

February 19, 2008

Securities and Exchange Commission
Division of Corporate Finance
100 F Street, N.E.
Washington, DC 20549

Attention: Jay Webb, Division of Corporate Finance

Re: Microchip Technology Incorporated
Form 10-K for fiscal year ended March 31, 2007
Form 10-Q for fiscal quarter ended September 30, 2007
Commission File No. 0-21184

Ladies and Gentlemen:

On behalf of Microchip Technology Incorporated (the "Company"), we are transmitting the Company's Memorandum of Response (the "Response Letter") to the comments of the Staff (the "Staff") of the Securities and Exchange Commission (the "Commission") contained in the Staff's letter dated January 28, 2008 relating to the Company's Form 10-K for the fiscal year ended March 31, 2007 and Form 10-Q for the fiscal quarter ended September 30, 2007.

If you should have any questions or additional comments regarding the Company's Response Letter, please do not hesitate to contact the undersigned at (512) 338-5400.

Very truly yours,

WILSON SONSINI GOODRICH & ROSATI
Professional Corporation

/s/ J. Robert Suffoletta

J. Robert Suffoletta, Esq.

Enclosure

MICROCHIP TECHNOLOGY INCORPORATED
MEMORANDUM OF RESPONSE TO SECURITIES AND EXCHANGE COMMISSION COMMENTS
AS SET FORTH IN THE STAFF'S LETTER DATED JANUARY 28, 2008

This memorandum sets forth the response of Microchip Technology Incorporated (the "Company") to the comments of the Staff (the "Staff") of the Securities and Exchange Commission (the "Commission") as set forth in the Staff's letter dated January 28, 2008 relating to the Company's Form 10-K for fiscal year ended March 31, 2007 and Form 10-Q for fiscal quarter ended September 30, 2007.

This Memorandum is being filed via EDGAR. For convenience, the Company has incorporated the Staff's comments in bold typeface before each of its responses.

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 you 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.

Microchip Response:

In response to the Staff's comment, we will include the requested disclosure in future filings. In particular, we have added language to the "Strategy" overview section of our Form 10-Q for the fiscal quarter ended December 31, 2007 regarding the markets in which we sell our products (including the consumer/housing market).

Liquidity and Capital Resources, page 32

2. In 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 of 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 disclosures required by Item 305 of Regulation S-K.

Microchip Response:

In response to the Staff's comment, we have included expanded disclosure on pages [8] and [33] of our Form 10-Q for the fiscal quarter ended December 31, 2007 and will do so as applicable in future filings.

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 @ 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>.

Microchip Response:

In response to the Staff’s comment, we have further reviewed the specific performance goals used for our Executive Management Incentive Compensation Plan (the “EMICP”) in light of the SEC guidance noted in the Staff’s comment. As a result, we will disclose in future filings the specific goals for gross margin percentage, operating expenses as a percentage of sales, operating income as a percentage of sales and earnings per share. Although we do not otherwise disclose such goals to the public, such goals correspond closely to our historical operating results and publicly stated operating metrics and, as such, disclosure of such goals is not likely to present a substantial risk of competitive harm to us. However, we continue to believe that disclosure of the specific revenue growth goals under the EMICP would result in substantial competitive harm to us as these goals are designed to incentivize specific officer behavior that is not otherwise disclosed to the public. In addition, our EMICP goals include revenue growth goals for specific product divisions for which the revenue is not disclosed publicly. We also believe that disclosure of the revenue goals could be confusing or misleading to our stockholders as these goals do not necessarily reflect our historical financial results or our financial guidance. As requested by the Staff, we will add further disclosure in future filings discussing how difficult or likely it will be for us to achieve the target levels of revenue growth.

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.

Microchip Response:

In response to the Staff’s comment, we will clarify in future filings that our Chief Executive Officer participates in the same compensation programs as our other executive officers. We will also expand the discussion regarding the compensation of our Chief Executive Officer relative to our other executive officers.

Consolidated Financial statements, page F-1

Note 1. Significant Accounting Policies, 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 or 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.

Microchip Response:

In response to the Staff’s comment, we advise the Staff that revenue is deferred at the time we ship products to our distributors because the ultimate sales price to the distributor is not fixed or determinable as required by SFAS No. 48, paragraph 6. Our distributors negotiate selling prices with their customers and, accordingly, they frequently request price discounts from us. Such discounts vary significantly based on the customer, product, quantity ordered, geographic location and other factors. Once the distributor has resold the product, and our final sales price is fixed or determinable, we recognize revenue for the final sales price and record the related costs of sales. Also, at that time, the distributor’s right to return the product expires.

With regards to our balance sheet presentation, we present deferred revenue and deferred cost of goods sold on our consolidated balance sheet, net within the deferred income on shipments to distributors current liability caption. We believe this presentation appropriately reflects the true economics of the transaction and general industry practice, and is consistent with SAB Topic 13, Item A. “Selected Revenue Recognition Issues,” Part 4 “Fixed or determinable sales price” (SAB 13A.4) as we defer 100% of the revenue and 100% of the costs. Furthermore, we believe the alternative of recording deferred revenue for the sale and presenting the inventory sold to distributors as an asset on our consolidated balance sheet would be misleading because:

- We have neither the risks nor any benefits associated with the possession or control of the inventory shipped to distributors;
- We do not have title, nor risk of loss with respect to the products already shipped to distributors (standard invoice terms are FOB or Ex-Works shipping point);
- We have no rights to direct the return or cause any other disposition of the inventory once it has been shipped to the distributor;
- We do not directly or indirectly control the use of the product once it has been shipped to the distributor;
- The inventory is not subject to any consignment arrangement; and
- The deferral of revenue due to price discounts while inventory is held at the distributor does not equate to continuous direct or indirect ownership of the inventory by us.

The rights of return offered to our distributors are limited and, while we cannot reliably estimate the amount of inventory that may be returned, we do evaluate the products held by our distributors for impairment to the extent such products may be returned by the distributor within these limited rights and such products would be considered excess or obsolete if included within our own inventory. We believe this treatment is in accordance with Chapter 4 of ARB 43.

We do not believe the presentation of the deferred revenue and the deferred cost of goods sold net within deferred income on shipments to distributors is in conflict with paragraph 5 of FIN 39, as these do not represent assets and liabilities resulting from a contractual relationship of the nature described in that Interpretation. Instead, the deferral of revenue and the associated cost of good sold is the result of uncertainty as to the ultimate sales price to be realized in those sales. Further, the deferred revenue and deferred cost of goods sold do not represent two separate transactions, but rather one, which culminates at the time the distributor sells the product to its customer, and the price becomes fixed or determinable.

Lastly, we respectfully refer the Staff to their letter dated October 16, 2003, and our response thereto, dated November 7, 2003, in which the presentation on our consolidated balance sheets of sales to distributors was previously discussed.

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.

Microchip Response:

In response to the Staff's comment, and as discussed in our response to Comment 5 above, we believe the presentation of products shipped to distributors as inventory on our consolidated balance sheets is inappropriate. Specifically, title to this inventory has transferred to the distributor, risks and benefits associated with the possession of the goods rest with the distributor, and we do not directly or indirectly control the use of the products shipped to the distributor. Additionally, as the inventory is no longer controlled by us, and we cannot control others' access to the inventory, we do not believe it meets all essential characteristics of an asset as set forth in paragraph 26 of CON 6. Further, as is set forth in Chapter 4 of ARB 43, "the term inventory is used herein to designate the aggregate of those items of tangible personal property which (1) are held for sale in the ordinary course of business, (2) are in process of production for such sale, or (3) are to be currently consumed in the production of goods or services to be available for sale." As the products held by the distributors are not held for sale by the Company, but rather, have already been subject to such a transaction, we believe it would be inappropriate to continue to present such items as inventory on our consolidated balance sheets.

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 10K 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.

Microchip Response:

In response to the Staff's comment, we will include the requested disclosure in future filings.

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.

Microchip Response:

In response to the Staff's comment, we will revise this disclosure in 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 efforts of any form of compensation of 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.

Microchip Response:

In response to the Staff's comment, we will remove the share-based compensation effects on earnings per share from future filings.

General Matters

In addition, the Company acknowledges the following:

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

Microchip Technology Incorporated

By: /s/ Gordon Parnell
Gordon Parnell,
Chief Financial Officer

