

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

March 15, 2013

<u>Via E-Mail</u> Mr. John W. Hohener Chief Financial Officer Microsemi Corporation One Enterprise Aliso Viejo, CA 92656

Re: Microsemi Corporation

Form 10-K for fiscal year ended September 30, 2012

Filed November 21, 2012

File No. 0-08866

Dear Mr. Hohener:

We have completed our review of your filing. We remind you that our comments or changes to disclosure in response to our comments do not foreclose the Commission from taking any action with respect to the company or 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. 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 the information the Securities Exchange Act of 1934 and all applicable rules require.

Sincerely,

/s/ Kevin L. Vaughn

Kevin L. Vaughn Accounting Branch Chief