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

August 24, 2007

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)

 $\label{eq:condition} 602\text{-}244\text{-}6600$ (Registrant's telephone number, including area code)

ck 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 isions:
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 5.02. Departure of Directors or Principal Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

(b) Effective as of August 24, 2007, Jerome N. Gregoire notified ON Semiconductor Corporation of his decision to resign effective immediately from the Board of Directors of ON Semiconductor Corporation.

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.

Date: August 27, 2007

ON SEMICONDUCTOR CORPORATION

(Registrant)

By: /s/ GEORGE H. CAVE

Name: George H. Cave

Title: Senior Vice President, General Counsel, Chief Compliance and Ethics

Officer and Secretary