

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

DIVISION OF CORPORATION FINANCE

October 15, 2010

David Yeskey Director of Legal Services Microchip Technology Incorporated 2355 W. Chandler Blvd. Chandler, AZ 85224

Re: Microchip Technology Incorporated Form 10-K for Fiscal Year Ended March 31, 2010 Filed June 2, 2010 File No. 000-21184

Dear Mr. Yeskey:

We have reviewed your response dated September 23, 2010 and have the following comment. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comment applies to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to this comment, we may have additional comments.

Item 11. Executive Compensation, page 43

1. We have reviewed your response to prior comment 2. Please confirm to us that your compensation discussion and analysis in future filings will be sufficiently clear so that investors can see how the amounts of the incentive cash bonuses awarded to each named executive officer were determined.

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 the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. 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. David Yeskey Microchip Technology Incorporated October 15, 2010 Page 2

In responding to our comments, please provide a written 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.

Please contact Allicia Lam at (202) 551-3316 or Tim Buchmiller, Senior Attorney, at (202) 551-3635 with any questions.

Sincerely,

Russell Mancuso Branch Chief

CC (by facsimile): J. Robert Suffoletta, Esq. -- Wilson Sonsini Goodrich & Rosati