SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D. C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

December 14, 2005 Date of report (Date of earliest event reported)

ON Semiconductor Corporation

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation) 000-30419 (Commission File Number) 36-3840979 (I.R.S. Employer Identification Number)

ON Semiconductor Corporation 5005 E. McDowell Road Phoenix, Arizona (Address of principal executive offices)

85008 (Zip Code)

602-244-6600

(Registrant's telephone number, including area code)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 8.01. Other Events.

Attached to this Current Report as Exhibit 99.1 is a copy of a news release for ON Semiconductor Corporation dated December 14, 2005 titled "ON Semiconductor Raises Revenue Guidance for Fourth Quarter 2005."

Item 9.01. Financial Statements and Exhibits.

- (a) Financial Statements of Businesses Acquired Not applicable.
- (b) Pro Forma Financial Information Not applicable.
- (c) Exhibits

Description

99.1 News release for ON Semiconductor Corporation dated December 14, 2005 titled "ON Semiconductor Raises Revenue Guidance for Fourth Quarter 2005."

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

ON SEMICONDUCTOR CORPORATION (Registrant)

By: /s/ DONALD A. COLVIN

Date: December 14, 2005

Donald A. Colvin Chief Financial Officer

EXHIBIT INDEX

Exhibit No. Description

99.1 News release for ON Semiconductor Corporation dated December 14, 2005 titled "ON Semiconductor Raises Revenue Guidance for Fourth Quarter 2005."



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ON Semiconductor Raises Revenue Guidance for Fourth Quarter 2005

PHOENIX, Ariz. – Dec. 14, 2005 – ON Semiconductor Corporation (NASDAQ: ONNN) today announced that it expects fourth quarter 2005 revenues to grow sequentially by 4 to 6 percent over third quarter 2005 revenues. This compares to previous guidance of 2 to 3 percent sequential growth in revenues, provided in the Company's October 20, 2005 earnings release and conference call. Additionally, the Company expects that gross margins will be up approximately 100 basis points sequentially in the fourth quarter of 2005 as previously announced.

"We are encouraged by the strong seasonal demand we are experiencing in the fourth quarter of 2005," said Keith Jackson, ON Semiconductor president and CEO. "Our consumer driven end-markets – computing, consumer electronics and wireless which represented over 60 percent of our third quarter 2005 revenues – continue to grow robustly in the fourth quarter of 2005. We will provide further details on fourth quarter 2005 results and first quarter 2006 guidance on our conference call scheduled for Feb. 2, 2006."

About ON Semiconductor

With its global logistics network and strong portfolio of power semiconductor devices, ON Semiconductor (Nasdaq: ONNN) is a preferred supplier of power solutions to engineers, purchasing professionals, distributors and contract manufacturers in the computer, cell phone, portable devices, automotive and industrial markets. For more information, please visit ON Semiconductor's website at http://www.onsemi.com.

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ON Semiconductor Raises Revenue Guidance for Fourth Quarter 2005 2-2-2-2

ON Semiconductor and the ON Semiconductor logo are registered trademarks of Semiconductor Components Industries, LLC. All other brand and product names appearing in this document are registered trademarks or trademarks of their respective holders. Although the company references its website in this news release, such information on the website is not to be incorporated herein.

This news release includes statements which are not historical facts but are "forward-looking statements" as that term is defined in the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. All statements other than statements of historical fact are statements that could be deemed forward-looking statements and are often characterized by the use of words such as "believes," "expects," "estimates," "projects," "may," "will," "intends," "plans," or "anticipates," or by discussions of strategy, plans or intentions. In this news release, forward-looking information relates to fourth quarter 2005 revenues, gross margins, average selling prices and similar matters. All forward-looking statements in this news release are made based on management's current expectations and estimates, which involve risks, uncertainties and other factors that could cause results to differ materially from those expressed in forward-looking statements. Among these factors are changes in overall economic conditions, the cyclical nature of the semiconductor industry, changes in demand for our products, changes in inventories at our customers and distributors, technological and product development risks, availability of raw materials, competitors' actions, pricing and gross margin pressures, loss of key customers, order cancellations or reduced bookings, changes in manufacturing yields, control of costs and expenses, significant litigation, risks associated with acquisitions and dispositions, risks associated with our substantial leverage and restrictive covenants in our debt agreements, risks associated with our international operations, the threat or occurrence of international armed conflict and terrorist activities both in the United States and internationally, risks and costs associated with increased and new regulation of corporate governance and disclosure standards (including pursuant to Section 404 of the Sarbanes-Oxley Act of 2002), and risks involving environmental or other governmental regulation. Additional factors that could affect the company's future operating results are described in our Form 10-K for the year ended December 31, 2004 under the caption "Trends, Risks and Uncertainties" in the MD&A section, and other factors are described from time to time in our subsequent SEC filings. Readers are cautioned not to place undue reliance on forward-looking statements. We assume no obligation to update such information.