July 22, 2016

Via EDGAR

Securities and Exchange Commission Division of Corporation Finance 100 F Street, N.E. Washington, DC 20549 Mail Stop 3030

Attention: Martin James, Division of Corporation Finance

Re: Microchip Technology Incorporated

Form 10-K for fiscal year ended March 31, 2016

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 June 24, 2016 relating to the Company's Form 10-K for the fiscal year ended March 31, 2016.

If you should have any questions regarding the Company's response, please do not hesitate to contact the undersigned at (512) 338-5439.

Very truly yours,

WILSON SONSINI GOODRICH & ROSATI Professional Corporation

/s/ J. Robert Suffoletta

J. Robert Suffoletta, Esq.

CC: David Burton, Securities and Exchange Commission Kate Tillan, Securities and Exchange Commission J. Eric Bjornholt, Microchip Technology Incorporated

MICROCHIP TECHNOLOGY INCORPORATED MEMORANDUM OF RESPONSE TO SECURITIES AND EXCHANGE COMMISSION COMMENTS AS SET FORTH IN THE STAFF'S LETTER DATED JUNE 24, 2016

This memorandum sets forth the responses 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 June 24, 2016 relating to the Company's Form 10-K for the fiscal year ended March 31, 2016.

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, 2016

Management's Discussion and Analysis of Financial Condition and Results of Operations

Liquidity and Capital Resources, page 42

1. We note that of your total cash, cash equivalents and short-term and long-term investments as of March 31, 2016 of \$2,564.6 million, \$2,559.3 million was held by your foreign subsidiaries. You disclose that you utilize a variety of tax planning and financing strategies, including borrowings under your credit agreement, with the objective of having your worldwide cash available in the locations which it is needed. Please explain to us in more detail how you are able to fund U.S. operations considering that at March 31, 2016 you held cash of only \$5.3 million in the United States.

Microchip Response:

The Company advises the Staff that it funds its U.S. operations using borrowing capacity under its existing credit facility and ongoing operating cash flow from its U.S. operations. The Company's treasury organization actively manages the Company's U.S. cash and credit facility borrowing balances to achieve a favorable overall net interest cost for the Company. In this regard, it is often more economically beneficial for the Company to use cash available in the U.S. to reduce interest costs by paying down the principal balance on its credit agreement rather than to maintain a higher U.S. cash balance that would earn very minimal interest income based on current interest rates. As of March 31, 2016, the Company had outstanding borrowings of \$1.052 billion under its credit facility and \$1.722 billion of additional borrowing capacity under such facility. The Company's existing credit facility expires as to \$2.562 billion of the facility in February 2020 and as to \$0.212 billion of the facility in June 2018.

The balance of the Company's cash, cash equivalents, and marketable securities includes significant amounts held by the Company's non-U.S. subsidiaries. Funds held by non-U.S. subsidiaries are generally subject to U.S. income taxation upon repatriation to the U.S. Substantially all of the Company's non-U.S. cash, cash equivalents, short-term investments and long term investments is being held offshore indefinitely for reinvestment and, therefore, no U.S. current or deferred taxes have been accrued on such amount.

The Company's international operations and capital requirements are funded primarily by cash generated by foreign operating activities and cash held by non-U.S subsidiaries. The Company's U.S. operations and capital requirements are funded primarily by cash generated from U.S. operating activities. Cash generated by U.S. operations has been and is expected to be sufficient to meet the Company's business needs in the U.S. for the foreseeable future including the funding of U.S. operations, purchases of capital equipment and quarterly dividend payments. Should the Company's U.S. cash needs exceed its funds generated by U.S. operations for any reason, including acquisitions of large capital assets or acquisitions of U.S. businesses, the Company may require additional funds in the U.S. In such event, the Company would expect to borrow such additional funds under its existing credit facility, pursue other U.S. borrowing alternatives, issue equity securities or utilize a combination of these sources.

2. On page 44 you disclose that the Atmel acquisition was structured in a manner that enabled you to utilize a substantial portion of the cash, cash equivalents, short-term investments and long-term investments held by certain of your foreign subsidiaries in a tax efficient manner. Please explain to us the ways in which the structure of the acquisition was tax efficient.

Microchip Response:

The Company advises the Staff that in preparation for the closing of the Atmel acquisition, the Company arranged to jointly fund and acquire Atmel's U.S. operations (including Atmel Corporation which is the U.S. parent entity) with one of the Company's non U.S. affiliates and, through post transaction closing integration steps, caused the Company's non U.S. affiliate to acquire the key non U.S. affiliates of Atmel while Microchip Technology Incorporated (the U.S. parent of the Company) acquired and retained the U.S. affiliates and the remaining non U.S. affiliates of Atmel. Given the substantial value of Atmel's key foreign entities relative to Atmel's overall value, a significant portion of the Company's offshore cash, cash equivalents, short-term investments and long-term investments were used in the public Atmel transaction and in turn funded the acquisition of Atmel's key foreign affiliates. The utilization of the Company's non-U.S. cash in the acquisition in the foregoing manner was more tax efficient than had the Company's offshore earnings been repatriated to the U.S.

Note 13, Income Taxes, page F-29

3. We note from your tax rate reconciliation on page F-30 that the impact of your foreign income taxed at lower than the federal rate was a benefit of \$114.5 million in 2016 which was more than your computed expected income tax provision of \$98.5 million. Please tell us the amount and nature of each significant reconciling item included in the benefit and briefly describe the factual circumstances of your tax holiday, the per share effects of the tax holiday, and the date upon which the special tax status terminates. Revise future filings to include all of the disclosures required by ASC 740-10-50-12 and SAB Topic 11C.

Microchip Response:

The Company advises the Staff that the Company's Thailand manufacturing operations are currently subject to numerous tax holidays granted to the Company based on its investment in property, plant and equipment in Thailand. The Company's tax holiday periods in Thailand expire at various times in

the future, however, the Company actively seeks to obtain new tax holidays. The Company does not expect the future expiration of any of its tax holiday periods in Thailand to have a material impact on its effective tax rate. In fiscal 2016, the aggregate dollar benefits derived from these tax holidays was approximately \$6.0 million and increased the Company's basic net income per common share by \$0.03. The remaining material components of foreign income taxed at a rate lower than the U.S. are earnings accrued in Ireland at a 12.5% statutory tax rate and earnings accrued by Microchip's offshore technology company which is resident in the Cayman Islands at a 0% statutory tax rate. At their statutory rates, the income accrued in these jurisdictions provides a rate benefit compared to the U.S. of \$108.2 million. These two jurisdictions plus the tax holiday in Thailand make up 99.8% of the total \$114.5 million benefit of foreign income taxes at a lower rate than the federal rate.

Please also refer to the Company's response to Comment #4 below. The Company will revise its future filings as described in the response to Comment #4 and to include any other disclosures required by ASC 740-10-50-12 and SAB Topic 11C.

4. In future filings, revise the Provision of Income Taxes section of Management's Discussion and Analysis to include a more robust discussion of these foreign income related tax benefits, including the likely impact on your future results and the periods over which you expect they will have the impact. Refer to Item 303(a)(3) of Regulation S-K.

Microchip Response:

In response to the Staff's comment, in future filings, the Company will revise the language that was used in "Note 13 Income Taxes" in the Company's Annual Report on Form 10-K for the year end March 31, 2016 to read as follows:

The foreign tax rate differential benefit primarily relates to the Company's operations in Thailand, Cayman and Ireland. The Company's Thailand manufacturing operations are currently subject to numerous tax holidays granted to the Company based on its investment in property, plant and equipment in Thailand. The Company's tax holiday periods in Thailand expire at various times in the future, however, the Company actively seeks to obtain new tax holidays. The Company does not expect the future expiration of any of its tax holiday periods in Thailand to have a material impact on its effective tax rate. The aggregate dollar benefits derived from these tax holidays approximated \$6.0 million, \$12.4 million and \$16.8 million in fiscal 2016, 2015 and 2014, respectively.

The geographic dispersion of earnings and losses contributes to the period-to-period changes in the Company's effective tax rates. Approximately 20 percent of the Company's current year earnings from continuing operations before income taxes was generated in the U.S. at a combined federal and state effective tax rate that is higher than the Company's overall effective tax rate. The Company is also subject to taxation in many other jurisdictions where it has operations. The effective tax rates that the Company pays in these jurisdictions vary widely, but they are generally lower than the Company's combined U.S. federal and state effective tax rate. The Company's domestic statutory tax rates for fiscal years 2016 and 2015 were approximately 37 percent. The Company's non-U.S. blended statutory tax rates for fiscal years 2016 and 2015 were much lower than this. The difference in rates applicable in foreign jurisdictions results from a number of factors, including lower statutory rates, historical loss carry-forwards, financing arrangements and other factors. The Company's effective tax rate has been, and will continue to be impacted by the geographical dispersion of the Company's earnings and losses. To the extent that domestic earnings increase while the foreign earnings remain flat or decrease, or increase at a lower rate, the Company's effective tax rate will increase.

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 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.

Microchip Technology Incorporated

By: /s/ J. Eric Bjornholt
J. Eric Bjornholt,

Chief Financial Officer