

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

May 17, 2013

Via E-mail
Bradley A. Cleveland
Chief Executive Officer
Proto Labs, Inc.
5540 Pioneer Creek Drive
Maple Plain, Minnesota 55359

RE: Proto Labs, Inc.

Form 10-K for the Fiscal Year Ended December 31, 2012

Filed March 22, 2013

Proxy Statement on Schedule 14A

Filed April 9, 2013 File No. 1-35435

Dear Mr. Cleveland:

We have reviewed your 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.

Form 10-K for the Fiscal Year Ended December 31, 2012

Note 16 – Segment and Geographic Information, page 73

1. We note in your quarterly reports for 2012 that your reportable segments included United States, Europe and Other. You now disclose that you only have one operating segment based on the fact that your CODM now reviews operating results at the consolidated level. In comment 6 from our letter dated November 17, 2011, we noted that your CODM reports included a "financial review" section wherein the operating performances of the three segments were separately analyzed. So that we can better assess the change in your CODM reports and your application of ASC 280 please provide us your CODM reports for the quarters ended September 30, 2012, December 31, 2012, March 31, 2013, year-ended December 31, 2012, and all reports your CODM received during these periods containing disaggregated financial data of your operations.

Mr. Cleveland Proto Labs, Inc. May 17, 2013 Page 2

Proxy Statement on Schedule 14A filed April 9, 2013

Long-Term Equity-Based Compensation, page 26

2. We note your disclosure in the second paragraph. Please revise your disclosure to provide a substantive analysis and insight into why the compensation committee determined that the levels of equity compensation were appropriate in light of the factors considered in deriving those payouts.

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.

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.

You may contact Tracey McKoy, Staff Accountant, at (202) 551-3772 or, in her absence, Al Pavot, Staff Accountant, at (202) 551-3738 or, the undersigned Accounting Branch Chief at (202) 551-3355, if you have questions regarding comments on the financial statements and related matters. Please contact Asia Timmons-Pierce, Staff Attorney, at (202) 551-3754 with any legal related questions.

Sincerely,

/s/ Terence O'Brien

Terence O'Brien Accounting Branch Chief