

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

Mail Stop 6010

March 25, 2008

Via U.S. Mail and Facsimile to (480) 792-7456

Steve Sanghi President Microchip Technology Inc. 2355 W. Chandler Blvd Chandler, AZ 85224

Re: Microchip Technology Inc.

Form 10-K for the Fiscal-Year ended March 31, 2007

Filed May 25, 2007 File No. 000-21184

Dear Mr. Sanghi:

We have reviewed your filing and your response letter dated February 19, 2008 and have the following additional comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

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Form 10-K for the Fiscal-Year ended March 31, 2007

Executive Compensation, page 38

1. We note your response to comment 3 in your letter dated February 19, 2008. Please provide us with a more detailed explanation as to why disclosure of the undisclosed specific revenue growth goals under your Executive Management Incentive Compensation Plan on a historical basis would cause substantial competitive harm. For example, describe for us what information your competitors could derive from such disclosure and how such information could be used to cause substantial competitive harm. Also, please tell us why the disclosure of such information would not be material to an investor's understanding of your compensation policies and decisions.

Consolidated Financial Statements

Note 1: Significant Accounting Policies, page F-6

Revenue Recognition, page F-6

- 2. We note your response to prior comment 5. In light of the fact that you are unable to estimate the product returns and the price discounts you issue under arrangements with your distributors and, therefore, an unknown portion of the amount recorded as "deferred income on shipments to distributors" will never be recognized as revenue, please tell us how you concluded that "deferred income" is an appropriate title for the liability account. We note that Regulation S-X calls for financial statement caption titles that reflect the significance and the character of the items being presented. Please tell us, for example, whether you considered a title for the account such as "customer deposit, net of deferred inventory costs" or other such titles that better depict the nature of the liability.
- 3. In future filings, please revise the notes to your financial statements to include the significant information outlined in your response to our prior comment 5. At a minimum, please address the following:
 - a. Specifically disclose why you defer revenue i.e., (i) you are unable to estimate the amount of products that could be returned and (ii) because of the price discounts you frequently provide to your distributors, the ultimate sales price of your transactions with distributors is not fixed or determinable until the distributors has sold to the end-user;
 - b. Disclose the significant terms of your sales arrangement with distributors, including a brief summary of the return rights and price protection or price concession rights you grant them; the situations under which the distributors may exercise those rights; whether returns or price discounts credits are capped to a certain percentage of sales price or margins; and whether any of your

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arrangements with distributors would allow or require you to grant price discounts below the cost of the product.

- c. Provide a discussion of your policies for testing and accounting for the impairment of the deferred cost of sale amounts or, as you indicated, the inventory still held by distributors which may be returned to you or on which you may have to provide discounts.
- 4. Please tell us the amounts of gross deferred revenues and gross deferred costs of sales presented in the deferred income caption of your balance sheets as of March 31, 2007 and December 31, 2008. In addition, as we note that impairments of the deferred costs and price discounts are reasonably likely to have a material impact on your results of operations, liquidity or capital resources, please revise MD&A in future filings to include similar disclosure accompanied by a discussion of the impact in each reported period. Your discussion could also include a roll-forward of your deferred distributor income liability account. Further, please discuss any trends noted over the reported periods. Refer to Item 303(a) of Regulation S-K.

As appropriate, please respond to this comment within 10 business days or tell us when you will provide us with a response. Detailed cover letters greatly facilitate our review. 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 filing to be certain that the filing includes all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment 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 comments, 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 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.

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 filing or in response to our comments on your filing.

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You may contact Kevin Kuhar, Staff Accountant, at (202) 551-3662 or me at (202) 551-3603 if you have questions regarding comments on the financial statements and related matters. Please contact Tim Buchmiller at (202) 551-3635 or Alan Morris at (202) 551-3601 if you have questions on other comments. In this regard, do not hesitate to contact me or Angela Crane, Branch Chief, at (202) 551-3554 with any questions.

Sincerely,

Jay Webb Reviewing Accountant