

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

January 28, 2009

Via U.S. Mail and Facsimile to (602) 244-6071

Donald Colvin Chief Financial Officer ON Semiconductor Corporation 5005 E. McDowell Road Phoenix, AZ 85008

Re: ON Semiconductor Corporation

Form 10-K for the Fiscal-Year ended December 31, 2007

Filed February 12, 2008

Form 10-Q for the Fiscal-Quarter ended September 26, 2008

File No. 000-30419

Dear Mr. Colvin:

We have reviewed your response dated December 30, 2008, and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

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Form 10-K for the Fiscal-Year ended December 31, 2007

Related Party Transactions, page 55

- 1. We note your response to prior comment 6:
 - · With regards to the "two separate supply and purchase transactions" please expand your analysis to describe the authority you rely on for your determination that Mr. Hernandez and Mr. McCranie do not have any direct or indirect material interest in the transaction that you omitted from your Item 404(a) disclosure. For example, we note Instruction 6(A)(i) to Item 404(a) is limited to directors of the other party to the relationship and does not exclude officers from the disclosure requirement.
 - Please expand to provide additional support for your reliance on instruction 7 to Item 404 of Regulation S-K to omit disclosure regarding the intellectual property license agreement. Describe in more detail how the rates and charges under the intellectual property license agreement were determined pursuant to a competitive bid process. For example, did multiple parties submit offers to license the technology? What rates or charges were determined through the bidding process?
- 2. Please expand your response to prior comment 7 to tell us the nature of the "information that came to your attention" prior to filing last year's proxy statement. Please expand your response to clarify why this information was insufficient to determine the nature of the relationship and why you relied solely on publicly available information in your efforts to make such a determination, rather than discussing it with these parties. Also, please tell us what steps you intend to take to "determine conclusively whether an affiliation exists" and when you will take those steps.

As appropriate, please respond to this comment within 10 business days or tell us when you will provide us with a response. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your response to our comment.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

• the company is responsible for the adequacy and accuracy of the disclosure in the filing;

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- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

You may contact Geoff Kruczek at (202) 551-3641 or me at (202) 551-3637 if you have questions regarding comments and related matters.

Sincerely,

Jay Mumford Attorney