



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 6010

January 28, 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
Form 10-Q for the Fiscal-Quarter ended September 30, 2007
File No. 000-21184**

Dear Mr. Sanghi:

We have reviewed your filing and have the following 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.

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

Management's Discussion and Analysis, page 22

1. We note from your current reports on Form 8-K that you have furnished that your recent quarterly results have been adversely impacted by weakness in the U.S. housing market. In your future filings, as applicable, please address any known trends that have had or that you reasonably expect will have a material impact on your operations in your Management's Discussion and Analysis. Refer to Item 303(a)(3)(ii) of Regulation S-K. We also note that you have compiled a "housing index" of your ten largest customers exposed to the U.S. housing market. In your future filings, as applicable, please also expand the "Overview" section of Management's Discussion and Analysis to add a balanced, executive-level discussion that identifies the most important themes or other significant matters with which management is concerned in evaluating the company's financial condition and operating results. Discuss material business opportunities, challenges and risks, such as those presented by known material trends and uncertainties, on which the company's executives are most focused, and the actions they are taking in response to them. For further guidance on the content and purpose of the "Overview," see Interpretive Release No. 33-8350 available on our website.

Liquidity and Capital Resources, page 32

2. It appears from footnote 3 to your financial statements for the fiscal year ended March 31, 2007 that a significant portion of your investments were held in "auction rate securities" and "floating rate securities." In future filings, as applicable, please clearly discuss the nature of the material components of your assets as necessary to provide your investors with information necessary for a clear understanding of your balance sheet items. Also, if these securities are reasonably likely to affect the value of your investments in any material way, please expand your discussion and analysis in applicable future filings to provide your investors with information necessary for a clear understanding of the trend or uncertainty. Refer to Item 303(a) of Regulation S-K. For example, as appropriate, identify the percentage and nature of any mortgage- or other asset-backed securities you hold, indicate what factors may affect the value of those securities, and disclose any material risks. Also add any appropriate disclosure required by Item 305 of Regulation S-K.

Executive Compensation, page 38

3. We note your executive compensation incorporated by reference into your Form 10-K from your definitive proxy statement. You disclose under "Incentive Cash Bonuses" that you set performance goals which, if met, result in quarterly payments to the named executive officers. In your future filings, as applicable, please disclose the specific performance goals. See Item 402(b)(2)(v) and Instruction 2 to Item 402(b). To the extent you believe that disclosure of the information would result in competitive harm

such that the information could be excluded under Instruction 4 to Item 402(b), please provide us with a detailed explanation supporting your conclusion. To the extent that it is appropriate to omit specific targets or performance objectives, you are required to provide appropriate disclosure pursuant to Instruction 4 to Item 402(b) of Regulation S-K. Refer also to Question 3.04 of the Item 402 of Regulation S-K Interpretations available on our website at www.sec.gov. In discussing how difficult or likely it will be for the registrant to achieve the target levels or other factors, you should provide as much detail as necessary without disclosing information that poses a reasonable risk of competitive harm. Also see "Performance Targets" in Staff Observations in the Review of Executive Compensation Disclosure (10/09/07), available at <http://www.sec.gov/divisions/corpfin/guidance/execcompdisclosure.htm>.

4. We note the significant differences between compensation paid to the chief executive officer and the other named executive officers. In future filings, as applicable, please discuss the reasons for the differences. If policies or decisions applicable to one named executive officer are materially different from those applicable to the other officers, this should be discussed on an individualized basis. Refer to Section II.B.1 of Commission Release No. 33-8732A and to "Differences in compensation policies and decisions" in the observations guidance cited above.

Consolidated Financial Statements, page F-1

Note 1. Significant Accounting Policies, page F-6

Revenue Recognition, page F-6

5. We note that because of the price protection and product return rights you grant to distributors and your inability to reasonably estimate the returns or the amounts you will grant in price protections, you defer recognizing revenue on sales made to distributors until the distributor sells the product to its customer. We note that when you defer recognizing revenue, "the amounts billed to distributors are recorded as accounts receivable, inventory is relieved and the sale and gross margin are deferred and reflected as a current liability."
 - Tell us and revise the note in future filings to clarify how you treat the costs of sales made to distributors.
 - Explain how that accounting treatment is consistent with paragraph 6 of SFAS 48.
 - If you defer these costs, tell us and revise future filings to disclose how the deferred costs are presented on your balance sheet.
 - Describe to us the methodology, if any, employed to evaluate that asset for impairment and the authoritative literature in US GAAP on which you base that policy.
 - To the extent you present both the deferred costs of sales and the deferred gross revenue within the deferred income on shipments to distributors current liability

caption of the balance sheet, please explain how that presentation complies with paragraph 5 of FIN 39 which permits the offsetting of assets and liabilities only when a legal right of setoff exists.

6. As we note from page 28 that distributors can return physical inventory to you and that you are unable to reasonably estimate the amount of the inventory that may be returned, please discuss your rationale under US GAAP for relieving inventory at the time of shipment to the distributor. Please reference the specific authoritative literature on which you have based your policy.

Impairment of Long-Lived Assets, page F-8

7. We see you indicate herein that "... (you) recognize an impairment loss based on the excess of the carrying amount of the assets over their respective fair values and that fair value is determined by discounted future cash flows, *appraisals* or other methods." We also noted disclosures on page 21 specifically indicated certain asset valuations were based on independent valuation firm appraisals. While in future filings management may elect to take full responsibility for valuing assets, if you choose to continue to refer to an expert in any capacity, please revise future filings, beginning with your next Form 10-Q, to name the independent valuation firm. In addition, please note that if you intend to incorporate your Form 10-K by reference into any registration statement, you will be required to include the consent of the independent valuation firm as an exhibit to the registration statement.

Note 16. Geographic Information, page F-21

8. Disclosure of long-lived assets by geographic area under SFAS 131 should present tangible assets only and should not include intangible assets and goodwill. See question 22 to the FASB publication "Segment Information: Guidance on Applying Statement 131." Please note our comment when preparing any future filings.

Form 10-Q for the Fiscal-Quarter ended September 30, 2007

Note 10. Employee Benefit Plans, page 10

Share-Based Compensation Expense, page 11

9. We note that paragraph 84 of SFAS 123(R) calls for the disclosure of the effect of applying the standard on basic and diluted earnings per share in the period of adoption. There does not appear to be any basis or context in GAAP for computing and disclosing the per share effects of any form of compensation on an on-going basis. Accordingly, please remove share-based compensation effects on earnings per share from future filings or tell us the authoritative accounting literature which permits and supports your current disclosures.

Steve Sanghi
Microchip Technology Inc.
January 28, 2008
Page 5

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.

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