

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

September 23, 2010

Mr. Stephen Cumming Vice President Finance and Chief Financial Officer Atmel Corporation 2325 Orchard Parkway San Jose, CA 95131

Re: Atmel Corporation Form 10-K for the fiscal year ended December 31, 2009 Filed March 1, 2010 File No. 000-19032

Dear Mr. Cumming:

We have reviewed your response dated September 14, 2010 and related filing and have the following comments. 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 providing the requested information or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

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Form 10-K for the fiscal year ended December 31, 2009

Item 8. Financial Statements

Note 12. Income Taxes, page 91

1. We acknowledge your responses to prior comments 6 and 7. With a view toward providing enhanced disclosure in future filings, please tell us how you considered the illustration example provided in FASB ASC 740-10-55-217 in determining the extent of your disclosure about the tax audit issues. In that regard, we note that the example provided in the Codification provides a brief description of the nature of the tax audit issues. In your response, please provide any proposed disclosure for future filings.

Item 11. Executive Compensation..., page 114

- 2. We note your response to prior comment 8. Please expand your justification for why you believe disclosing the historical performance goals applicable to your short-term incentive program will result in competitive harm to you. For example, please:
 - Clarify how disclosing performance target levels for a past year would "offer insight into [y]our expectations for the coming fiscal year." For instance, explain why would a past year's performance targets necessarily be predictive of your strategic plans for future years, given that your compensation committee could assign different weights to these goals or different goals altogether;
 - Tell us how competitors would be able to extrapolate or forecast your business model to future periods from disclosure of performance targets for a past year. For example, how would a competitor's comparison of these business goals as reflected in the performance targets enable it to draw a specific conclusion with respect to your strategic activities in future years? Might there be multiple variables that affected actual performance that are unrelated to the performance targets and your strategy?;
 - Discuss how disclosure of the performance targets will result in substantial competitive harm and undermine multi-year business strategies. It is unclear how you reached this conclusion, given that the predictive value would appear subject to significant assumptions by your competition as to your strategic direction; and

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• Describe in more detail how disclosing the financial targets of the company for the past year would result in competitive harm to you.

Item 13. Certain Relationships . . ., page 115

3. The last sentence of your response to prior comment 9 implies that related-party transactions occurred and were reviewed during 2009. Your disclosure on page 40 of your definitive proxy statement indicates that there were no reportable transactions during 2009. Please reconcile. If you mean that the transactions your Audit Committee reviewed during 2009 were not reportable, in addition to not significant, then please clarify your response accordingly.

You may contact Leigh Ann Schultz at 202-551-3628 or Gary Todd, Accounting Reviewer, at 202-551-3605 if you have questions regarding comments on the financial statements and related matters. Please contact Ruairi Regan at 202-551-3269 or Geoffrey Kruczek at 202-551-641 with any other questions. You may also contact me at (202) 551-3676.

Sincerely,

for

Brian Cascio Accounting Branch Chief