



DIVISION OF
CORPORATION FINANCE

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

February 27, 2013

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
Form 8-K dated January 24, 2013
Filed January 24, 2013
File No. 0-08866**

Dear Mr. Hohener:

We have reviewed your filing and have the following comments. We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your documents. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe a revision is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

Form 10-K for Fiscal Year Ended September 30, 2012

Consolidated Statements of Cash Flows, page 48

1. We note your disclosure on page 54 that you corrected an error related to your presentation of excess tax benefits on stock awards in your consolidated statements of cash flows for the year ended October 2, 2011. Please address the following:
 - We do not see where you have provided clear disclosure on the face of the statement of cash flows that the 2011 amounts have been restated. Please explain to us why you concluded such disclosure was not necessary.

- Explain to us how you have complied with FASB ASC 250-10-50-7a, which requires disclosure of the effect of the correction on each financial statement line item.
- Please have your auditor address how it considered paragraph 9 of PCAOB Auditing Standard No. 6 and why it ultimately concluded reference to the restatement in its audit report was not required.

Note 1. Description of Business and Summary of Significant Accounting Policies, page 49

– Goodwill and Intangible Assets, page 52

2. We note your disclosures here that you “assess qualitative factors to determine whether it is more likely than not that an indefinite-lived intangible asset such as goodwill is impaired as the basis for determining whether a quantitative impairment test is required.” Based on this disclosure and the disclosure on page 40, it appears that you have elected to adopt the provisions of FASB ASU 2012-02. However, we also note disclosure here that you performed a quantitative analysis in the fourth quarter of 2012. As such, it appears that the qualitative assessment may have indicated it was more likely than not that goodwill was impaired. Please revise future filings to clarify the results of your qualitative assessment and the link between the qualitative assessment and the quantitative assessment.

– Segment Information, page 53

3. We note your disclosure here that you manage your business on the basis of one reportable segment. Please provide us with additional analysis of your presentation of segments in accordance with FASB ASC 280. Specifically address the following:
 - Clarify for us how many operating segments you have identified. If you aggregate more than one operating segment into your one reportable segment, provide us with your analysis of the criteria in FASB ASC 280-10-50-11.
 - We note that you operate in distinct geographic areas. Provide us with more information regarding the financial information that you provide to your chief operating decision maker (as defined in FASB ASC 280) with respect to these geographic areas.
 - We note you discuss your results in terms of “end markets.” Please explain to us how you have considered these end markets in connection with your segment reporting.
 - In your discussion of the integration of acquired entities on page 28, you include references to “divisions.” Please tell us more about the nature of the “divisions” that you are referring to and how you have considered these in your segment presentation analysis.
 - Provide us with a summary of the reporting package provided to your chief operating decision maker.

Note 8. Credit Agreement and Related Instruments, page 62

-Credit Agreement, page 62

4. We note that as of September 30, 2012, you have \$776 million borrowed under the term loan facility and no borrowings under the revolving facility. We further note that during fiscal year 2012, you entered into a new credit agreement and then subsequently further modified that credit agreement. The net effect was new borrowings of \$810 million under the term loan and \$50 million in a revolving credit facility. Please provide us with additional details of the \$959,708 of proceeds from credit facility disclosed on your statement of cash flows.

Note 14. Segment Information, page 70

5. We note that the geographic information for net sales has been separated into three components – United States, Europe, and Asia. Please revise future filings to separately disclose material revenues attributed to any individual country. Please also revise your future filings to more clearly disclose the basis for attributing revenues from external customers to individual countries by clarifying what you mean by the phrase “originating geographic area.” Refer to FASB ASC 280-10-50-41.
6. With reference to page 6, we note your disclosures of a number of different product offerings, including broadband power amplifiers, integrated circuits, transistors, suppressors, relays and more. Please explain to us how you have considered the disclosure requirements of FASB ASC 280-10-50-40.

Form 8-K dated January 24, 2013

7. We note the secondary headline of your earnings release refers to Non-GAAP Diluted EPS but does not include disclosure of GAAP Diluted EPS. Please revise such statements in future filings to ensure the GAAP measure is presented with equal or greater prominence than the non-GAAP measure. Refer to Item 10(e)(1)(i)(a) of Regulation S-K.
8. Further to the above, while we note broad disclosures describing the non-GAAP financial measures, disclosures regarding the items that are adjusted for purposes of your presentation of non-GAAP financial information and also the reconciliation of each non-GAAP financial measure to the most directly comparable measure calculated in accordance with GAAP, we do not see where you have provided disclosure of the usefulness of *each specific* non-GAAP measure. Please revise future filings to provide such disclosure for *each* non-GAAP financial measure presented.

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 Exchange Act rules require. Since the company and its management are

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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 responding to our comments, please provide a written statement from the company acknowledging that:

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

You may contact David Burton, Staff Accountant at (202) 551-3626 or me at (202) 551-3643 if you have questions regarding these comments. In this regard, do not hesitate to contact Martin James, Senior Assistant Chief Accountant at (202) 551-3671.

Sincerely,

/s/ Kevin L. Vaughn

Kevin L. Vaughn
Accounting Branch Chief