



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 3720

January 27, 2010

Via U.S. Mail and Fax (408.428.6960)

Mr. Justin Spencer
Chief Financial Officer
Symmetricom, Inc.
2300 Orchard Parkway,
San Jose, CA 95131-1017

**RE: Symmetricom, Inc.
Form 10-K for the Fiscal Year Ended June 28, 2009
Filed September 9, 2009
File No. 000-02287**

**Schedule 14A Definitive Proxy Statement
Filed September 30, 2009
File No. 000-02287**

Dear Mr. Spencer:

We have reviewed your filing and have the following comment. If you disagree with our comment, we will consider your explanation as to why it is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation.

Please comply with our comment in future filings. Confirm in writing that you will do so and also explain to us how you intend to comply. Please do so within the time frame set forth below. Please understand that after our review of your response, we may raise additional comments.

Form 10-K for the Fiscal Year Ended June 28, 2009

Definitive Proxy Statement Incorporated By Reference Into Part III of Form 10-K

Compensation Discussion and Analysis, page 14

Annual Variable Compensation, page 18

1. In future filings, please disclose the specific corporate performance targets for the annual incentive compensation program and provide more detail about the success or failure of

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your named executive officers' individual performance objectives for the last completed fiscal year.

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Please respond to our comment, via EDGAR, within 10 business days or tell us when you will provide us with a response. Please understand that we may have additional comments after reviewing your response to our comment.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings reviewed by the staff 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 connection with responding to our comment, please provide, in writing, a statement from the company acknowledging that

- the company is responsible for the adequacy and accuracy of the disclosure in the filings;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filings; 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.

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 our review of your filings or in response to our comments on your filings.

You may contact Kenya Wright Gumbs, Staff Accountant, at (202) 551-3373 or Robert S. Littlepage Jr., Accountant Branch Chief, at (202) 551-3361 if you have questions regarding comments on the financial statements and related matters. Please contact Paul Fischer, Staff Attorney, at (202) 551-3415 or me at (202) 551-3815 with any other questions

Sincerely,

Larry M. Spiegel
Assistant Director