
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

FORM S-8
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

ON SEMICONDUCTOR CORPORATION

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

36-3840979
(I.R.S. Employer
Identification No.)

5005 E. McDowell Road
Phoenix, Arizona 85008
(Address of Principal Executive Offices) (Zip Code)

ON SEMICONDUCTOR CORPORATION 2000 STOCK INCENTIVE PLAN
(Full title of the plan)

George H. Cave, Esq.
ON SEMICONDUCTOR CORPORATION
5005 E. McDowell Road
Phoenix, Arizona 85008
(602) 244-5226
(Name, address, 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 smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer
Non-accelerated filer (Do not check if a smaller reporting company) Smaller reporting company

CALCULATION OF REGISTRATION FEE

Title of securities to be registered	Amount to be registered(1)	Proposed maximum offering price per share(2)	Proposed maximum aggregate offering price	Amount of registration fee
Common Stock	36,000,000 shares	\$7.75	\$279,000,000	\$15,569

- (1) Together with an indeterminate number of shares that may be necessary to adjust the number of shares reserved for issuance pursuant to the ON Semiconductor Corporation 2000 Stock Incentive Plan as the result of a stock split, stock dividend or similar adjustment of the outstanding common stock of ON Semiconductor Corporation.
- (2) Estimated solely for the purposes of calculating the amount of the registration fee, pursuant to Rules 457(c) and 457(h) under the Securities Act of 1933, as amended, on the basis of the average of the high and low prices of the registrant's common stock as reported on the NASDAQ Stock Market LLC (NASDAQ Global Select Market) on August 20, 2009.
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PART I

INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

The documents containing the information specified in Part I of Form S-8 will be sent or given to each participant in the ON Semiconductor Corporation 2000 Stock Incentive Plan, as amended (the "Plan"), as required by Rule 428(b)(1) of the Securities Act of 1933, as amended (the "Securities Act"). A statement of availability will also be provided as required by Rule 428(a)(1). Such documents need not be filed with the Securities and Exchange Commission (the "SEC") 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 into this registration statement pursuant to Item 3 of Part II of this registration statement, taken together, constitute a prospectus that meets the requirements of Section 10(a) of the Securities Act.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents have been filed by the ON Semiconductor Corporation (the "Company") with the SEC pursuant to the Securities Exchange Act of 1934, as amended (the "Exchange Act") and are incorporated herein by reference, excluding in each case, information deemed furnished and not filed:

1. The Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2008.
2. The Company's Quarterly Report on Form 10-Q for the fiscal quarters ended April 3, 2009 and July 3, 2009.
3. The Company's Current Reports on Form 8-K filed January 9, 2009, February 4, 2009, February 11, 2009, March 2, 2009, March 27, 2009, May 21, 2009, and May 22, 2009.
4. The description of the Company's common stock included in its registration statement on Form 8-A12G, filed April 21, 2000, and any amendment or report that it has filed (or will file after the date of this registration statement and prior to the termination of this offering) for the purpose of updating such description, including its Current Report on Form 8-K filed with the SEC on May 21, 2009.

All documents subsequently filed by the Company pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act, prior to the filing of a post-effective amendment to this registration statement which indicates that all securities offered 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, excluding in each case, information deemed furnished and not filed. Any statement contained in this registration statement or in a document incorporated or deemed to be incorporated by

reference herein shall be deemed to be modified or superseded for purposes of this registration statement to the extent that a statement contained herein or in any subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this registration statement.

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 102(b)(7) of the Delaware General Corporation Law (“DGCL”) authorizes a corporation to provide in its certificate of incorporation that a director of the corporation shall not be personally liable to the corporation or its stockholders for monetary damages for breach of the director’s fiduciary duty. While this statute does not change the directors’ duty of care, it enables corporations to limit available relief to equitable remedies such as injunction or rescission. The statute has no effect on a director’s duty of loyalty or liability for acts or omissions not in good faith or involving intentional misconduct or knowing violations of law, illegal payment of dividends or stock redemptions or repurchases, or for any transaction from which the director derives an improper personal benefit. Article Sixteenth of the Company’s Amended and Restated Certificate of Incorporation eliminates the personal liability of each of its directors to the full extent permitted by the DGCL Section 102(b)(7), as it may be amended or supplemented.

Subsection (a) of Section 145 of the DGCL empowers a corporation to indemnify any present or former director, officer, employee or agent of the corporation, or any individual serving at the corporation’s request as a director, officer, employee or agent of another enterprise, who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation), against expenses (including attorneys’ fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding provided that such person acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful.

Subsection (b) of Section 145 empowers a corporation to indemnify any present or former director, officer, employee or agent of the corporation, or any individual serving at the corporation’s request as a director, officer, employee or agent of another enterprise, who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation, against expenses (including attorneys’ fees) actually and reasonably incurred by the person in connection with the defense or settlement of such action or

suit provided that such director, officer, employee or agent acted in good faith and in a manner reasonably believed to be in, or not opposed to, the best interests of the corporation, except that no indemnification may be made in respect of any claim, issue or matter as to which such director, officer, employee or agent shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

Section 145 further provides that to the extent a director or officer has been successful on the merits or otherwise in the defense of any action, suit or proceeding referred to in subsections (a) and (b) or in the defense of any claim, issue or matter therein, he or she shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by him or her in connection therewith and that indemnification and advancement of expenses provided by or granted pursuant to Section 145 shall not be deemed exclusive of any other rights to which the indemnified party may be entitled.

Article Eleventh of the Company's Amended and Restated Certificate of Incorporation provides that the Company shall indemnify all persons whom it may indemnify pursuant to Section 145 of the DGCL, to the full extent permitted by Section 145 of the DGCL, as amended from time to time.

Section 145(g) of the DGCL permits a corporation to purchase and maintain insurance on behalf of a director, officer, employee or agent of the corporation, or that was or is serving at the request of the corporation as a director, officer, employee or agent for another enterprise, against any liability asserted against such person and incurred by such person in any such capacity, whether or not the corporation would otherwise have the power to indemnify such person against liability. The Company carries insurance policies that cover the Company and its individual directors and officers against certain liabilities, including liabilities under the Securities Act. Employment agreements with certain of our officers, entitle the particular officer to the same directors and officers' liability insurance coverage that the Company provides generally to its other directors and officers as such policies may be amended from time to time.

Item 7. Exemption from Registration Claimed.

Not applicable.

Item 8. Exhibits.

<u>Exhibit No.</u>	<u>Description</u>
5.1	Opinion of Snell & Wilmer L.L.P.
23.1	Consent of PricewaterhouseCoopers LLP
23.2	Consent of Snell & Wilmer L.L.P. (included in the opinion filed as Exhibit

5.1)

24.1 Powers of Attorney (contained within the signature page hereto)

In addition to those Exhibits shown above, the Company hereby incorporates the following Exhibits pursuant to Rule 411 of Regulation C promulgated under the Securities Act by reference to the filings set forth below:

<u>Exhibit No.</u>	<u>Description</u>	<u>Previously Filed as Exhibit</u>	<u>File No.</u>	<u>Date Filed</u>
4.1	Amended and Restated Certificate of Incorporation of ON Semiconductor Corporation, as further amended through March 26, 2008	Exhibit 3.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2008	000-30419	5/7/08
4.2	Amended and Restated Bylaws of ON Semiconductor Corporation	Exhibit 3.1 to the Company's Current Report on Form 8-K dated November 19, 2007	000-30419	11/19/07
4.3	Specimen of share certificate of Common Stock, \$.01 par value, ON Semiconductor Corporation	Exhibit 4.1 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2003	000-30419	3/10/04
4.4	ON Semiconductor Corporation 2000 Stock Incentive Plan (as amended and restated May 19, 2004)	Exhibit 10.7 of the Company's Quarterly Report on Form 10-Q for the quarter ended July 2, 2004	000-30419	8/6/04
4.5	Amendment to the ON Semiconductor Corporation 2000 Stock Incentive Plan, dated May 16, 2007	Exhibit 10.2 of the Company's Quarterly Report on Form 10-Q for the quarter ended June 29, 2007	000-30419	8/1/07

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. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(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 (a)(1)(i) and (a)(1)(ii) of this section do not apply if the registration statement is on Form S-8, and 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.

(h) 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 SEC such indemnification is against public policy as expressed in the 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 Act and will be governed by the final adjudication of such issue.

SIGNATURES

THE REGISTRANT. Pursuant to the requirements of the Securities Act of 1933, the registrant 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 Phoenix, State of Arizona, on August 25, 2009.

ON SEMICONDUCTOR CORPORATION

By: /s/ Keith D. Jackson
Keith D. Jackson
President and Chief Executive Officer

POWER OF ATTORNEY

The officers and directors of ON Semiconductor Corporation, whose signatures appear below, hereby constitute and appoint Keith D. Jackson, Donald A. Colvin and George H. Cave, and each of them, their true and lawful attorneys and agents, with full power of substitution, each with power to act alone, to sign and execute on behalf of the undersigned any amendment or amendments to this registration statement on Form S-8, and each of the undersigned does hereby ratify and confirm all that each of said attorney and agent, or their or his substitutes, shall do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

<u>SIGNATURE</u>	<u>TITLE</u>	<u>DATE</u>
<u>/s/ Keith D. Jackson</u> (Keith D. Jackson, President and Chief Executive Officer)	Principal Executive Officer and Director	August 25, 2009
<u>/s/ Donald A. Colvin</u> (Donald A. Colvin, Executive Vice President, Chief Financial Officer and Treasurer)	Principal Financial Officer and Principal Accounting Officer	August 25, 2009
<u>/s/ J. Daniel McCranie</u> (J. Daniel McCranie)	Chairman of the Board of Directors	August 25, 2009

<u>/s/ Francis P. Barton</u> (Francis P. Barton)	Director	August 25, 2009
<u>/s/ Curtis J. Crawford</u> (Curtis J. Crawford)	Director	August 25, 2009
<u>/s/ Emmanuel T. Hernandez</u> (Emmanuel T. Hernandez)	Director	August 25, 2009
<u>/s/ Phillip D. Hester</u> (Phillip D. Hester)	Director	August 25, 2009
<u>/s/ Daryl Ostrander</u> (Daryl Ostrander)	Director	August 25, 2009
<u>/s/ Robert H. Smith</u> (Robert H. Smith)	Director	August 25, 2009

INDEX TO EXHIBITS

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23.2	Consent of Snell & Wilmer L.L.P. (included in the opinion filed as Exhibit 5.1)
24.1	Powers of Attorney (contained within the signature page hereto)

August 25, 2009

ON Semiconductor Corporation
5005 E. McDowell Road
Phoenix, Arizona 85008

Ladies and Gentlemen:

We have acted as counsel to ON Semiconductor Corporation, a Delaware corporation (the "Company"), in connection with the Company's preparation and filing with the Securities and Exchange Commission (the "Commission") of a registration statement on Form S-8 (the "Registration Statement") under the Securities Act of 1933, as amended (the "Securities Act"), relating to the ON Semiconductor Corporation 2000 Stock Incentive Plan, as Amended and Restated May 19, 2004, as further amended on May 16, 2007 (the "Plan"). The Registration Statement relates to the issuance and sale from time to time, pursuant to Rule 415 of the General Rules and Regulations promulgated under the Securities Act, of up to 36,000,000 shares of common stock, \$.01 par value, of the Company (the "Offered Shares").

This opinion is delivered in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act. In rendering the opinions set forth herein, we have examined the (i) Registration Statement and exhibits thereto; (ii) Amended and Restated Certificate of Incorporation of the Company as currently in effect; (iii) Amended and Restated Bylaws of the Company as currently in effect; (iv) resolutions adopted by the Board of Directors of the Company relating to the filing of the Registration Statement and the offering and sale of the Offered Shares, and (v) specimen certificate for the Offered Shares as incorporated by reference into the Registration Statement. We have also examined such other documents and records and have made such other investigation as we have deemed necessary or appropriate to render the opinions set forth below. As to any facts material to the opinions expressed herein that were not independently established or verified by us, we have relied upon oral or written statements and representations of officers and other representatives of the Company and others.

We have assumed the legal competency and capacity of all natural persons, the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as electronic, certified, conformed, photostatic or facsimile copies and the authenticity of the originals of such latter documents.

Based upon the foregoing and in reliance thereon, and subject to the assumptions, qualifications and limitations set forth herein, we are of the opinion that when the Registration Statement shall have become effective, and the Offered Shares shall have been issued and delivered in accordance with the Plan, including receipt of the purchase price therefor as contemplated in the Plan, the Offered Shares will be validly issued, fully paid and non-assessable. For purposes of this opinion, we have assumed that (i) the Offered Shares that underlie awards under the Plan that are outstanding on the date hereof or that are available for issuance on the date hereof have been allocated to the Plan in the records of the Company and its transfer agent, (ii) the Offered Shares that become available for issuance under the Plan on January 1, 2010 pursuant to Section 5.1 of the Plan will not exceed the unallocated share balance at such time and will be allocated to the Plan from such unallocated share balances in the records of the Company and its transfer agent at such time, and (iii) in all cases the consideration for each Offered Share is not less than the par value thereof. This opinion relates only to original issuance securities.

We are admitted to practice only in the State of Arizona and we do not express any opinion as to the laws of any jurisdiction other than the laws of the State of Arizona, the statutory provisions of the Delaware General Corporation Law and the laws of the United States of America. As to matters of the Delaware General Corporation Law, we have based our opinion solely upon our examination of such statutory provisions as reported in standard, unofficial compilations. We have not obtained opinions of counsel licensed to practice in jurisdictions other than the State of Arizona. The opinions herein are based upon the facts in existence and laws in effect on the date hereof and we expressly disclaim any obligation to update, revise, or supplement our opinions herein, regardless of whether changes in such facts or laws come to our attention after the delivery hereof.

We hereby consent to the filing of this opinion with the Commission as an exhibit to the Registration Statement. In giving this consent, we do not concede that we are included in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission promulgated thereunder.

This opinion letter is given to you solely for use in connection with the issuance of the Offered Shares in accordance with the Registration Statement and is not to be relied on for any other purpose. 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 Offered Shares, or the Registration Statement.

Very truly yours,

/s/ Snell & Wilmer L.L.P.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated February 26, 2009 relating to the financial statements, financial statement schedule and the effectiveness of internal control over financial reporting, which appears in ON Semiconductor Corporation's Annual Report on Form 10-K for the year ended December 31, 2008.

/s/ PricewaterhouseCoopers LLP

Phoenix, AZ
August 25, 2009