



DIVISION OF
CORPORATION FINANCE

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

January 6, 2012

Via Email

Dr. Paramesh Gopi
President and Chief Executive Officer
Applied Micro Circuits Corporation
215 Moffett Park Drive
Sunnyvale, CA 94089

Re: Applied Micro Circuits Corporation
Form 10-K for the fiscal year ended March 31, 2011
Filed May 9, 2011
File No. 0-23193

Dear Mr. Gopi:

We have reviewed your filing 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.

Please respond to this letter within ten business days by amending your filing, 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 an amendment 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.

Item 7. Management's Discussion and Analysis, page 36

1. We note your disclosure on page 4 that you are focusing your current transport investments on high growth 10G and beyond, data center, OTN and enterprise market opportunities while continuing to service the SONET/SDH market. Please tell us, and in your future filings disclose, the portion of your business that is represented, respectively, by (1) your 10G and faster Ethernet products and (2) your SONET/SDH products. Please also tell us, and in your future filings disclose, the known trends that are affecting your operating results in these two markets and consider disclosing trends that you anticipate will impact these markets.

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 Tim Buchmiller at (202) 551-3635 or me at (202) 551-3528 with any questions.

Sincerely,

/s/ Amanda Ravitz

Amanda Ravitz
Assistant Director

cc: Shiva Natarajan
Applied Micro Circuits Corporation
(via email)