



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

August 19, 2011

Via E-mail

Bradley A. Cleveland
Chief Executive Officer
Proto Labs, Inc.
5540 Pioneer Creek Drive
Maple Plain, MN 55359

Re: Proto Labs, Inc.
Registration Statement on Form S-1
Filed: July 25, 2011
File No.: 333-175745

Dear Mr. Cleveland:

We have reviewed your registration statement 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 by amending your registration statement and providing the requested information. If you do not believe our comments apply 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 registration statement and the information you provide in response to these comments, we may have additional comments.

General

1. Please add to the prospectus as soon as possible all currently omitted information that is not subject to Rule 430A, including, for example, a bona fide estimate of the range of the maximum offering price for the shares, the maximum number of shares offered, and the amount of additional shares that the underwriters may purchase in connection with the over-allotment option. This information must be included on the prospectus cover page, as well as in the body of the prospectus. We will need adequate time to review this information once it is provided.
2. Absent a bona fide estimate of your expected offering price, we cannot complete a review of your disclosures regarding stock compensation and convertible securities. In order to avoid a delay in the effectiveness of your registration statement, please supplementally provide us with an estimated range for your IPO price. If the IPO

price materially differs from your corresponding equity fair value accounting estimates, then an expanded disclosure may be required for investors to assess the reasonableness of your critical accounting estimates.

3. In addition, please confirm that you will not circulate copies of the preliminary prospectus until you include an estimated price range, maximum number of shares, dollar amounts dependent upon the offering price that are based on the mid-point of the offering price range, and all other information except information you may exclude in reliance upon Rule 430A.
4. Prior to the effectiveness of your registration statement, please arrange to have FINRA call us or provide us with a letter indicating that FINRA has no objection to the underwriter compensation discussed in the prospectus.
5. Please provide us with copies of any artwork you intend to use as soon as possible for our review and comment. Please keep in mind that we may have comments on these materials and you should consider waiting for further comments before printing and circulating any artwork.
6. We encourage you to file all exhibits with your next amendment or otherwise furnish us drafts of your legal opinion and underwriting agreement. Please understand that we will need adequate time to review these materials before effectiveness.
7. Please revise your filing to disclose the date through which subsequent events have been evaluated, which we assume to approximate the consent date. Refer to ASC 855-10-50-1 for guidance.

Front Cover Page of the Registration Statement

8. Based on the information in our EDGAR system, it does not appear that the primary standard industrial classification code 3544 that you have on your registration statement cover page exists. Please revise accordingly.
9. Please indicate by a checkmark the company's current reporting status.

Prospectus Cover Page

10. Please relocate the prospectus delivery obligation to the outside back cover page of the prospectus. Refer to Item 502(b) of Regulation S-K.

Prospectus Summary

Overview, page 1

11. Throughout the prospectus summary and the other sections of the prospectus you make statements that you are "a leading online and technology-enabled quick-turn manufacturer" and a leading supplier of low-volume custom products (see, e.g., pages 1, 34 and 56). Please revise these statements to disclose the measure by which you have determined that you are a leader (e.g., revenues, number of customers, or volume of products sold).
12. Please balance the information regarding the "significant growth" in total revenue that you have experienced since inception with a brief discussion of any factors that would impact continued growth such as any increase in competitors or any corresponding increases in operating expenses.

Our Industry and Market Opportunity, page 1

13. If true, please confirm that all market and industry data (including but not limited to the Plastics Custom Research report, the IBISWorld report and the Jon Peddie Research report, all referenced on page two), represents information that is generally available to the public and was not prepared for you for a fee or for use in this registration statement. If you funded or were otherwise affiliated with any of the sources that you cite, please disclose this. If any sources are not publicly available for no or a nominal fee, or were prepared for use in the registration statement, either file consents or explain to us why you are not required to do so under Rule 436 of Regulation C and Section 7 of the Securities Act of 1933. Please also provide us with copies of these reports marked to highlight the information you are using to support your disclosures in the filing. We may have additional comments after we review your response.

Risks Factors, page 8

14. We note your disclosure at the end of the introductory paragraph about unknown or currently immaterial risks which in the future may be deemed to represent risks material to your business. Please note that your risk factor disclosure should discuss only known material risks. Please revise.
15. In order to make your various risk factors more currently material, please review your disclosure and provide examples, as applicable, of instances where you have been impacted by what would otherwise appear to be a generic risk factor.

The loss of one or more key members of our management team or personnel, or our failure to attract, integrate and retain additional personnel in the future, could harm our business...., page 10

16. Because this risk factor appears generic and applicable to any company in any industry, please revise to describe the particular risks you face.

Our operating results and financial condition may fluctuate on a quarterly and annual basis, page 12

17. With a view towards disclosure, please tell us whether historically your operating results have fluctuated either on a quarterly or annual basis.

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 34

Overview, page 34

18. Please revise your disclosure in the third paragraph to indicate that it is your belief that the United States, Europe and Japan are "three of the largest geographical markets where product developers are located.

Key Financial Measures and Trends, page 35

Revenue, page 35

19. If material, please disclose the percentage of revenue that the shipping revenue comprises. In an appropriate section of the filing, also disclose the methods you use for the shipping of your products and any arrangements you may have with a third party provider.

Results of Operations, page 36

20. You disclose on page 35 that you expect your revenue to increase due, in part, to greater penetration of your existing customer base. Please revise your disclosure to discuss your plan to increase sales related to your existing customers and whether sales in the periods presented were positively impacted by your efforts to increase sales to existing customers. Please also disclose the percentage increase of new customers period over period.
21. Please amend your filing to disclose whether any of the material risk factors related to your operating results and financial condition, as disclosed on page 12, actually impacted your results of operations for the periods presented. There is a concern that the existing disclosures on pages 38 and 40 do not identify any specific factors (other than new customers) that materially impacted revenue during the period presented. Given the 69% and 48% revenue growth in 2011 and 2010, respectively, an expanded and informative disclosure about the causal changes in circumstances is necessary for readers to understand these material variances. The page 34 "Overview" disclosure does not fully explain these variances. Please read Section 501.12.b.4 of the Financial Reporting Codification.
22. Please amend your filing to provide a more robust MD&A discussion throughout your filing that allows an investor to gain a better understanding into your business. For example, although you quantify the increase in sales the underlying drivers of the increase is not apparent. Please amend your disclosure to identify and quantify the underlying factors driving changes in your operating results. Additionally, on page 38 you state that revenues for the three months ended March 31, 2011 increased 69% as compared to the same period in 2010. Based on your disclosure it appears that new customer companies accounted for approximately 33% of this increase in revenues however, your disclosure doesn't appear to identify or quantify the other contributing factors. Please amend your disclosures throughout your filing accordingly.
23. Please revise your disclosure to quantify the impact of foreign exchange rate variances on sales. Furthermore, on pages 38, 40 and 42 you state that pricing for your services remained relatively constant for certain periods. The phrase "relatively constant" is not clear. Please revise your disclosure to quantify price changes period over period and the contributing factors driving the changes. Your discussion should also address how the market for your products has changed, including your market share, for each period presented and the impact to your operating results. See Item 303(a)(3) of Regulation S-K.
24. On page 11 you disclose that your gross margin may be negatively impacted if your international sales grow as a percentage of your total revenue. We note from your segment footnote on page F-22 that international sales have increased by 61% from

2009 to 2010 and you state on page 35 you expect continued growth of your international business. Please revise your filing to fully discuss the negative impact to gross margin that you expect in future periods due to increased international sales.

Provision for Income Taxes, page 42

25. Please amend your filing to discuss the qualified subsidiary election of \$11 million for FY 2010 presented on the face of your reconciliation of your federal statutory income tax rate to the effective tax rate on page F-20. Your disclosure should address whether this item will have a recurring impact on your effective tax rate. Refer to Section 501.04 of the Financial Reporting Codification for guidance.

Liquidity and Capital Resources, page 45

26. We note your disclosure that for year 2010 you had a \$0.8 million asset impairment charge. With a view towards disclosure, please explain to us whether this impairment charge represents the \$773,000 loss on impairment of foreign subsidiary assets disclosed on page 33 of the filing, or whether it represents a charge in addition to the loss on impairment of foreign assets. In addition, if material to your business, please discuss whether management anticipates the occurrence of future impairment charges which may have an unfavorable impact on your net revenues.

Contractual Obligations, page 47

27. You disclose on page F-16 that you sponsor a defined contribution retirement plan that covers the employees of Proto Labs Limited and you made employer contributions of approximately \$32,000 for the year ended December 31, 2010. If material, please amend your table of contractual obligations to reflect future cash payments related to the defined contribution retirement plan or disclose such amounts. Refer to Financial Reporting Release No. 33-8350 for guidance.

Financing Arrangements, page 48

28. You disclose on page F-15 that you were in violation of a covenant relating to capital expenditures for the year ended December 31, 2010, which was waived subsequent to year-end. Although you state there were no advances outstanding on the revolving note as of December 31, 2008, 2009, and 2010 and for the three months ended March 31, 2011, please revise your filing to disclose the length of the waiver, whether the covenant violation impacted your ability to draw down funds under the line of credit and consequences you would be subject to in the absence of a waiver. Refer to Financial Reporting Release No. 33-8350 for guidance.
29. Please revise your disclosure regarding your credit agreement with Wells Fargo to discuss any financial ratios or covenants you must comply with. We note your

disclosure on page F-15 to your financial statements stating that you were in violation of a covenant relating to capital expenditures for the year ended December 31, 2010. In addition, please file a complete copy of the line of credit agreement as an exhibit to the registration statement.

Allowance for Doubtful Accounts, page 49

30. Please amend your disclosure to address why your allowance for doubtful accounts has decreased each year in light of the increase in your accounts receivable balance. We note the consistent increase in your accounts receivable balance. Your revised disclosure should identify specific reasons for the decrease in your allowance account (i.e. material improvements in aging). Furthermore, please amend your filing to provide a roll-forward of your of allowance account. Refer to Rule 5-04 of Regulation S-X for guidance.

Business, page 56

General

31. Please ensure that your disclosure in this section addresses all relevant Item 101(c)(1) requirements. For example, we note that Item 101(c)(1)(iii), (vi), (xi) and (xii) disclosures related to (1) the sourced and availability of raw materials, (2) working capital practices, (3) estimated amount spent during each of the last three fiscal years on company-sponsored research and development activities (we note the tabular financial disclosure elsewhere in the prospectus), and (4) material effects that compliance with rules and regulations relating to the protection of the environment may have upon your capital expenditures, earnings and competitive position, appear to be missing. If material to an understanding of your business, please discuss these items or cross-reference other sections of the filing where you address these items. We note, for example, your “If our present single or limited source suppliers become unavailable...” risk factor on page 15 and “Our business involves the use of hazardous materials...” risk factor on page 19.

Industry Overview, page 57

Our Market Opportunity, page 57

32. In the second paragraph, please disclose the range of the end-markets which you serve.

Our Services, page 61

Firstcut, page 61

33. Please identify the type of material used with the Firstcut technology.

Director Compensation, page 72

34. Please disclose whether any of the fees paid to the non-employee directors during 2010 represented compensation for time spent with management outside of board or committee meetings. To the extent necessary, please include relevant footnotes to the “Non-Employee Director Compensation for 2010” tabular disclosure on page 73. Please refer to Items 402(k)(3) and 402(r)(3) of Regulation S-K, as applicable.

Non-Employee Director Compensation for 2010, page 73

35. We note your footnote (1) disclosure; however, supplementally please tell us how you determined that Mr. Lukis as the company’s Chairman and Chief Technology Officer is not a named executive officer whose compensation would be required to be disclosed in accordance with Item 402 of Regulation S-K.

Executive Compensation, page 74

Executive Compensation Philosophy and Objectives, page 74

36. In the middle of page 75 you disclose, among other things, that you do not benchmark total compensation or individual elements of compensation against specific comparable companies. However, the process described in the second paragraph of your “Base Salaries” discussion on page 76 appears to constitute benchmarking for purposes of Item 402(b)(2)(xiv) of Regulation S-K. As such, your disclosure must provide a materially complete description of all of the elements considered by the compensation committee in setting executive compensation, including among other things, whether the compensation decisions were derived from, or based upon, a comparison to peer companies (which should be identified by name). To the extent that any specific elements of compensation are tied to a benchmark, please identify the benchmark and discuss where your actual payments and awards fall with respect to the benchmark. For additional guidance, see Question 118.05 of the Compliance and Disclosure Interpretations concerning Item 402 of Regulation S-K, which can be found on our website at <http://www.sec.gov/divisions/corpfin/guidance/regs-kinterp.htm>.

37. If you believe that the steps undertaken by the compensation committee do not constitute benchmarking for purposes of Item 402(b)(2)(xiv), please revise your disclosure to better describe the nature of the market data used by the compensation

committee in making executive compensation decisions, and what salary ranges or overall compensation packages the committee considers to be competitive.

Base Salaries, page 76

38. Please disclose the factors considered by the compensation committee in awarding the 4% increase in base salary to each executive officer. In this regard, we note that your disclosure on page 74 indicates that the compensation committee takes into consideration the executives' "individual performance goals" in making compensation decisions (see third bullet point of the "Executive Compensation Philosophy and Objectives"). To the extent that the compensation committee's decisions regarding a named executive officer's individual performance were based upon a subjective evaluation, please ensure that you disclose each executive officer's individual performance goals by also identifying the specific contributions made by each executive and contextualize those achievements for purposes of demonstrating how they resulted in specific compensation decisions. Refer to Item 402(b)(2)(vii) of Regulation S-K. Although quantitative targets for subjective or qualitative assessments may not be required, you should provide insight of how qualitative inputs are translated into objective pay determinations. To the extent relevant, please also address this comment with respect to the compensation committee's determination of the annual bonus amounts.

Annual Bonuses, page 76

39. Please expand your disclosure to discuss Mr. Langton's contributions related to the special project for which he was granted an additional \$5,000 bonus.

Market and Industry Data, page 111

40. You state that you "have not independently verified market and industry data from third-party sources" used as basis of some of your disclosures in the registration statement. Please note that you are responsible for the entire content of the registration statement and that you may not use language that would be interpreted as a disclaimer of the information you have chosen to include in the filing. Please revise accordingly.

Financial Statements, page F-3

41. Please revise your filing to update your financial statements pursuant to Rule 3-12 of Regulation S-X.

Note 15 – Segment and Geographic Information, page F-22

42. You disclose that you have two operating segments that were aggregated into one reportable segment based upon their similar operational and economic characteristics. 2011. However, we note from your disclosures in MD&A that revenue growth increased 60.3% for Protomold and 103.6% for Firstcut for the three months ended March 31, 2011 compared with the same period in 2010 and 37.8% for Protomold and 102.1% for Firstcut for 2010 as compared to 2009. Given this it appears your operating segments may not be economically similar. Please provide us your CODM reports for each period presented.

Part II – Information Not Required In the Prospectus, page II-1

Undertakings, page II-3

43. Please remove the undertakings in subparagraph (3) and the undertakings in the last paragraph as inapplicable.

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 Act of 1933 and all applicable Securities 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.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange

Mr. Bradley A. Cleveland
Proto Labs, Inc.
August 19, 2011
Page 11

Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Tracey McKoy, Staff Accountant, at (202) 551-3772 or Al Pavot, Senior Staff Accountant, at (202) 551-3738 if you have questions regarding comments on the financial statements and related matters. Please contact Era Anagnosti, Staff Attorney, at (202) 551-3369 or Craig Slivka, Special Counsel, at (202) 551-3729 with any other questions.

Sincerely,

/s/ Craig E. Slivka, for

Pamela A. Long
Assistant Director

cc: Via E-mail
W. Morgan Burns, Esq.
Faegre & Benson LLP