FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

## STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

| OMB APPROVAL             |           |  |  |  |  |  |  |  |
|--------------------------|-----------|--|--|--|--|--|--|--|
| OMB Number:              | 3235-0287 |  |  |  |  |  |  |  |
| Estimated average burden |           |  |  |  |  |  |  |  |

0.5

hours per response:

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

| 1. Name and Address of Reporting Person* <u>KLOSTERBOER ROBERT A.</u> |  |  |   |                                    |        | 2. Issuer Name <b>and</b> Ticker or Trading Symbol ON SEMICONDUCTOR CORP [ ONNN ] |        |        |            |  |     |   |  |             |                          | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable)  Director 10% Owner |  |   |   |   |  |  |
|---|--|--|---|------------------------------------|--------|---|--------|--------|------------|--|-----|---|--|-------------|--------------------------|---|--|---|---|---|--|--|
| (Last) (First) (Middle) 5005 E. MCDOWELL ROAD                         |  |  |   |                                    |        | 3. Date of Earliest Transaction (Month/Day/Year) 04/07/2011                       |        |        |            |  |     |   |  |             |                          |   | X Officer (give title below)  SVP & GM, Dig & MxdSig Prd ( |   |   |   |  |  |
| (Street) PHOENI (City)  |  |  | 35008<br>Zip)                                 |                                    | 4. If  | 4. If Amendment, Date of Original Filed (Month/Day/Year)                          |        |        |            |  |     |   |  |             |                          | Indivine)   | Forn   | Joint/Group Filing (Check Applicab<br>filed by One Reporting Person<br>filed by More than One Reporting<br>on |   |   | on   |  |
|   |  | Tabl                                       | e I - Nor                                     | n-Deriv                            | ative  | Se  | curiti | ies Ac | qui        | ired,  | Dis | posed o                                     | f, or  | Ben         | efici                    | ally  | Owne   | ed  |   |   |  |  |
| 1. Title of Security (Instr. 3)  2. Transa Date (Month/D              |  |  |   |                                    |        | Executi   |        |        | ,   7      | 3.<br>Transaction<br>Code (Instr.<br>8)  4. Securi<br>Disposed                       |     | ities Acquired (A)<br>d Of (D) (Instr. 3, 4 |  |             | 4 and Secu<br>Ben<br>Own |   | cially<br>I Following                                      | 6. Ownership<br>Form: Direct<br>(D) or Indirect<br>(I) (Instr. 4)   |   | 7. Nature<br>of Indirect<br>Beneficial<br>Ownership<br>(Instr. 4) |  |  |
|   |  |  |   |                                    |        |   |        |        |            | Code   | v   | Amount                                      |  | A) or<br>D) | Price                    |   | Reported<br>Transaction(s)<br>(Instr. 3 and 4)             |   |   |   | (1130.4)   |  |
| Common 04/03  |  |  |   |                                    | 7/2011 | 2011  |        |        |            | S  |     | 1,967(1)                                    |  | ) D \$      |                          | 71,501  |  | 1,501   | D                                       |   |  |  |
|   |  | Та   | ble II - D                                    |                                    |        |   |        |        |            |  |     | sed of,<br>onvertib                         |  |             |                          | y Ov  | vned   |   |   |   |  |  |
| Derivative Conversion Date  |  | 3. Transaction<br>Date<br>(Month/Day/Year) | 3A. Deemd<br>Execution<br>if any<br>(Month/Da | ned 4.<br>n Date, Transa<br>Code ( |        |   |        |        | Exp<br>(Mo | 6. Date Exercisable a Expiration Date (Month/Day/Year)  Date Expira Exercisable Date |     |   | Amount of Securities Underlying Derivative Security (Instr. and 4)  Amour or Number of Security (Instr. and 4) |             | ount<br>nber             |   |  | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction (Instr. 4)               | Owr<br>Forr<br>Dire<br>or In<br>(I) (II | ership<br>n:<br>ct (D)<br>direct<br>nstr. 4)                      | 11. Nature<br>of Indirect<br>Beneficial<br>Ownership<br>(Instr. 4) |  |

## Explanation of Responses:

1. This transaction was made pursuant to the Reporting Person's existing Rule 10b5-1 plan (i.e. a stock trading plan designed to comply with Rule 10b5-1 of the Securities Exchange Act of 1934, as amended).

## Remarks:

Judith A. Boyle is signing on behalf of the Reporting Person pursuant to a Power of Attorney attached herein as an exhibit. klosterboer2011poa.txt

Judith A. Boyle, Attorney-in-Fact 04/11/2011

\*\* Signature of Reporting Person Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

- $^{\star}$  If the form is filed by more than one reporting person, see Instruction 4 (b)(v).
- \*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.

POWER OF ATTORNEY (Robert A. Klosterboer)

I hereby appoint Keith D. Jackson, George H. Cave and Judith A. Boyle, and each of them, attorney-in-fact for me, each with full power of substitution, to prepare, execute and deliver on my behalf reports required to be filed by me pursuant to Section 16 of the Securities Exchange Act of 1934, as amended ("Section 16"), and Rule 144 and Rule 145 under the Securities Act of 1933 (singly or collectively ("Rule 144")), and any and all related documents and instruments. Among other things, each attorney-in-fact is authorized to file original reports (either electronically or otherwise), signed by me or on my behalf, on Forms 3, 4 and 5, and Form 144 with the Securities and Exchange Commission, any and all related documents and instruments, and to provide any necessary copies of such signed forms, documents and instruments to The NASDAQ Stock Market and ON Semiconductor Corporation as required by the rules under Section 16 and Rule 144 as in effect from time to

This power of attorney is effective from the date hereof until April 15, 2012, unless earlier revoked or terminated.

/s/ ROBERT A. KLOSTERBOER Robert A. Klosterboer

Dated: March 1, 2011