



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

February 3, 2011

Via Facsimile and U.S. Mail

Mr. Gregory S. Lang
President
PMC-Sierra, Inc.
3975 Freedom Circle
Santa Clara, CA 95054

**Re: PMC-Sierra, Inc.
Form 10-K for the year ended December 27, 2009
Filed February 24, 2010
File No. 0-19084**

Dear Mr. Lang:

We have reviewed your response letter dated January 19, 2011 and have the following additional comments. 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 revising future filings where indicated and by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comment applies 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 filings and the information you provide in response to these comments, we may have additional comments.

Form 10-K for the year ended December 27, 2009

Note 1. Summary of Significant Accounting Policies, page 57

– Segment Reporting, page 63

1. We note your response to prior comment 4. We note that each of the four operating segments has demonstrated different economic characteristics for the periods presented. For example, we note that revenue growth rates, non-GAAP gross margin percentage and non-GAAP operating margin percentage vary significantly across the four segments.

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Please explain to us in greater detail why you believe these represent similar economic characteristics.

2. Further to the above, we note non-GAAP R&D as a percentage of revenue is part of the key information reviewed by the CODM. Please tell us how consideration of non-GAAP R&D as a percentage of revenue would impact your analysis of whether the operating segments possess similar economic characteristics. Also discuss as appropriate why you do not believe this is a relevant measure for purposes of analyzing whether the operating segments possess similar economic characteristics.

Note 14. Income Taxes, page 82

3. Please refer to prior comment 6. We note your proposed disclosure in response thereto. However, the distinction made between domestic and foreign has been applied to the components of the income tax provision rather than income (loss) before income tax expense (benefit) as required by Rule 4-08(h)(1)(i) of Regulation S-X. Please revise in future filings. Provide us with a sample of your proposed revised disclosures.

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,

Kevin L. Vaughn
Accounting Branch Chief