

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

SCHEDULE 13D  
Under the Securities Exchange Act of 1934  
(Amendment No. 1)\*

ON Semiconductor Corporation

-----  
(Name of Issuer)

Common Stock, par value \$0.01 per share

-----  
(Title of Class of Securities)

682189 10 5

-----  
(CUSIP Number)

Michael A. Gerstenzang  
Cleary, Gottlieb, Steen and Hamilton  
One Liberty Plaza  
New York, NY 10006  
(212) 225-2000

-----  
(Name, Address and Telephone Number of Person  
Authorized to Receive Notices and Communications)

February 9, 2004

-----  
(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of ss.240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box. [ ]

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See ss.240.13d-7 for other parties to whom copies are to be sent.

\* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control number.

SEC 1746 (3-00)

Page 1 of 17  
Exhibit Index on Page10

-----  
CUSIP No. 682189 10 5

13D/A

1 NAME OF REPORTING PERSON  
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

TPG ON Holdings LLC

2 =====

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP\*

(a)   
(b)

3 SEC USE ONLY

4 SOURCE OF FUNDS\*

Not applicable

5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

7 SOLE VOTING POWER

NUMBER OF SHARES  
BENEFICIALLY OWNED BY  
EACH REPORTING  
PERSON  
WITH

8 SHARED VOTING POWER  
38,408,302 (See Items 4 and 5)

9 SOLE DISPOSITIVE POWER

10 SHARED DISPOSITIVE POWER  
43,447,689 (See Items 4 and 5)

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

43,447,689 (See Items 4 and 5)

12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES\*

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

14.7% (See Items 4 and 5)

14 TYPE OF REPORTING PERSON\*

00 (Limited Liability Company)

1 NAME OF REPORTING PERSON  
 S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

TPG Semiconductor Holdings LLC

2 =====

CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP\* (a)   
 (b)

3 SEC USE ONLY

4 SOURCE OF FUNDS\*

Not applicable

5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO  
 ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

7 SOLE VOTING POWER

NUMBER OF SHARES  
 BENEFICIALLY OWNED BY  
 EACH REPORTING  
 PERSON  
 WITH

8 SHARED VOTING POWER  
 111,858,369 (See Items 4 and 5)

9 SOLE DISPOSITIVE POWER

10 SHARED DISPOSITIVE POWER  
 111,858,369 (See Items 4 and 5)

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

111,858,369 (See Items 4 and 5)

12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN  
 SHARES\*

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

44.4% (See Items 4 and 5)

14 TYPE OF REPORTING PERSON\*

00 (Limited Liability Company)

Pursuant to Rule 13d-2(a) of Regulation 13D-G of the General Rules and Regulations under the Securities Exchange Act of 1934, as amended (the "Act"), TPG ON Holdings LLC ("ON Holdings") hereby amends its Schedule 13D Statement filed September 17, 2001 (the "Original Schedule 13D") relating to the shares of common stock, par value \$0.01 per share (the "Common Stock"), of ON Semiconductor Corporation (the "Company"). In addition, TPG Semiconductor Holdings LLC ("TPG Semi") hereby supplements its Schedule 13G Statement filed February 14, 2001 (the "Original Schedule 13G" and, together with the Original Schedule 13D, the "Original Schedules") and becomes a Reporting Person with respect to this first amendment (this "Amendment") to the Original Schedule 13D.

Item 1. Security and Issuer.

This Amendment amends and restates Item 1 of the Original Schedule 13D in its entirety as set forth below:

"This statement relates to Common Stock of the Company. The address of the Company's principal executive offices is as follows: ON Semiconductor Corporation; 5005 E. McDowell Road; Phoenix, AZ 85008"

Item 2. Identity and Background.

This Amendment amends and restates Item 2 of the Original Schedule 13D in its entirety as set forth below:

"This statement is filed by ON Holdings and TPG Semi (the "Reporting Persons"). Additionally, information is included herein with respect to TPG Partners II, L.P. ("Partners"), TPG Parallel II, L.P. ("Parallel"), TPG Investors II, L.P. ("Investors"), TPG 1999 Equity Partners II, L.P. ("TPG 1999"), TPG GenPar II, L.P. ("GenPar") and TPG Advisors II, Inc. ("Advisors" and, together with Partners, Parallel, Investors, TPG 1999 and GenPar, the "Controlling Persons"). Because (i) GenPar is the sole general partner of each of Partners, Parallel and Investors, (ii) Advisors is the sole general partner of GenPar and TPG 1999, and (iii) Partners, Parallel, Investors and TPG 1999 are members of each of the Reporting Persons, the Controlling Persons may be deemed, pursuant to Rule 13d-3 of the Act, to be the beneficial owners of all of the shares of Common Stock beneficially owned by the Reporting Persons. The Reporting Persons and the Controlling Persons are sometimes hereinafter collectively referred to as the "Filing Parties." The Filing Parties are making this single, joint filing because they may be deemed to constitute a "group" within the meaning of Section 13(d)(3) of the Act, although neither the fact of this filing nor anything contained herein shall be deemed to be an admission by the Filing Parties that such a group exists. A copy of the Joint Filing Agreement of the Filing Parties is attached hereto as Exhibit 1.

The address of the principal business offices of the Filing Parties is as follows: 301 Commerce Street, Suite 3300, Fort Worth, Texas 76102.

The Reporting Persons are Delaware limited liability companies (of which the members include Partners, Parallel, Investors and TPG 1999) that were organized to effect the transactions described under Item 4 below and have not engaged in any activities other than those incident to their formation and such transactions. Partners is a Delaware limited partnership engaged in making investments in securities of public and private corporations. Parallel, Investors and TPG 1999 are Delaware limited partnerships engaged in making investments in entities in which Partners invests. GenPar is a Delaware limited partnership whose principal business is to serve as the general partner of Partners, Parallel, Investors and other related entities engaged in making investments in securities of public and private corporations. Advisors is a Delaware corporation whose principal business is to serve as the General Partner of GenPar and TPG 1999. The executive officers and directors of Advisors are David Bonderman (director and President), James Coulter (director and Executive Vice President), William Price (director and Executive Vice President), John Viola (Vice President), Thomas E. Reinhart (Vice President), James O'Brien (Vice President and Treasurer) and Richard A. Ekleberry (Vice President and Secretary), each of whom is a natural person. No other persons control the Filing Parties.

David Bonderman has his business address at 301 Commerce Street, Suite 3300, Fort Worth, Texas 76102. Mr. Bonderman's principal occupation is as a director and President of Advisors.

James Coulter has his business address at 345 California Street, Suite 3300, San Francisco, California 94104. Mr. Coulter's principal occupation is as a director and Executive Vice President of Advisors.

William Price has his business address at 345 California Street, Suite 3300, San Francisco, California 94104. Mr. Price's principal occupation is as a director and Executive Vice President of Advisors.

John Viola has his business address at 301 Commerce Street, Suite 3300, Fort Worth, Texas 76102. Mr. Viola's principal occupation is as a Vice President of Advisors.

Thomas E. Reinhart has his business address at 345 California Street, Suite 3300, San Francisco, California 94104. Mr. Reinhart's principal occupation is as a Vice President of Advisors.

James O'Brien has his business address at 301 Commerce Street, Suite 3300, Fort Worth, Texas 76102. Mr. O'Brien's principal occupation is as a Vice President and Treasurer of Advisors.

Richard A. Ekleberry has his business address at 301 Commerce Street, Suite 3300, Fort Worth, Texas 76102. Mr. Ekleberry's principal occupation is as a Vice President and Secretary of Advisors.

During the last five years, none of the Filing Parties and, to the best knowledge of the Filing Parties, none of the executive officers or directors of Advisors has been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).

During the last five years, none of the Filing Parties and, to the best knowledge of the Filing Parties, none of the executive officers or directors of Advisors has been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

All natural persons listed in item 2 are citizens of the United States."

Item 3. Source and Amount of Funds of Other Consideration.

This Amendment amends Item 3 of the Original Schedule 13D by inserting the paragraph below at the beginning of Item 3 of the Original Schedule 13D:

"As more fully described under Item 4 below, on May 11, 1999, TPG Semi, a wholly-owned subsidiary of TPG Semi, Motorola, Inc., the Company and a wholly-owned subsidiary of the Company entered into the Recapitalization Agreement (as defined below), pursuant to which, among other things, TPG Semi purchased 124,999,433 shares (the "Original Shares") of Common Stock (taking into account all stock splits and reverse splits since such date) for aggregate consideration of \$337,500,000 in cash. The funds required for the purchase of the Original Shares by TPG Semi were obtained from general funds available to the Filing Parties and their affiliates."

Item 4. Purpose of Transaction.

This Amendment amends Item 4 of the Original Schedule 13D: by (1) inserting the first two paragraphs below at the beginning of Item 4 of the Original Schedule 13D, (2) replacing the last three paragraphs of Item 4 of the Original Schedule 13D with the remaining four paragraphs below and (3) changing all references in Item 4 of the Original Schedule 13D to "the Reporting Person" to "ON Holdings":

"On May 11, 1999, TPG Semi, a wholly-owned subsidiary of TPG Semi, Motorola, Inc., the Company and a wholly-owned subsidiary of the Company entered into an Agreement and Plan of Recapitalization and Merger (as amended July 28, 1999, the "Recapitalization Agreement"), providing for, among other things, the purchase by TPG Semi from Motorola, Inc. of the Original Shares. The purchase price paid for the Original Shares by TPG Semi pursuant to the Recapitalization Agreement was \$337,500,000 in cash. The transactions contemplated by the Recapitalization Agreement were consummated on August 4, 1999.

Stockholders Agreement. On August 2, 1999, concurrently with the consummation of the transactions contemplated by the Recapitalization Agreement, the Company, Motorola, Inc. and TPG Semi entered into a Registration Rights Agreement dated as of August 4, 1999 (the "Stockholders Agreement"), pursuant to which the Company granted to TPG Semi certain "demand" and "piggyback" registration rights with respect to shares of Common Stock of the Company. These registration rights are accompanied by customary indemnification provisions. The other rights and obligations of the parties to the Stockholders Agreement have expired pursuant to the termination provisions of the Stockholders Agreement."

Underwriting Agreement. ON February 3, 2004, the Company and TPG Semi entered into an Underwriting Agreement (the "Underwriting Agreement") with Morgan Stanley & Co. Incorporated and Credit Suisse First Boston LLC, as representatives of the several underwriters named therein (the "Underwriters"), in connection with a public offering of Common Stock by the Company and TPG pursuant to a Registration Statement on Form S-3 (No. 333-111702) under the Securities Act of 1933, as amended. Pursuant to the Underwriting Agreement, the Company agreed to sell 34,000,000 shares of Common Stock to the Underwriters and TPG Semi agreed to sell 13,000,000 shares of Common Stock to the Underwriters, in each case with a public offering price of \$6.98 per share, less underwriting discounts and commissions of \$0.3141 per share. In addition, the Company granted the Underwriters the right to purchase at such price up to an additional 5,100,000 shares of Common Stock and TPG Semi granted the Underwriters the right to purchase at such price up to an additional 1,950,000 shares of Common Stock, in each case to cover over-allotments. Pursuant to the Underwriting Agreement, TPG Semi agreed, subject to limited exceptions, not to sell shares of Common Stock (or effect certain other transactions or enter into certain other agreements relating to the Common Stock) until the 90th day following the date of the Underwriting Agreement.

ON Holdings Lock-up Agreement. On February 3, 2004, ON Holdings entered into a Lock-Up Agreement (the "ON Holdings Lock-up Agreement") with Morgan Stanley & Co. Incorporated and Credit Suisse First Boston LLC, as representatives of Underwriters. Pursuant to the ON Holdings Lock-up Agreement, ON Holdings agreed, subject to limited exceptions, not to sell shares of Common Stock (or effect certain other transactions or enter into certain other agreements relating to the Common Stock) until the 90th day following the date of the ON Holdings Lock-up Agreement.

Sale of Common Stock. On February 9, 2004, TPG Semi sold 13,141,064 shares of Common Stock pursuant to the Underwriting Agreement.

General. The provisions of the Investment Agreement (including the form of Certificate of Designations with respect to the Series A Preferred Stock attached as an exhibit thereto), the Registration Rights Agreement, the Subordination Agreement, the Recapitalization Agreement, the Stockholders Agreement, the Underwriting Agreement and the ON Holdings Lock-up Agreement are set forth in the documents filed as Exhibits 4 through 11 to this statement and are incorporated herein in their entirety by this reference in response to this Item 4. The foregoing description of the terms and provisions of these documents is a summary only, and is qualified in its entirety by reference to such documents.

Subject to the restrictions described above, the Filing Parties may, from time to time, subject to developments with respect to the Company and market conditions, consider and explore the purchase or sale of Common Stock or other securities of the Company.

Except as set forth herein, the Filing Parties do not have any plans or proposals which would relate to or result in any of the actions described in subparagraphs (a) through (j) of Item 4 of Schedule 13D. In addition, the Investor Nominees, in their capacity as members of the Board, may, from time to time, propose that the Board consider one or more of such actions."

This Amendment amends and restates Item 5 of the Original Schedule 13D in its entirety as set forth below:

"(a) ON Holdings may be deemed to beneficially to own up to 43,447,689 shares of Common Stock, representing in the aggregate approximately 14.7% of the outstanding shares of Common Stock (assuming the conversion in full of the Preferred Stock and including 851,915 additional shares of Common Stock expected to be issuable in respect of accumulated and unpaid dividends on the Preferred Stock as of March 31, 2004).

TPG Semi may be deemed to beneficially own 111,858,369 shares of Common Stock, representing in the aggregate approximately 44.4% of the outstanding shares of Common Stock.

The Filing Parties, collectively and individually, may be deemed to beneficially to own up to 155,306,058 shares of Common Stock, representing in the aggregate approximately 52.5% of the outstanding shares of Common Stock (assuming the conversion in full of the Preferred Stock and including 851,915 additional shares of Common Stock expected to be issuable in respect of accumulated and unpaid dividends on the Preferred Stock as of March 31, 2004).

The foregoing percentage calculations are based on a total of 252,202,657 shares of common stock outstanding, comprised of (1) the 217,833,721 shares of Common Stock outstanding as of January 21, 2004, as set forth in the Prospectus Supplement filed by the Company with the Commission under Rule 424(b)(5) of the Securities Act of 1933, as amended, and (2) the 34,368,936 shares of newly-issued Common Stock sold by the Company pursuant to such Prospectus Supplement on February 9, 2004.

(b) ON Holdings has the following:

- (i) sole power to vote or to direct the vote: -0-
- (ii) shared power to vote or to direct the vote: 38,408,302
- (iii) sole power to dispose or to direct the disposition of : -0-
- (iv) shared power to dispose or to direct the disposition of:  
43,447,689

TPG Semi has the following:

- (i) sole power to vote or to direct the vote: -0-
- (ii) shared power to vote or to direct the vote: 111,858,369
- (iii) sole power to dispose or to direct the disposition of : -0-
- (iv) shared power to dispose or to direct the disposition of:  
111,858,369

The Filing Parties, collectively and individually, may be deemed to to have the following:

- (v) sole power to vote or to direct the vote: -0-
- (vi) shared power to vote or to direct the vote: 150,266,671
- (vii) sole power to dispose or to direct the disposition of : -0-
- (viii) shared power to dispose or to direct the disposition of:  
155,306,058

(c) Except as described herein, no transactions in shares of Common Stock were effected during the past 60 days by any of the Filing Parties or to the best of their knowledge, any of the individuals identified in Item 2.

(d) Not applicable

(e) Not applicable"

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to the Securities of the Issuer.

This Amendment amends and restates Item 6 of the Original Schedule 13D

in its entirety as set forth below:

"Except as set forth in this statement, to the best knowledge of the Filing Parties, there are no other contracts, arrangements, understandings or relationships (legal or otherwise) among the persons named in Item 2 and between such persons and any person with respect to any securities of the Company, including but not limited to, transfer or voting of any of the securities of the Company, joint ventures, loan or option arrangements, puts or calls, guarantees of profits, division of profits or loss, or the giving or withholding of proxies, or a pledge or contingency the occurrence of which would give another person voting power over the securities of the Company."

Item 7. Material to be filed as Exhibits.

This Amendment amends Item 7 of the Original Schedule 13D by (1) replacing Exhibit 1 with the Exhibit 1 listed below and (2) adding Exhibits 7 through 10 listed below.

Exhibit 1 Joint Filing Agreement, dated as of February 9, 2004 among TPG ON Holdings LLC, TPG Semiconductor Holdings LLC, TPG Partners II, L.P., TPG Parallel II, L.P., TPG Investors II, L.P., TPG 1999 Equity Partners II, L.P., TPG GenPar II, L.P. and TPG Advisors II, Inc.

Exhibit 7 Agreement and Plan of Recapitalization and Merger, as amended, dated as of May 11, 1999, among ON Semiconductor Corporation (f/k/a SCG Holding Corporation), Semiconductor Components Industries, LLC, Motorola, Inc., TPG Semiconductor Holdings LLC and TPG Semiconductor Acquisition Corp. (incorporated by reference from Exhibit 2.2 to the ON Semiconductor Corporation Form S-4 filed on November 5, 1999)

Exhibit 8 Amendment No. 1, dated as of July 28, 1999, to Agreement and Plan of Recapitalization and Merger, as amended, dated as of May 11, 1999, among ON Semiconductor Corporation (f/k/a SCG Holding Corporation), Semiconductor Components Industries, LLC, Motorola, Inc., TPG Semiconductor Holdings LLC and TPG Semiconductor Acquisition Corp. (incorporated by reference from Exhibit 2.3 to the ON Semiconductor Corporation Form S-4 filed on November 5, 1999)

Exhibit 9 Stockholders Agreement, dated as of August 4, 1999, among ON Semiconductor Corporation (f/k/a SCG Holding Corporation), TPG Semiconductor Holdings LLC and Motorola, Inc. (incorporated by reference from Exhibit 99.5 to the ON Semiconductor Corporation Form S-4 filed on November 5, 1999)

Exhibit 10 Underwriting Agreement, dated February 3, 2004, among the Company, TPG Semi and the several underwriters named in Schedule I thereto (incorporated by reference from Exhibit 1.1 to the ON Semiconductor Corporation Form 8-K filed on February 4, 2004)

Exhibit 11 Lock-up Agreement, dated February 3, 2004, among ON Holdings and the several underwriters named in Schedule I thereto

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

February 9, 2004

TPG ON Holdings LLC

By: /s/ Richard A. Ekleberry

-----

Name: Richard A. Ekleberry  
Title: Vice President

TPG Semiconductor Holdings LLC

By: /s/ Richard A. Ekleberry

-----

Name: Richard A. Ekleberry  
Title: Vice President

EXHIBIT 1

JOINT FILING AGREEMENT

JOINT FILING AGREEMENT (this "Agreement"), dated as of February 9, 2004 among TPG ON Holdings LLC, a Delaware limited liability company ("TPG ON Holdings"), TPG Semiconductor Holdings LLC, a Delaware limited liability company ("TPG Semi"), TPG Partners II, L.P., a Delaware limited partnership ("Partners"), TPG Parallel II, L.P., a Delaware limited partnership ("Parallel"), TPG Investors II, L.P., a Delaware limited partnership ("Investors"), TPG 1999 Equity Partners II, L.P., a Delaware limited partnership ("TPG 1999"), TPG GenPar II, L.P., a Delaware limited partnership ("GenPar") and TPG Advisors II, Inc., a Delaware corporation, ("Advisors").

W I T N E S S E T H

WHEREAS, as of the date hereof, each of TPG ON Holdings, TPG Semi, Partners, Parallel, Investors, TPG 1999, GenPar and Advisors are filing an Amendment No.1 (the "Amendment") to a Schedule 13D Statement under the Securities Exchange Act of 1934 (the "Exchange Act") filed by TPG ON Holdings on September 17, 2001 (the "Original Schedule 13D") relating to the shares of common stock, par value \$0.01 per share (the "Common Stock"), of ON Semiconductor Corporation (the "Company");

WHEREAS, in connection with the filing of the Original Schedule 13D, TPG ON Holdings, Partners, Parallel, Investors, TPG 1999, GenPar and Advisors entered into a Joint Filing Agreement dated as of September 17, 2001 (the "Original Joint Filing Agreement");

WHEREAS, each of TPG ON Holdings, TPG Semi, Partners, Parallel, Investors, TPG 1999, GenPar and Advisors is individually eligible to file the Amendment;

WHEREAS, each of TPG ON Holdings, TPG Semi, Partners, Parallel, Investors, TPG 1999, GenPar and Advisors wishes to file the Amendment and any further amendments to the Original Schedule 13D jointly and on behalf of each of TPG ON Holdings, TPG Semi, Partners, Parallel, Investors, TPG 1999, GenPar and Advisors, pursuant to Rule 13d-1(k)(1) under the Exchange Act;

NOW, THEREFORE, in consideration of these premises and other good and valuable consideration, the parties hereto agree as follows:

1. TPG ON Holdings, TPG Semi, Partners, Parallel, Investors, TPG 1999, GenPar and Advisors hereby agree that the Amendment is, and any further amendments to the Original Schedule 13D will be, filed on behalf of each of TPG ON Holdings, TPG Semi, Partners, Parallel, Investors, TPG 1999, GenPar and Advisors pursuant to Rule 13d-1(k)(1)(iii) under the Exchange Act. TPG ON Holdings, TPG Semi, Partners, Parallel, Investors, TPG 1999, GenPar and Advisors hereby further agree that the Original Joint Filing Agreement shall be amended, restated and replaced in its entirety by this Joint Filing Agreement.

2. Each of TPG ON Holdings, TPG Semi, Partners, Parallel, Investors, TPG 1999, GenPar and Advisors hereby acknowledges that, pursuant to Rule 13d-1(k)(1)(i) under the Exchange Act, it is responsible for the timely filing of the Amendment and any further amendments to the Original Schedule 13D, and for the completeness and accuracy of the information concerning it contained therein, and is not responsible for the completeness and accuracy of the information concerning any of the other parties contained therein, unless it knows or has reason to know that such information is inaccurate.

3. Each of TPG ON Holdings, TPG Semi, Partners, Parallel, Investors, TPG 1999, GenPar and Advisors hereby agrees that this Agreement shall be filed as an exhibit to the Amendment, pursuant to Rule 13d-1(k)(1)(iii) under the Exchange Act.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed individually or by their respective directors hereunto duly authorized as of the day and year first above written.

TPG ON Holdings LLC

By: /s/ Richard A. Ekleberry

-----  
Name: Richard A. Ekleberry  
Title: Vice President

TPG Semiconductor Holdings LLC

By: /s/ Richard A. Ekleberry

-----  
Name: Richard A. Ekleberry  
Title: Vice President

TPG Partners II, L.P.

By: TPG GenPar II, L.P.

By: TPG Advisors II, Inc.

By: /s/ Richard A. Ekleberry

-----  
Name: Richard A. Ekleberry  
Title: Vice President

TPG Parallel II, L.P.

By: TPG GenPar II, L.P.

By: TPG Advisors II, Inc.

By: /s/ Richard A. Ekleberry

-----  
Name: Richard A. Ekleberry  
Title: Vice President

TPG Investors II, L.P.

By: TPG GenPar II, L.P.

By: TPG Advisors II, Inc.

By: /s/ Richard A. Ekleberry

-----  
Name: Richard A. Ekleberry  
Title: Vice President

TPG 1999 Equity Partners II, L.P.

By: TPG Advisors II, Inc.

By: /s/ Richard A. Ekleberry

-----  
Name: Richard A. Ekleberry  
Title: Vice President

TPG GenPar II, L.P.

By: TPG Advisors II, Inc.

By: /s/ Richard A. Ekleberry

-----  
Name: Richard A. Ekleberry  
Title: Vice President

TPG Advisors II, Inc.

By: /s/ Richard A. Ekleberry

-----  
Name: Richard A. Ekleberry  
Title: Vice President

## LOCK-UP AGREEMENT

February 3, 2004

Morgan Stanley & Co. Incorporated  
1585 Broadway  
New York, NY 10036  
and  
Credit Suisse First Boston LLC  
Eleven Madison Avenue  
New York, NY 10010-3629

Dear Sirs and Mesdames:

The undersigned understands that Morgan Stanley & Co. Incorporated ("Morgan Stanley") and Credit Suisse First Boston ("CSFB," together with Morgan Stanley, the "Managers") propose to enter into an Underwriting Agreement (the "Underwriting Agreement") with ON Semiconductor Corporation, a Delaware corporation (the "Company"), and TPG Semiconductor Holdings LLC, a Delaware limited liability company, providing for the public offering (the "Public Offering") by the several Underwriters, including the Managers (the "Underwriters"), of 47,000,000 shares (the "Shares") of the common stock, par value \$0.01 per share, of the Company (the "Common Stock").

To induce the Underwriters that may participate in the Public Offering to continue their efforts in connection with the Public Offering, the undersigned hereby agrees that, without the prior written consent of the Managers on behalf of the Underwriters, it will not, during the period commencing on the date hereof and ending 90 days after the date of the final prospectus relating to the Public Offering (the "Prospectus"), (1) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock or (2) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the Common Stock, whether any such transaction described in clause (1) or (2) above is to be settled by delivery of Common Stock or such other securities, in cash or otherwise. The foregoing sentence shall not apply to (a) transfers of shares of Common Stock or any security convertible into Common Stock as a bona fide gift or gifts, (b) distributions of shares of Common Stock or any security convertible into Common Stock to the partners, shareholders or members of the undersigned or its affiliates, (c) transfers and dispositions between or among the undersigned, any of its affiliates and any partners, shareholders or members of any of the foregoing, provided that in the case of any transfer, distribution or disposition pursuant to clause (b), (c) or (d), (i) each donee, distributee or disposition recipient shall execute and deliver to each Manager a duplicate form of this Lock-up Letter and (ii) if a filing by any party (donor, donee, transferor, transferee, disposer or disposition recipient) under Section 16(a) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), shall be required in connection with such transfer, distribution or disposition (other than a filing on a Form 5 made after the expiration of the 90-day period referred to above), such party shall provide the Managers no less than one day prior notice of such filing (it being understood that no such filing shall be made by any such party if not required to be made under the Exchange Act). In addition, the undersigned agrees that, without the prior written consent of the Managers on behalf of the Underwriters, it will not, during the period commencing on the date hereof and ending 90 days after the date of the Prospectus, make any demand for or exercise any right with respect to, the registration of any shares of Common Stock or any security convertible into or exercisable or exchangeable for Common Stock.

Whether or not the Public Offering actually occurs depends on a number of factors, including market conditions. Any Public Offering will only be made pursuant to an Underwriting Agreement, the terms of which are subject to negotiation between the Company and the Underwriters.

Delivery of an executed signature page to this letter by facsimile shall be effective as delivery of a manually executed signature page of this letter.

Very truly yours,

TPG ON Holdings LLC

/s/ Richard A. Ekleberry

-----  
Name: Richard A. Ekleberry  
Title: Vice President and Secretary  
Address: 301 Commerce St, Suite 3300  
Forth Worth, Texas 76102