

## Proto Labs Inc.

NYSE:PRLB

**Analyst:** Kyle White

**Sector:** Industrials

**BUY**

Price Target: \$85.00

### Key Statistics as of 4/15/2015

Market Price:	\$78.16
Industry:	Machinery
Market Cap:	\$2.023 B
52-Week Range:	\$94.23-54.97
Beta:	-0.14

### Thesis Points:

- Very attractive growth profile, taking advantage of shorter modern product lifecycles, and unique business model is dramatically shortening companies time to market
- Highly scalable, meaning higher revenues at relatively similar cost profile
- Extremely efficient cash usage, short cash cycles compared to peers and industry
- Cash machine and minimal debt even with capital expenditures geared for future growth

### Company Description:

Proto Labs, Inc., together with its subsidiaries, manufactures computer numerical control (CNC) machined, injection molded, and 3D printed custom parts for prototyping and short-run production in the medical, aerospace, computer/electronics, consumer products, industrial machinery, and other markets. Its primary manufacturing services comprise Firstcut, a CNC machining service; and Protomold, an aluminum injection molding service. The company also provides Fineline, an additive manufacturing product that offers precision rapid prototyping. It serves product developers who use three-dimensional computer-aided design software to design products. The company has operation primarily in the United States, Europe, and Japan. Proto Labs, Inc. was founded in 1999 and is headquartered in Maple Plain, Minnesota.



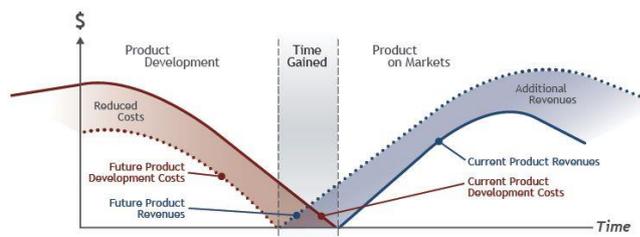
## Thesis

In today's business environment, fast is everything. The cold hard truth is that companies are most likely to be defined by their ability to get new, innovative products to market than by any other part of their business. This reality is most pressing for many technology and medical device providers, whose product lifecycles are often, at best, 6 to 12 months. You would have to be deaf, dumb, and blind to not recognize this as an opportunity. Fortunately for a small quick-turn manufacturer like Proto Labs, they've heard the call of an underserved market, envisioned a future full of opportunity, and have done an amazing job of communicating that vision through real, tangible results today. What we are looking at is a company that has achieved incredible growth year-over-year, while achieving cash efficiency unrivaled by peers and the industry, doing so with minimal debt, and throughout, maintaining highly stable margins. Since coverage of this stock was initiated 2 weeks ago, the stock has surged past its 1-year target of \$76.00, for an 11% gain, and as some would say, "has tapped out all the value there was," but this stock is certainly still undervalued and has in the short term potential to climb to \$85 and beyond.

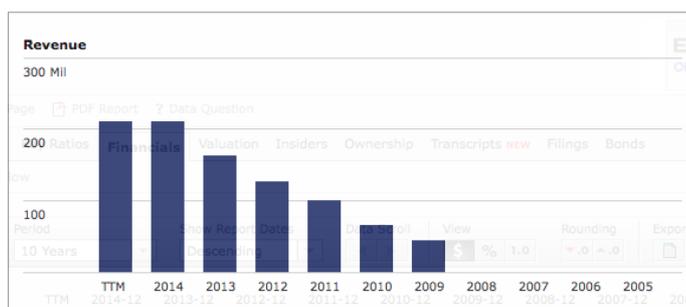
## Strong Growth Profile

In order to understand the full potential of Proto Labs, which will from here on out be referred to as PL, you first have to gain an understanding of what the company does, will do, and to some extent what they have done in the past. Like with any straightforward story, the past is the absolute best place to start, unlike what Hollywood would have you believe. PL was founded in 1999, as much of the same company as it is today, a jumpstarter. The company's founder, Larry Lukis, like many engineers then, and many engineers today, were, and are frustrated by the length of time required, and the excessive cost associated with getting prototypes and products up and running. Many companies at the time were largely focused around pushing through large volumes of single parts, and ignoring small run jobs that, what was then Protomold, focused on. Prototyping has always been a critical part of the design process, but it's becoming increasingly important as generational iterations of products begin to shrink as a unit of time. For a single product, the number of prototypes involved

may be countless, and the associate parts further add to the burden. Today companies simply can't afford sitting around waiting for parts like they could in the past, and the same amount of headache compressed into a smaller timeframe is generating a great deal of anxiety inside many companies. The losses absorbed by a company due to delayed projects are summed up rather nicely in the following chart.

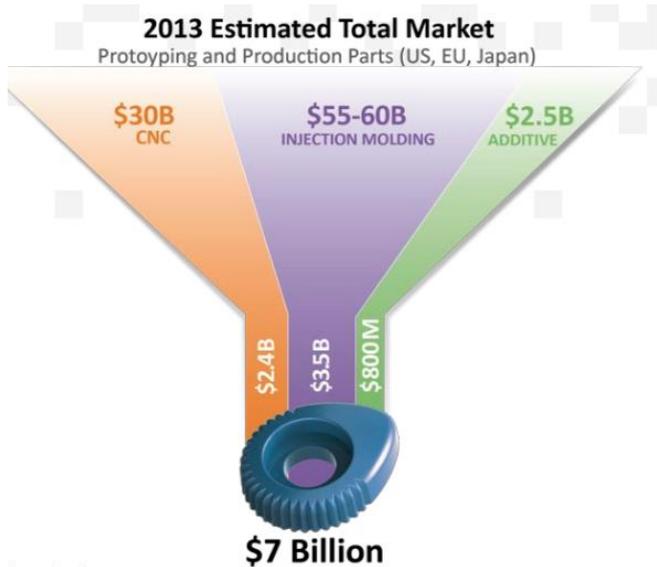


As we move into the more rapidly shifting environment of the future, this chart and its associated costs will only become more exacerbated. The 4 to 12 week waiting period for necessary parts just won't cut it anymore. PL has stepped in to fill this void. Working with engineers, advanced machinery, and proprietary software, the company is turning 12 weeks into 2. For many, working with PL, this has caused a sigh of relief across multiple industries. What does that relief look like? Well for PL it's a 25% CAGR in revenue with industry leading margins.



Today the company's growth has brought us to about \$200 million in sales, the company's CEO Vicki Holt, "It's a very large market out there," and she has her eyes peeled on \$7 billion portion of the larger \$90 billion space that her company operates in. In large, the company intends to engage in a great deal of cooperation with the blooming medical device industry, which must go through much iteration to get past the rigorous scrutiny of the FDA. In order to achieve the type of growth talked about here, the company has very specific plans for each of its operating segments, and is by no means timid in its CAPEX spending to achieve those

goals.

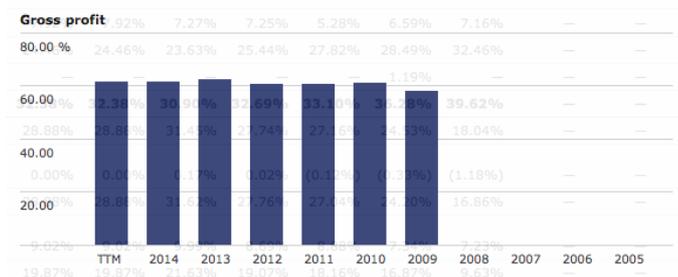


Where PL truly focuses is in its injection molding business, as it can produce the highest volumes, with the largest range of materials, and for the largest amount of customers as we can see the graph above. Both the CNC and injection molding have had several new facilities dedicated to their future space requirements, but a significant sales force has been dedicated to the segments as well. Starting in 2014 roughly 500 new sales staff was brought on board to understand and market the unique services that PL offers. As marketing and sales now makes up a significant portion of operating costs, it might be expected that in the short run this could squeeze margins and reduce ROIC. As a long-term investment in the firm, it should be expected that the higher revenues, coupled with the scalability of the business would quickly outweigh this. Outside their more “traditional” business, PL recently acquired Finline, an additive manufacturing company, aka, 3D printing technology. While for now it makes up a relatively small portion of the companies revenues, focusing on this technology, which is believed by many experts to become, overtime, the primary means of manufacturing small, low volume parts in the developed world. While the company’s focus here is on the future, that isn’t to say that it hasn’t had its impact today. When observing overall revenue growth in 2014, of the 28.5% growth, roughly 10% was derived from the newly added Finline services, showing that there is already significant demand for the service, although many engineers and product developers are still reluctant to fully embrace the technology. As the technological capabilities of the company unfold, we can expect to see more and more engineering departments seeking to adopt the company’s

services as they come in line with their needs. Most of the company’s revenues are still largely based in the US, but an increasingly significant amount of that top line growth is coming from international markets, especially due to increasing manufacturing growth in Europe, as well as a blossoming of advanced manufacturing in Southeast Asia. The company is making aggressive expansion into these areas in order drive value creation moving into the future. What PL does is one of a kind, and if they can be first to market in those areas, we can expect to see considerable competitive advantage, as the barriers to entry for this industry are considerable. What will be the biggest obstacle to the company’s growth in these areas will be their ability to enforce the multiple patents that they derive their advantage from.

### Highly Scalable

PL is a company that, at least, at the core of their business is completely automated. Engineers secure quotes online, upload CAD designs online, and are billed online. From the internet, besides feeding machines material, the process is entirely automated. Machines receive orders from an online queue and immediately begin producing, and if transportation could remove the human element, that would be automated as well. The result of this business model is high initial fixed costs, with minimal variable costs going forward. From 2013 to 2014 the company has made major outlays in terms of NPPE, a 64% of which 54%% represented new machinery and 37% represented new floor space and expansion. This capital expenditure is likely to provide more than enough room for growth over the coming years. With a proper foothold in the company’s desired markets, and its grounding in an internet based system, the companies only true addition to cost over the coming years is likely to be from sales and marketing to capture more and more of the market. It should also hold true that revenues should outpace the growth in cost and allow the company to maintain current margins.



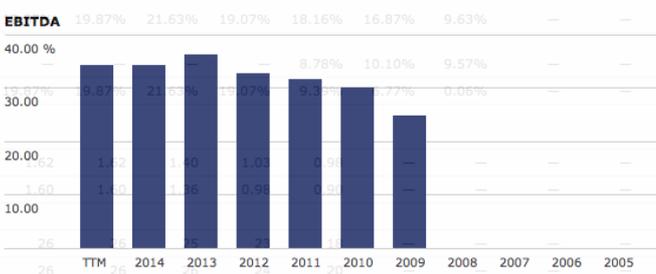
As is plainly clear the company has done an astounding

job keeping material costs down suggesting either a great deal of operating leverage with suppliers or low switching costs, as the materials which PL uses in production (plastics and common manufacturing metals) are for the most part commoditized. What is more important than that though, we see below in terms of operating profits.



The company has a track record of being able to bring down its operating cost either through increasing expertise in their business or fat trimming abilities, of which the former I would be more inclined to say is true. From 2010 to 2014, there has been an improvement in operating margins of nearly 4%, which is impressive, even if the company is relatively new. As technology becomes cheaper, as Moore's Law says it inevitably will, the company should be able to find increased efficiencies as technology and experience merge, creating larger margins, and coupled with significant growth should continue to drive value.

But even more exciting are the company's EBITDA margins, (which as the true estimator of cash being generated by the business) are significantly higher than both the company's peers and the industry as well.



## Efficient Cash Use

PL is a very unique player in a diversified playing field. Commonly it is lumped in by many investors with the rest of the big 3D printing companies like Stratasys and

3D Systems, and therefore it has high valuation multiples that many don't believe it deserves and will eventually run into a higher cost structure like its peers have. Whatever the similarities, of which there were none before the company's acquisition of Firstline, PL is far more likely to exceed investors expectation on a shorter timeframe such as this fund typically goes after. While the companies margins speak for themselves, there are other aspects of PL that place it squarely in the realm of best in class, particularly its CCC, which demonstrates a companies ability to use cash, and whether it will continue to do so in the future. Now PL sits at a cash conversion cycle of approximately 32 days, which are light years ahead of its two closest competitors DDD and SSYS who are at 118 and 138 respectively. On top of this, the company has been able to improve this number year-over-year, and as online experience improves along with quicker, more accurate customer deliveries they should at least continue to exhibit stability if not improvement in the future. The ability of the company to use cash now is a good indicator of quick, efficient growth in coming years, and the avoidance of growing pains that rapidly expanding companies tend to face.

## Cash Machine, Low Debt

An encouraging sign for any company's value is its ability to generate cash, and doing so efficiently. PL does this and more. With a fraction of a fraction of debt, the company enjoys a great deal of freedom in terms of its capital structure decisions and will continue to experience autonomy in an industry where direct competitors don't really exist. This isn't to say that the company doesn't face pressure from rivals, but the quality and quickness that the company delivers, their niche appeal in the prototyping world, and the customer relations they have built provide them with a stable economic moat. So could the company be a target for acquisition by a larger manufacturer looking to diversify, or take advantage of the in house benefit the company could offer? Insiders do hold a significant portion of the company still at around 15%, meaning they clearly do care, and believe in the future potential of the company. That combined with the compensation to employees in the form of options and warrants, mean that management does see future appreciation of stock price in the future. In large, acquisitions of this type of company are rare, as they are too specialized for a larger

company to take real advantage of. As a result many companies often see more value in these companies as stand alones that can be used via outsourcing. That being said, it isn't outside the realm of possibility, given the attractiveness of the PL balance sheet and cash flows, that it may be the target of possible M&A activity.

## **Forecast & Final Recommendation**

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There is a fair chance that in approaching months we will see a pullback in the economy, which has continually searched for new heights in the first quarter of 2015, however rocky the waters may be. Many analysts, and I would agree have placed a target price in the mid-80's, which having recently moved past it consensus target of \$76.00, is very possibly within the cards. Although this company is classified as an industrial, even the company's management smirks when the notion of it being a tech play is mentioned, and that ultimately makes it more vulnerable to a pull back and the collapse of rich valuations in the technology sector. Long term, the outlook on this stock is very bullish, as its servable market is really starting to take off. Short-term, the waters are likely to be choppy. Value plays, good luck finding them in this market, but investors with patience and a long investment horizon are likely in for a treat with this little chestnut.

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<b>Proto Labs, Inc.</b>		<b>PRLB</b>	<b>Analyst</b> Kyle White	<b>Current Price</b> \$76.63	<b>Intrinsic Value</b> \$67.40	<b>Target Value</b> \$64.39	<b>Divident Yield</b> 0%	<b>Target Return</b> 1-y Return: -15.98%	<b>BEARISH</b>		
<b>General Info</b>		<b>Peers</b>	<b>Market Cap.</b>	<b>Management</b>							
Sector	Industrials	Stratasyus Ltd.	\$2,832.32	<b>Professional</b>	<b>Title</b>	<b>Comp. FY2012</b>	<b>Comp. FY2013</b>	<b>Comp. FY2014</b>			
Industry	Machinery	(Parameter Length Limit Exceeded)	(Parameter Length Limit Exceeded)	Holt, Victoria	Chief Executive Officer, President :	\$0	\$0	\$1,894,210			
Last Guidance	#####			Way, John	Chief Financial Officer and Executi	\$0	\$0	\$427,898			
Next earnings date	4/23/2015			Krantz, Donald	Executive Vice President and Tech	\$553,795	\$913,408	\$971,455			
<b>Market Data</b>		<b>Current Capital Structure</b>		Schneider, Jacqueline	Vice President of Global Sales	\$0	\$830,716	\$930,181			
Enterprise value	\$1,911.15	Total debt/market cap	0.01%	Tumelty, John	Managing Director of Europe, Mic	\$0	\$785,346	\$1,021,328			
Market Capitalization	\$2,032.29	Cost of Borrowing	12.75%	Dietrick, William	Vice President of Marketing	\$0	\$0	\$0			
Daily volume	0.25	Interest Coverage	52.3x	<b>Historical Median Performance</b>							
Shares outstanding	25.89	Altman Z	52.28					<b>PRLB</b>	<b>Peers</b>	<b>Industry</b>	<b>All U.S. firms</b>
Diluted shares outstanding	26.10	Debt Rating	AAA	Growth	26.9%	26.5%	5.7%	7.4%			
% shares held by institutions	99.58%	Levered Beta	-0.43	ROIC	18.8%	6.7%	17.7%	14.3%			
% shares held by insiders	10.16%	WACC (based on market value weights)	0.35%	NOPLAT Margin	31.0%	12.6%	8.4%	10.4%			
Short interest	15.61%										
Days to cover short interest	14.27										
52 week high	\$94.23										
52-week low	\$54.97										
5y Beta	-0.08										
6-month volatility	38.44%										
<b>Past Earning Surprises</b>		<b>Revenue</b>		<b>EBITDA</b>		<b>Norm. EPS</b>					
Last Quarter	2.8%	-9.5%		-4.4%		2.4%					
Last Quarter-1	-2.1%	-5.4%		-6.4%		-6.4%					
Last Quarter-2	3.0%	9.3%		7.1%		7.1%					
Last Quarter-3	-1.6%	4.3%		5.1%		5.1%					
Last Quarter-4	0.9%	2.8%		5.4%		5.4%					
<b>Proforma Assumptions</b>		<b>Forecast</b>									
Money market rate as of today	0.54%	<b>Period</b>	<b>Rev. Growth</b>	<b>Adj. Op. Cost/Rev</b>	<b>Invested Capital</b>	<b>NOPLAT Margin</b>	<b>ROIC</b>	<b>WACC</b>			
Annual increase (decrease) in interest rates	0.1%	LTM	28.5%	63.6%	\$488.89	31%	13.3%	0.3%			
Yield Spread acceleration	1.2	NTM	30.0%	63.3%	\$271.64	25%	13.8%	1.3%			
Marginal Tax Rate	35.0%	NTM+1	35.0%	63.1%	\$316.76	25%	33.8%	2.3%			
Risk-Free rate	2.6%	NTM+2	32.6%	62.8%	\$365.64	25%	38.9%	3.2%			
Tobin's Q	0.80	NTM+3	25.0%	62.5%	\$415.28	25%	42.4%	4.1%			
Op. Cash/Rev.	2%	NTM+4	20.0%	62.3%	\$465.32	26%	45.2%	5.1%			
Growth in PPE	NPPE Growth follows Revenue Growth	NTM+5	17.6%	62.0%	\$515.77	26%	47.8%	6.0%			
Long term Growth	4.0%	NTM+6	15.1%	61.8%	\$565.00	26%	50.0%	7.0%			
Base Year Unlevered Beta	is equal to -0.43	NTM+7	12.7%	61.5%	\$611.06	26%	51.7%	7.9%			
Long term Unlevered Beta	1.10	NTM+8	10.2%	61.3%	\$651.55	26%	53.1%	8.8%			
		Continuing Period	7.8%	61.0%	\$1,052.84	15%	10.0%	8.9%			
<b>Valuation</b>		<b>Pricing Model</b>									
<b>Period</b>	<b>Invested Capital x (ROIC-WACC)</b>	<b>Total Debt</b>	<b>Other non-interest bearing claims</b>	<b>Shares Outstanding</b>	<b>DCF (Weight = 100%)</b>	<b>Relative (Weight = 0%)</b>	<b>Distress (Weight = 0%)</b>	<b>Weighted Average Price Per Share</b>			
LTM	\$0.00	\$0.15	-\$58.72	25.89	\$68.36	\$48.42	\$70.37	\$68.36			
NTM	\$61.05	\$0.15	-\$96.78	25.89	\$65.14	\$51.68	\$64.35	\$65.14			
NTM+1	\$85.81	\$0.15	-\$146.56	25.89	\$67.87	\$71.07	\$67.03	\$67.87			
NTM+2	\$112.92	\$0.15	-\$229.75	25.89	\$71.39	\$96.43	\$70.52	\$71.39			
NTM+3	\$140.00	\$0.15	-\$332.62	25.89	\$75.02	\$123.23	\$74.07	\$75.02			
NTM+4	\$166.53	\$0.15	-\$465.37	25.89	\$79.44	\$151.48	\$77.93	\$79.44			
NTM+5	\$194.22	\$0.15	-\$654.39	25.89	\$84.01	\$183.40	\$82.92	\$84.01			
NTM+6	\$221.78	\$0.15	-\$853.21	25.89	\$88.25	\$216.29	\$87.11	\$88.25			
NTM+7	\$247.73	\$0.15	-\$1,096.39	25.89	\$92.45	\$250.35	\$91.44	\$92.45			
NTM+8	\$270.43	\$0.15	-\$1,371.56	25.89	\$95.11	\$283.78	\$95.17	\$95.11			
Continuing Value	\$124.12										
<b>Monte Carlo Simulation Assumptions</b>		<b>Monte Carlo Simulation Results</b>									
	<b>Base</b>	<b>Stdev</b>	<b>Min</b>	<b>Max</b>	<b>Distribution</b>						
Revenue Variation	0	10%	N/A	N/A	Normal	<b>Mean est.</b>	\$68.36	\$65.14			
Op. Costs Variation	0	10%	N/A	N/A	Normal	<b>σ(e)</b>	\$0.32	\$0.25			
Country Risk Premium	6%	N/A	5%	7%	Triangular	<b>3 σ(e) adjusted price</b>	\$67.40	\$64.39			
Long term Growth	4%	N/A	3%	27%	Triangular	<b>Current Price</b>	\$76.63				
						<b>Analysts' median est.</b>		\$77.56			

