

Mail Stop 6010

July 12, 2006

George H. Cave
Senior Vice President
ON Semiconductor Corporation
5005 E. McDowell Road
Phoenix, Arizona 85008

Re: ON Semiconductor Corporation
Application for Qualification of Indentures on Form T-3
Filed June 20, 2006
File No. 22-28812

Dear Ms. Skeffington:

We have limited our review of your filing to the issues addressed in our comments below. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comments are inapplicable or a revision is unnecessary.

1. We note the comment letter we issued on June 30, 2006 in connection with our review of your Schedule TO filed on June 20, 2006. Issues raised in that comment letter must be resolved before we act on any request to accelerate the effective date of the Form T-3. Also, please revise the Form T-3 as appropriate to reflect any changes resulting from resolution of those issues.
2. We note your pending application for confidential treatment. We will provide any comments on your application separately. Comments on your application must be resolved and your application must be complete before we act on any request to accelerate the effective date of the Form T-3.

As appropriate, please amend your filing in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

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We urge all persons who are responsible for the accuracy and adequacy of the disclosure in your filing to be certain that they have provided all information investors require for an informed 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 the event the company requests acceleration of the effective date of the Form T-3, it should furnish a letter, at the time of such request, acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments or the declaration of effectiveness 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 connection with your filing.

We will consider a written request for acceleration of the effective date of the Form T-3 as a confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the federal securities laws as they relate to the proposed offering of the securities specified in the above Form T-3. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

If you have any questions, please call Donald C. Hunt at (202) 551-3647 or me at (202) 551-3617.

Sincerely,

Russell Mancuso
Branch Chief

cc (via fax): Stephen H. Shalen, Esq. – Cleary Gottlieb Steen & Hamilton LLP