

September 23, 2010

Via EDGAR

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

Attention: Alicia Lam, Division of Corporate Finance

Re: Microchip Technology Incorporated
Form 10-K for fiscal year ended March 31, 2010
Commission File No. 0-21184

Ladies and Gentlemen:

On behalf of Microchip Technology Incorporated (the “Company”), we have attached the Company’s response to the comments of the Staff (the “Staff”) of the Securities and Exchange Commission set forth in the Staff’s letter dated August 30, 2010 relating to the Company’s Form 10-K for the fiscal year ended March 31, 2010.

If you should have any questions regarding the Company’s response, 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 AUGUST 30, 2010

This memorandum sets forth the response of Microchip Technology Incorporated (“we” or 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 August 30, 2010 relating to the Company’s Form 10-K for fiscal year ended March 31, 2010.

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.

Item 11. Executive Compensation, page 43

1. **We note from your discussion under “Base Salaries” on page 15 of the proxy statement that you have incorporated by reference into your Form 10-K that the Compensation Committee assesses the business and financial objectives of Microchip as a whole, as well as the objectives for each of the individual officers relative to their respective areas of responsibility in setting base salaries. In future filings, please describe the specific items of corporate performance that are taken into account in setting base salary and how base salary is structured and implemented to reflect the named executive officer’s individual performance and/or individual contribution to these items of the registrant’s performance, describing the elements of individual performance and/or contribution that are taken into account. Please see Items 402(b)(2)(v) and 402(b)(2)(vii) of Regulation S-K.**

Microchip Response:

In response to the Staff’s comment, we will add the requested disclosure in our future filings.

2. **It is unclear how the amounts of the incentive cash bonuses awarded to the named executive officers were determined from the size of the bonus pool. With a view towards revised disclosure in future filings, please tell us how these incentive cash bonus awards were determined and specifically address how the amount of each named executive officer’s cash bonus was determined. We note additionally your footnotes 4 and 5 on page 25 of the proxy statement that you have incorporated by reference. There appears to be a discrepancy between these footnotes and the target percentage of bonuses disclosed on page 16. Please clarify.**

We note additionally your reference to the MICP in footnote 4 of the Summary Compensation Table on page 22 and the ECBP in footnote 6 on page 25 but note that you have not provided a discussion of these plans. With a view towards revised disclosure in future filings, please provide us a discussion of all plans used to determine non-equity incentive compensation of the named executive officers.

Microchip Response:

In response to the Staff’s comment, we are providing the following information.

On a quarterly basis, each executive's total bonus target under the EMICP and the DMICP is based on a percentage of his or her base salary. The dollar amount of the target bonus for each executive is based on achievement of all performance metrics under the EMICP (as disclosed on page 16 of our proxy statement) and payment of 20% as a discretionary award under the DMICP (as disclosed on page 16 of our proxy statement). The actual awards under the EMICP are based on our quarterly financial performance compared to the performance metrics and the actual awards under the DMICP are determined by our Compensation Committee and can be significantly higher or lower than the 20% target. For fiscal 2010, our CEO's quarterly bonus target under the EMICP and DMICP combined is 200% of his salary for the associated quarter; for Mr. Moorthy it is 55% of his salary; for Mr. Little it is 46% of his salary; for Mr. Dreihobl it is 40% of his salary; and for Mr. Bjornholt it is 30% of his salary. Of the total target bonus, 80% is based upon whether the EMICP performance metrics are met, and 20% is discretionary and awarded under the DMICP.

The quarterly payment target for named executive officers reported on page 16 of the proxy statement is based on each executive's actual salary at the beginning of fiscal 2010. However, the actual bonus payments are made based on the executive's base salary each quarter at the time of the award. Thus, if an executive's salary changes during the year, up or down, this would affect his or her actual bonus amount during the fiscal year. The annual estimated future payouts under non-equity incentive plan awards that are reported in footnote 4 and footnote 5 on page 25 of the proxy statement represent the estimated target bonuses for each executive for fiscal 2011 based on each executive's salary at the end of fiscal 2010. As one target is based on historical data for fiscal year 2010 (page 16), and one target represents estimated future payments under each plan for fiscal 2011 (page 25), the targets reported on pages 16 and 25 are not the same as they reflect different periods and different underlying salaries.

Our MICP, referenced in footnote 4 of the Summary Compensation table on page 22, is our "Management Incentive Compensation Plan." The MICP participants are all Microchip management personnel (other than executive officers). Executive officers participate in the EMICP and not the MICP. However, the MICP is disclosed in footnote 4 because Mr. Bjornholt participated in that plan prior to becoming an executive officer on January 1, 2009. The MICP has substantially the same performance criteria and payment structure as the EMICP and those criteria are disclosed on page 16 of our proxy statement. We will clarify this in future filings.

Our ECBP, referenced on footnote 6 of page 25, is our "Employee Cash Bonus Plan." We describe this plan on page 19 of our proxy statement. The ECBP is a discretionary bonus plan designed to allow the full-time employees of eligible subsidiaries, not just our executive officers, to share in the success of the company. The target bonus under the ECBP is based on 2.5 days of base salary per quarter, or on an annual basis, two weeks of annual base salary. Our Compensation Committee determines how much, if any, awards should be paid out under this plan. To be eligible to participate under the ECBP, the employee must be employed at the company on the first date of the payroll period of the quarter, and remain employed with the company through the date the payment is scheduled to be made. Other eligibility terms also apply, such as an attendance requirement and a performance requirement. We will clarify this in future filings.

3. We note that you have not included any disclosure in response to Item 402(s) of Regulation S-K. Please advise us of the basis for your conclusion that disclosure is not necessary and describe the process you undertook to reach that conclusion.

Microchip Response:

In evaluating whether any disclosure was required in response to Item 402(s) of Regulation S-K, the Company's management reviewed the Company's compensation policies and practices to assess whether such policies and practices as they relate to the Company's employees are reasonably likely to have a material adverse effect on the Company. The Company concluded that its compensation policies and practices are not reasonably likely to have a material adverse effect on the Company and that no disclosure in response to Item 402(s) of Regulation S-K was necessary. In reaching such conclusion, the Company considered the following factors:

- substantially all employees (other than the employees participating in the EMICP, MICP and DMICP discussed below) receive a substantial majority of their cash compensation in the form of base salary, which the Company believes does not encourage excessive risk taking;
- although the Company's executive officers and senior managers participate in a non-equity management incentive plans (i.e., the EMICP and DMICP for executives and the MICP for senior managers) under which performance-based cash bonuses are awarded based on the achievement of performance objectives, the Company believes that the performance objectives are aligned with the long-term goals of the Company and stockholder interests and create a balanced risk and reward structure that incentivizes executive officers and senior managers but does not encourage excessive risk taking;
- all grants of equity awards upon initial employment and all "evergreen" grants to employees are subject to multi-year time-based vesting, which require that an employee remain employed by the Company for a period of years to receive the full benefit of any awards (although special equity grants are made from time to time and such awards may vest over less than two years; such awards do not typically comprise a significant portion of an employee's overall compensation) and equity awards to executive officers are also subject to performance based vesting; and
- the Company's annual compensation review and performance evaluation process does not focus entirely on the Company's financial results but considers other factors that the Company believes do not encourage excessive risk taking, such as management and technical skills, team building, integrity and mentoring skills.

General Matters:

In addition, the Company acknowledges the following:

- the Company is responsible for the adequacy and accuracy of the disclosure in the filing;
- 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
- 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/ Eric Bjornholt
Eric Bjornholt
Chief Financial Officer
