

[Letterhead of Wilson Sonsini Goodrich & Rosati]

July 19, 2017

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, 2017
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 30, 2017 relating to the Company's Form 10-K for the fiscal year ended March 31, 2017.

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: 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 30, 2017

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 30, 2017 relating to the Company's Form 10-K for the fiscal year ended March 31, 2017.

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, 2017

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

Net Sales, page 39

1. We note you attribute the changes in net sales in each period to acquisitions and the impact of general economic and semiconductor industry conditions. In future filings, when individual line items disclosed in your statements of operations materially fluctuate in comparison to the prior period, please quantify and disclose the nature of each item that caused a material change. For example, quantify each material factor such as increases or decreases in net sales from business acquisitions or organic growth that affected your overall net sales. For factors such as organic growth, discuss the underlying material causes for the increase in growth. Refer to Item 303 and the related instructions in Regulation S-K as well as SEC Interpretive Release No. 34-48960.

Microchip Response:

In response to the Staff's comment, the Company will revise its future filings to address the matters in the Staff's comment. In this regard, the Company notes that since the Company completed its acquisition of Atmel Corporation ("Atmel") on April 4, 2016, the acquisition of Atmel will not have an impact on the comparability of the Company's quarterly or annual consolidated results for the fiscal 2018 periods compared to fiscal 2017. However, in future filings, the Company will include disclosure regarding material acquisitions or other items that materially fluctuate in comparison to the prior period and will quantify and disclose the nature of each item that caused a material change.

Provision for Income Taxes, page 45

2. We see from the table on page F-35 that your effective tax rate is significantly impacted by foreign income generated in lower tax jurisdictions. In future filings explain the impact of non-U.S. lower taxed jurisdictions on your effective tax rate, including a discussion of the primary taxing jurisdictions where your foreign earnings are derived, the location of tax holidays and the relevant statutory rates in those jurisdictions. Discuss any uncertainties relating to the income tax rates or benefits you currently receive in those jurisdictions. Refer to Item 303(a)(3) of Regulation S-K.

Microchip Response:

In response to the Staff's comment, the Company will revise its future filings to address the matters in the Staff's comment. A draft of such disclosure is provided below for reference.

The geographic dispersion of the Company's earnings and losses contributes to the period-to-period changes in the Company's effective tax rates. Approximately 20% of the Company's fiscal 2017 earnings from continuing operations before income taxes was generated in the U.S. at a combined federal and state effective tax rate that was 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 rate for each of fiscal 2017 and fiscal 2016 was approximately 37%. The Company's non-U.S. blended statutory tax rates for fiscal 2017 and fiscal 2016 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.

The Company's 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 or, if such tax holidays are not obtained, the Company will be subject to tax at the applicable Thailand statutory rate of 20%. 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 \$25.3 million, \$6.0 million and \$12.4 million in fiscal 2017, 2016 and 2015, respectively. The aggregate dollar benefit derived from these tax holidays in Thailand increased the Company's basic net income per common share by \$0.12 in fiscal 2017, \$0.03 in fiscal 2016 and \$0.06 in fiscal 2015. 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. These two jurisdictions plus the tax holiday in Thailand make up approximately 100% of the total \$105.1 million benefit of foreign income taxes at a lower rate than the federal rate for fiscal 2017.

Item 8. Financial Statements

Note 3. Special Charges and Other, Net, page F-25

3. Revise the disclosures of your restructuring activities in future filings to also provide the information required by ASC 420-10-50-1(a), (b), and (d).

Microchip Response:

In response to the Staff's comment, the Company will revise its future filings to provide the information required by ASC 420-10-50-1(a), (b), and (d). A draft of the Company's proposed disclosure is provided below for reference.

The Company continuously evaluates its existing operations in an attempt to identify and realize cost saving opportunities and operational efficiencies. This same approach is applied to businesses that are acquired by the Company and often, the operating models of acquired companies are not as efficient as the Company's operating model which enables the Company to realize significant savings and efficiencies. As a result, following an acquisition, the Company will from time to time incur restructuring expenses; however, the Company is often not able to estimate the timing or amount of such costs in advance of the period in which they occur. The primary reason for this is that the Company regularly reviews and evaluates each position, contract and expense against the Company's strategic objectives, long-term operating targets and other operational priorities. Decisions related to restructuring activities are made on a "rolling basis" during the course of the integration of an acquisition whereby

department managers, executives and other leaders work together to evaluate each of these expenses and make recommendations. As a result of this approach, at the time of an acquisition, the Company is not able to estimate the total amount of expected employee separation or exit costs that it will incur in connection with its restructuring activities

The Company's restructuring expenses during fiscal 2017 were related to the Company's recent business combinations, including the acquisitions of Atmel and Micrel, and resulted from workforce, property and other operating expense rationalizations as well as combining product roadmaps and manufacturing operations. These expenses were for employee separation costs, contract exit costs, other operating expenses and intangible asset impairment losses. At March 31, 2017, these activities were substantially complete; however, the Company may continue to incur additional costs in the future as additional synergies or operational efficiencies are identified. The Company is not able to estimate the amount of such future expenses, if any, at this time.

Exit costs for fiscal 2017 were \$44.0 million, of which \$39.0 million was recorded in the fourth quarter. All of the Company's restructuring activities occurred in its Semiconductor products segment. The Company incurred \$51.1 million during the past three fiscal years in connection with employee separation activities, of which \$39.2 million was incurred in fiscal 2017. These employee separation activities are now substantially complete and future amounts are not expected to be material. The Company has incurred \$44.7 million in connection with contract exit activities during the past three fiscal years of which \$44.0 million was incurred in fiscal 2017. These contract exit activities are now substantially complete and future amounts are not expected to be material.

Note 10. Income Taxes, page F-34

4. Revise this note in future filings to disclose the per share effects of tax holidays as required by SAB Topic 11.C.

Microchip Response:

In response to the Staff's comment, the Company will revise its future filings to include the requested disclosure. Please refer to the Company's response to comment 2 for a draft of such disclosure.

Microchip Technology Incorporated

By: /s/ J. Eric Bjornholt

Title: Vice President and Chief Financial Officer

July 19, 2017