UNITED STATES 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

Date of Report (Date of earliest event reported): October 10, 2008

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 (IRS Employer Identification No.)

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

85008 (Zip Code)

Registrant's telephone number, including area code: 602-244-6600

Not applicable

(Former name or former address, if changed since last report.)

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))

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

Item 2.01. Completion of Acquisition or Disposition of Assets.

On October 10, 2008, ON Semiconductor Corporation ("ON") announced that it had completed the previously announced acquisition of Catalyst Semiconductor, Inc. ("Catalyst"). Pursuant to the terms and conditions of the Agreement and Plan of Merger and Reorganization, dated July 16, 2008 (the "Merger Agreement"), by and among ON, Catalyst and Centaur Acquisition Corporation, a wholly-owned indirect subsidiary of ON ("Merger Sub"), on October 10, 2008 (the "Closing Date") the Merger Sub merged with and into Catalyst, with Catalyst thereafter becoming a wholly-owned indirect subsidiary of ON (the "Merger").

In accordance with the terms of the Merger Agreement, on the Closing Date each outstanding share of Catalyst common stock was converted into the right to receive 0.706 shares of ON's common stock; provided, however, that holders of Catalyst common stock will not receive any fractional shares of ON's common stock in the Merger and are, in lieu thereof, entitled to receive a cash payment equal to the fraction of a share of ON's common stock to which the holder would otherwise be entitled multiplied by the closing price of ON's common stock on The Nasdaq Stock Market on the Closing Date. Holders of Catalyst common stock will be contacted by the exchange agent for the Merger for information regarding this process.

On July 17, 2008, ON filed a copy of the Merger Agreement with the Securities and Exchange Commission (the "SEC") on a Current Report on Form 8-K, and the Merger Agreement is incorporated into this Current Report on Form 8-K by this reference. ON has also filed with the SEC a Registration Statement on Form S-4 (File No. 333-153164) containing a proxy statement of Catalyst and a prospectus of ON, and each of ON and Catalyst have filed with the SEC other documents regarding the Merger. The proxy statement/prospectus was mailed to stockholders of Catalyst on or about September 11, 2008. A copy of ON's news release announcing completion of the Merger is attached hereto as Exhibit 99.1 and is incorporated herein by this reference.

Item 9.01. Financial Statements and Exhibits.

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

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- Exhibit No. Description
 - 2.1 Agreement and Plan of Merger and Reorganization, dated as of July 16, 2008, by and among ON Semiconductor Corporation, Centaur Acquisition Corporation and Catalyst Semiconductor, Inc. (incorporated by reference to Exhibit 2.1 to ON's Current Report on Form 8-K filed on July 17, 2008)*

99.1 News release for ON Semiconductor Corporation, dated October 10, 2008

* Certain schedules have been omitted and ON agrees to furnish supplementally to the SEC a copy of any omitted schedules upon request.

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 hereunto duly authorized.

October 10, 2008

ON SEMICONDUCTOR CORPORATION (Registrant)

By: /s/ Donald A. Colvin

Donald A. Colvin Executive Vice President and Chief Financial Officer

Exhibit No. 2.1	<u>Description</u> Agreement and Plan of Merger and Reorganization, dated as of July 16, 2008, by and among ON Semiconductor Corporation, Centaur Acquisition Corporation and Catalyst Semiconductor, Inc. (incorporated by reference to Exhibit 2.1 to ON's Current Report on Form 8-K filed on July 17, 2008)*
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EXHIBIT INDEX



ON Semiconductor Corporation Completes Acquisition of Catalyst Semiconductor, Inc.

PHOENIX, AZ – Oct. 10, 2008 – ON Semiconductor Corporation (Nasdaq: ONNN) announced today that it has, effective today, completed its acquisition of Catalyst Semiconductor, Inc. (Nasdaq: CATS) in a stock-for-stock merger. Under the terms of the merger agreement, Catalyst stockholders have generally received 0.706 shares of ON Semiconductor common stock for each share of Catalyst common stock they own. ON Semiconductor issued approximately 11 million shares for the outstanding shares of Catalyst Semiconductor. The company also assumed Catalyst Semiconductor stock-based compensation awards that will result in an additional increase of approximately 2 million shares of ON Semiconductor common stock equivalents on a diluted basis.

"The merger represents another step in the transformation of ON Semiconductor," said Keith Jackson, ON Semiconductor president and chief executive officer. "With the combination of ON Semiconductor's global footprint, effective channels of distribution, and top-tier customer relationships, we expect to be able to support a broader and deeper penetration of Catalyst's overall product portfolio. This should enable us to accelerate their revenue growth and increase market share."

"Catalyst's merger with ON Semiconductor is a great opportunity for our customers, employees, stockholders and their future," said Gelu Voicu, senior vice president of ON Semiconductor's Catalyst Group. "I am also excited to become a part of the ON Semiconductor team." Mr. Voicu is the former CEO and continuing president of Catalyst Semiconductor.

"This acquisition is directly aligned with both our strategic and financial goals," said Donald Colvin, ON Semiconductor executive vice president and chief financial officer. "We believe ON Semiconductor's operational strengths will significantly benefit the revenue and margin potential of Catalyst Semiconductor similar to our experiences with the acquisition of AMIS Holdings, Inc. The Catalyst acquisition will also add approximately \$25 million of cash and equivalents to ON Semiconductor's balance sheet. We intend to provide further details on the acquisition and our third quarter 2008 results on our regularly scheduled quarterly earnings conference call on Oct. 30, 2008."

Teleconference and Webcast Information

ON Semiconductor will host a conference call for the financial community at 2:00 p.m. Eastern Time (ET) on Oct. 30, 2008 to discuss this announcement and ON Semiconductor's results for the third quarter of 2008. The company will also provide a real-time audio broadcast of the teleconference on the Investor Relations page of its website at http://www.onsemi.com. The webcast replay will be available at this site approximately one hour following the live broadcast and will continue to be available for approximately 30

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ON Semiconductor Corporation Completes Acquisition of Catalyst Semiconductor, Inc.

days following the conference call. Investors and interested parties can also access the conference call through a telephone call by dialing (888) 546-9664 (U.S./Canada) or 706-679-4331 (International). In order to join this conference call, you will be required to provide the Conference ID Number – which is 68319961. Approximately one hour following the live broadcast, the company will provide a dial-in replay that will continue to be available through November 6, 2008. To listen to the teleconference replay, call 800-642-1687 (U.S./Canada) or 706-645-9291 (International). You will be required to provide the Conference ID Number – which is 68319961.

About ON Semiconductor

With its global logistics network and strong product portfolio, ON Semiconductor (Nasdaq: ONNN) is a preferred supplier of high performance, energy efficient, silicon solutions to customers in the power supply, automotive, communication, computer, consumer, medical, industrial, mobile phone, and military/aerospace markets. The company's broad portfolio includes power, signal management, analog, DSP, advance logic, clock management and standard component devices. Global corporate headquarters are located in Phoenix, Arizona. The company operates a network of manufacturing facilities, sales offices and design centers in key markets throughout North America, Europe, and the Asia Pacific regions. For more information, visit http://www.onsemi.com.

This document contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements include, but are not limited to, statements related to the benefits of the transaction between ON Semiconductor Corporation ("ON") and Catalyst Semiconductor, Inc. ("Catalyst Semiconductor") and the future financial performance of ON. These forward-looking statements are based on information available to ON and Catalyst Semiconductor as of the date of this release and current expectations, forecasts and assumptions and involve a number of risks and uncertainties that could cause actual results to differ materially from those anticipated by these forward-looking statements. Such risks and uncertainties include a variety of factors, some of which are beyond ON's or Catalyst Semiconductor's control. In particular, such risks and uncertainties include difficulties encountered in integrating merged businesses; the variable demand and the aggressive pricing environment for semiconductor products; dependence on each company's ability to successfully manufacture in increasing volumes on a cost-effective basis and with acceptable quality for its current products; the adverse impact of competitive product announcements; revenues and operating performance; poor economic conditions and markets, including the current credit markets; the cyclical nature of the semiconductor industry; changes in demand for our products; changes in inventories at 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 leverage and restrictive covenants in debt agreements; risks associated with 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. Information concerning additional factors that could cause results to differ materially from those projected in the forward-looking statements is contained in ON's Annual Report on Form 10-K, as filed with the Securities and Exchange Commission (the "SEC") on February 12, 2008, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and other of ON's SEC filings, and Catalyst Semiconductor's Annual Report on Form 10-K, as filed with the SEC on July 3, 2008 and as amended on August 14, 2008, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and other of Catalyst Semiconductor SEC filings. These forward-looking statements should not be relied upon as representing ON's or Catalyst Semiconductor's views as of any subsequent date and neither ON nor Catalyst Semiconductor undertake any obligation to update forward-looking statements to reflect events or circumstances after the date they were made.

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trademarks of their respective holders. Although ON Semiconductor and Catalyst Semiconductor reference their respective websites in this news release, information on those websites is not to be incorporated herein.

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