(5)(i) of Regulation S-K.

We have assumed the genuineness and authenticity of all documents submitted to us as originals, the conformity to originals of all documents submitted to us as copies thereof, and due execution and delivery of all documents where due execution and delivery are a prerequisite to the effectiveness thereof.

We have reviewed the Company's charter documents and the corporate proceedings taken by the Company in connection with the establishment of the Plans. Based on such review, we are of the opinion that if, as and when the Shares are issued and sold (and the consideration therefor received) pursuant to the provisions of the 2009 Stock Plan or the 2009 ESPP, as the case may be, and in accordance with the Registration Statement, the Shares will be duly authorized, legally issued, fully paid and non-assessable.

Europe & Middle EastAlmaty
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Brussels
Budapest
Cairo
Düsseldorf
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Geneva
Kyiv
London
Madrid
Milan
Moscow
Munich
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Prague
Riyadh
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Porto Alegre
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San Francisco
Santiago
Sao Paulo
Tijuana
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Washington, DC

This opinion letter is rendered as of the date first written above and we disclaim any obligation to advise you of facts, circumstances, events or developments which hereafter may be brought to our attention and which may alter, affect or modify the opinion expressed herein. Our opinion is expressly limited to the matters set forth above and we render no opinion, whether by implication or otherwise, as to any other matters relating to the Company, the Plans or the Shares. We consent to the filing of this opinion letter as Exhibit 5.1 to the Registration Statement.

Very truly yours,

/s/ Baker & McKenzie LLP

BAKER & MCKENZIE LLP

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the 2009 Stock Incentive Plan and the 2009 Employee Stock Purchase Plan of Silicon Laboratories Inc., of our reports dated February 10, 2009, with respect to the consolidated financial statements of Silicon Laboratories Inc. included in its Annual Report (Form 10-K) for the year ended January 3, 2009, and the effectiveness of internal control over financial reporting of Silicon Laboratories Inc. filed with the Securities and Exchange Commission.

/s/ ERNST & YOUNG LLP

Austin, Texas
April 29, 2009
