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

May 15, 2006

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))

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

Item 1.01. Entry into a Material Definitive Agreement.

On May 15, 2006, Semiconductor Components Industries, LLC ("SCI"), a wholly-owned subsidiary of ON Semiconductor Corporation ("ON Semiconductor") completed its purchase from LSI Logic Corporation ("LSI") of certain assets associated with LSI's semiconductor wafer fabrication facilities in Gresham, Oregon. In connection with the purchase, SCI entered into a wafer supply and test service agreement ("Agreement") with LSI pursuant to which (1) SCI will manufacture and provide semiconductor wafer products to LSI, and (2) SCI will provide certain sort test, processing engineering, quality assurance and other similar and related services that LSI may from time to time request SCI to perform. Subject to the terms and conditions of the Agreement, and provided that SCI fulfills all material obligations set forth in the Agreement, LSI is obligated to purchase, and SCI is obligated to provide, \$198,800,000 of wafer products and related services (such as wafer testing and sorting services) from SCI during the first two years under the Agreement. Commencing the third year under the Agreement, pricing for the products and services LSI orders (which are not subject to any minimum purchase requirements or supply guarantees) will be renegotiated. The term of the Agreement is six years ("Initial Term"), unless terminated by either party for breach or for a change of control. After the Initial Term (unless terminated earlier as set forth above), the Agreement will renew automatically for successive periods of two years, unless either party provides notice of non-renewal to the other party at least six months prior to the date of the expiration of the then-current term. The Agreement further provides that LSI will indemnify SCI and ON Semiconductor for certain intellectual property infringement claims and SCI will indemnify LSI for certain product liability and intellectual property infringement claims. Except as provided in the Agreement (a) the liability of SCI and LSI to each other for claims related to the Agreement is subject

The above description of the Agreement is qualified in its entirety by reference to its complete text, which form has been filed as Exhibit 2.1 to ON Semiconductor's Form 10-Q for the quarterly period ended March 31, 2006, and which amended and executed Agreement will be filed as an exhibit to ON Semiconductor's Form 10-Q for the quarterly period ended June 30, 2006. Portions of Exhibit 2.1 were omitted pursuant to a request for confidential treatment.

Item 8.01. Other Events.

On May 15, 2006, ON Semiconductor announced in a news release the completion of its purchase of certain assets associated with LSI's wafer fabrication facility in Gresham, Oregon. A copy of this news release is furnished as Exhibit 99.1 to this Current Report on Form 8-K.

The information in this Item 8.01 (including Exhibit 99.1) shall not be deemed to be "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended ("Exchange Act"), or otherwise subject to liability of that section. In addition, this information shall not be incorporated by reference into any registration statement or other document filed under the Securities Act of 1933, as amended, or the Exchange Act, regardless of any general incorporation language in such filing, except as shall be expressly set forth by specific reference in the filing.

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Item 9.01.	Financial Statements and Exhibits.	
(a)	Financial Statements of Businesses Acquired	
	Not applicable.	
(b)	Pro Forma Financial Information	
	Not applicable.	
(c)	Exhibits	
The following exhibit is furnished as part of this Current Report on Form 8-K:		
Exhibit No.	Description	
99.1	News release for ON Semiconductor issued on May 15, 2006 regarding its purchase of certain assets associated with LSI's wafer fabrication facility in Gresham, Oregon*	

* Furnished, not filed.

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

Donald A. Colvin Senior Vice President and Chief Financial Officer

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Date: May 18, 2006

Exhibit No. Description	
	006 regarding its purchase of certain assets associated with LSI's wafer fabrication
facility in Gresham, Oregon*	

EXHIBIT INDEX

* Furnished, not filed.



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ON Semiconductor Completes \$105 Million Acquisition of LSI Logic Corporation's Gresham, Ore., 8-Inch Wafer Fab

Gresham expands ON Semiconductor's manufacturing capabilities – enabling more rapid in-house development of high-performance submicron analog and digital power products

PHOENIX, Ariz. – May 15, 2006 – ON Semiconductor (Nasdaq: ONNN) today announced that its primary operating subsidiary, Semiconductor Components Industries, LLC, has completed the purchase of LSI Logic Corporation's (NYSE: LSI) Gresham, Ore., wafer fabrication facility and certain other semiconductor manufacturing equipment for a total price of approximately \$105 million, under terms of a definitive agreement executed on April 5, 2006. The Company paid LSI Logic approximately \$90 million in proceeds to date, with the balance due within 90 days of closing according to the agreement.

ON Semiconductor has hired substantially all of the LSI manufacturing employees currently working at the Gresham facility. The purchase of the Gresham wafer facility significantly enhances ON Semiconductor's internal manufacturing capabilities. With the completion of the this transaction, the Company has gained the skilled process development engineers, operational expertise and process development know-how to help enable it to develop a larger mix of high volume, low cost, high-performance submicron analog and digital power products down to the 0.18 micron (μ) level, with toolset capabilities down to the 0.13 μ level in the future.

As mentioned during its first quarter earnings call, the Company expects to provide details of the financial impact of the transaction on its results for the second quarter of 2006 in its second quarter earnings release scheduled for the end of July.

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 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 "forward-looking statements" as that term is defined in 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," "projects," "may," "will," "intends," "plans," or "anticipates," or by discussions of strategy, plans or intentions. In this news release, forward-looking information relates to the impact of the purchase of LSI Logic Corporation's Gresham, Oregon wafer fabrication facility and the related Wafer Supply and Test Agreement, Intellectual Property License Agreement, Transition Services Agreement and Facility Services Agreement, ON Semiconductor's 2006 and 2007 EPS, ON Semiconductor's ability to expand its high performance analog and power products 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 including risks associated with the purchase of LSI Logic Corporation's Gresham wafer fabrication facility and our ability to retain the highly-skilled personnel currently employed at Gresham, a long-term supply agreement with LSI Logic which may result in operating losses at Gresham, difficulties in integrating the Gresham facility into our business, difficulties utilizing the additional capacity at Gresham in a cost-effective manner and transition costs associated with the acquisition of Gresham, 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 in Item 1A Risk Factors of our Form 10-K for the year ended December 31, 2005 and other factors are described from time to time in our SEC filings. Readers are cautioned not to place undue reliance on forward-looking statements. We assume no obligation to update such information.