

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 10-Q

(Mark One)

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the quarterly period ended September 30, 2023

or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from _____ to _____

Commission File Number: 001-35435

Proto Labs, Inc.

(Exact name of registrant as specified in its charter)

Minnesota

(State or other jurisdiction of incorporation or organization)

41-1939628

(I.R.S. Employer Identification No.)

5540 Pioneer Creek Drive

Maple Plain, Minnesota

(Address of principal executive offices)

55359

(Zip Code)

(763) 479-3680

(Registrant's telephone number, including area code)

Not Applicable

(Former name, former address and former fiscal year, if changed since last report)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, Par Value \$0.001 Per Share	PRLB	New York Stock Exchange

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>		
Smaller reporting company	<input type="checkbox"/>	Emerging growth company	<input type="checkbox"/>

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date: 25,785,903 shares of Common Stock, par value \$0.001 per share, were outstanding at October 31, 2023.

Proto Labs, Inc.
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PART I. FINANCIAL INFORMATION
Item 1. Financial Statements

Proto Labs, Inc.
Consolidated Balance Sheets
(In thousands, except share and per share amounts)

	September 30, 2023	December 31, 2022
	(Unaudited)	
Assets		
Current assets		
Cash and cash equivalents	\$ 83,496	\$ 56,558
Short-term marketable securities	19,204	23,568
Accounts receivable, net of allowance for doubtful accounts of \$2,665 and \$1,706 as of September 30, 2023, and December 31, 2022, respectively	78,395	76,225
Inventory	13,803	13,578
Income taxes receivable	891	4,042
Prepaid expenses and other current assets	8,722	12,597
Total current assets	204,511	186,568
Property and equipment, net	243,022	257,785
Goodwill	273,991	273,991
Other intangible assets, net	26,668	31,250
Long-term marketable securities	12,212	26,419
Operating lease assets	2,737	3,844
Finance lease assets	16,763	17,532
Other long-term assets	4,341	4,779
Total assets	\$ 784,245	\$ 802,168
Liabilities and shareholders' equity		
Current liabilities		
Accounts payable	\$ 17,922	\$ 17,356
Accrued compensation	16,337	12,743
Accrued liabilities and other	21,027	22,384
Current operating lease liabilities	1,568	1,561
Current finance lease liabilities	16,630	17,537
Income taxes payable	1,144	-
Total current liabilities	74,628	71,581
Long-term operating lease liabilities	1,545	2,255
Long-term finance lease liabilities	671	—
Long-term deferred tax liabilities	17,138	26,322
Other long-term liabilities	5,341	4,362
Total liabilities	99,323	104,520
Shareholders' equity		
Preferred stock, \$0.001 par value, authorized 10,000,000 shares; issued and outstanding 0 shares as of each of September 30, 2023, and December 31, 2022	-	-
Common stock, \$0.001 par value, authorized 150,000,000 shares; issued and outstanding 25,785,903 and 26,888,425 shares as of September 30, 2023, and December 31, 2022, respectively	26	27
Additional paid-in capital	463,908	473,740
Retained earnings	251,276	258,236
Accumulated other comprehensive loss	(30,288)	(34,355)
Total shareholders' equity	684,922	697,648
Total liabilities and shareholders' equity	\$ 784,245	\$ 802,168

The accompanying notes are an integral part of these consolidated financial statements.

Proto Labs, Inc.
Consolidated Statements of Comprehensive Income
(In thousands, except share and per share amounts)
(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Statements of Operations:				
Revenue	\$ 130,705	\$ 121,721	\$ 378,829	\$ 372,791
Cost of revenue	71,423	68,089	212,648	205,933
Gross profit	59,282	53,632	166,181	166,858
Operating expenses				
Marketing and sales	21,682	20,594	65,863	62,235
Research and development	10,105	9,309	30,647	29,316
General and administrative	17,058	16,477	49,713	49,770
Closure of Japan business	22	1,194	186	6,388
Total operating expenses	48,867	47,574	146,409	147,709
Income from operations	10,415	6,058	19,772	19,149
Other income (loss), net	320	(24)	(1,758)	(323)
Income before income taxes	10,735	6,034	18,014	18,826
Provision for income taxes	2,781	2,083	7,784	7,223
Net income	\$ 7,954	\$ 3,951	\$ 10,230	\$ 11,603
Net income per share:				
Basic	\$ 0.31	\$ 0.14	\$ 0.39	\$ 0.42
Diluted	\$ 0.31	\$ 0.14	\$ 0.39	\$ 0.42
Shares used to compute net income per share:				
Basic	26,023,830	27,505,097	26,296,304	27,512,057
Diluted	26,028,456	27,508,217	26,327,606	27,522,734
Comprehensive Income (Loss) (net of tax)				
Comprehensive income (loss)	\$ 6,887	\$ (6,924)	\$ 14,297	\$ (18,604)

The accompanying notes are an integral part of these consolidated financial statements.

Proto Labs, Inc.
Consolidated Statements of Shareholders' Equity
(In thousands, except share amounts)

	Common Stock		Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Total
	Shares	Amount				
Balance at December 31, 2022	26,888,425	27	473,740	258,236	(34,355)	697,648
Common shares issued on exercise of options and other, net of shares withheld for tax obligations	26,798	-	(401)	-	-	(401)
Stock-based compensation expense	-	-	3,695	-	-	3,695
Repurchases of common stock and other	(712,500)	(1)	(11,849)	(9,475)	-	(21,325)
Net income	-	-	-	2,659	-	2,659
<i>Other comprehensive income</i>						
Foreign currency translation adjustment	-	-	-	-	527	527
Net unrealized gains (losses) on investments in securities	-	-	-	-	334	334
Comprehensive income						3,520
Balance at March 31, 2023	26,202,723	\$ 26	\$ 465,185	\$ 251,420	\$ (33,494)	\$ 683,137
Common shares issued on exercise of options and other, net of shares withheld for tax obligations	169,229	-	962	-	-	962
Stock-based compensation expense	-	-	3,675	-	-	3,675
Repurchases of common stock and other	(276,518)	-	(4,872)	(4,107)	-	(8,979)
Net loss	-	-	-	(383)	-	(383)
<i>Other comprehensive income</i>						
Foreign currency translation adjustment	-	-	-	-	4,254	4,254
Net unrealized gains (losses) on investments in securities	-	-	-	-	19	19
Comprehensive income						3,890
Balance at June 30, 2023	26,095,434	\$ 26	\$ 464,950	\$ 246,930	\$ (29,221)	\$ 682,685
Common shares issued on exercise of options and other, net of shares withheld for tax obligations	1,037	-	(11)	-	-	(11)
Stock-based compensation expense	-	-	4,441	-	-	4,441
Repurchases of common stock and other	(310,568)	-	(5,472)	(3,608)	-	(9,080)
Net income	-	-	-	7,954	-	7,954
<i>Other comprehensive income</i>						
Foreign currency translation adjustment	-	-	-	-	(1,307)	(1,307)
Net unrealized gains (losses) on investments in securities	-	-	-	-	240	240
Comprehensive income						6,887
Balance at September 30, 2023	25,785,903	\$ 26	\$ 463,908	\$ 251,276	\$ (30,288)	\$ 684,922

	Common Stock		Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Total
	Shares	Amount				
Balance at December 31, 2021	27,465,945	28	468,548	376,734	(16,817)	828,493
Common shares issued on exercise of options and other, net of shares withheld for tax obligations	27,716	-	(462)	-	-	(462)
Stock-based compensation expense	-	-	4,397	-	-	4,397
Repurchases of common stock	-	-	-	-	-	-
Net income	-	-	-	5,095	-	5,095
<i>Other comprehensive loss</i>						
Foreign currency translation adjustment	-	-	-	-	(4,972)	(4,972)
Net unrealized gains (losses) on investments in securities	-	-	-	-	(516)	(516)
Comprehensive loss						(393)
Balance at March 31, 2022	27,493,661	\$ 28	\$ 472,483	\$ 381,829	\$ (22,305)	\$ 832,035
Common shares issued on exercise of options and other, net of shares withheld for tax obligations	122,705	-	1,158	-	-	1,158
Stock-based compensation expense	-	-	4,031	-	-	4,031
Repurchases of common stock	(113,266)	-	(1,932)	(3,307)	-	(5,239)
Net income	-	-	-	2,557	-	2,557
<i>Other comprehensive loss</i>						
Foreign currency translation adjustment	-	-	-	-	(13,515)	(13,515)
Net unrealized gains (losses) on investments in securities	-	-	-	-	(329)	(329)
Comprehensive loss						(11,287)
Balance at June 30, 2022	27,503,100	\$ 28	\$ 475,740	\$ 381,079	\$ (36,149)	\$ 820,698
Common shares issued on exercise of options and other, net of shares withheld for tax obligations	31,150	-	-	-	-	-
Stock-based compensation expense	-	-	4,907	-	-	4,907
Repurchases of common stock	(207,500)	-	(3,540)	(4,295)	-	(7,835)
Net income	-	-	-	3,951	-	3,951
<i>Other comprehensive loss</i>						
Foreign currency translation adjustment	-	-	-	-	(10,287)	(10,287)
Net unrealized gains (losses) on investments in securities	-	-	-	-	(588)	(588)
Comprehensive loss						(6,924)
Balance at September 30, 2022	27,326,750	\$ 28	\$ 477,107	\$ 380,735	\$ (47,024)	\$ 810,846

The accompanying notes are an integral part of these consolidated financial statements.

Proto Labs, Inc.
Consolidated Statements of Cash Flows
(In thousands)
(Unaudited)

	Nine Months Ended September 30,	
	2023	2022
Operating activities		
Net income	\$ 10,230	\$ 11,603
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	28,213	29,981
Stock-based compensation expense	11,811	13,335
Deferred taxes	(9,197)	(8,920)
Interest on finance lease obligations	859	-
Loss on foreign currency translation	3,906	-
Impairments related to closure of Japan business	-	2,842
Gain on disposal of property and equipment	(498)	(1,174)
Other	122	11
Changes in operating assets and liabilities:		
Accounts receivable	(3,058)	(3,909)
Inventories	(150)	(1,613)
Prepaid expenses and other	4,127	(920)
Income taxes	4,693	670
Accounts payable	746	1,292
Accrued liabilities and other	4,242	8,366
Net cash provided by operating activities	<u>56,046</u>	<u>51,564</u>
Investing activities		
Purchases of property, equipment and other capital assets	(9,935)	(16,414)
Proceeds from sales of property, equipment and other capital assets	693	3,227
Purchases of marketable securities	-	(45,872)
Proceeds from sales of marketable securities	-	1,998
Proceeds from call redemptions and maturities of marketable securities	19,115	13,696
Net cash provided by (used in) investing activities	<u>9,873</u>	<u>(43,365)</u>
Financing activities		
Proceeds from exercises of stock options	1,986	2,311
Purchases of shares withheld for tax obligations	(1,436)	(1,615)
Repurchases of common stock	(39,053)	(13,074)
Principal repayments of finance lease obligations	(234)	(417)
Net cash used in financing activities	<u>(38,737)</u>	<u>(12,795)</u>
Effect of exchange rate changes on cash and cash equivalents	(244)	(1,972)
Net increase (decrease) in cash and cash equivalents	<u>26,938</u>	<u>(6,568)</u>
Cash and cash equivalents, beginning of period	<u>56,558</u>	<u>65,929</u>
Cash and cash equivalents, end of period	<u>\$ 83,496</u>	<u>\$ 59,361</u>

The accompanying notes are an integral part of these consolidated financial statements.

Notes to Consolidated Financial Statements

Note 1 – Basis of Presentation

The unaudited interim Consolidated Financial Statements of Proto Labs, Inc. (ProtoLabs, the Company, we, us or our) have been prepared in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP) for interim financial information and with the instructions to Form 10-Q and Article 10 of Regulation S-X. In the opinion of management, the accompanying financial statements reflect all adjustments necessary for a fair presentation of the Company's statements of financial position, results of operations and cash flows for the periods presented. Except as otherwise disclosed herein, these adjustments consist of normal, recurring items. Operating results for interim periods are not necessarily indicative of results that may be expected for the fiscal year as a whole.

The preparation of the financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, expenses, and the related disclosures at the date of the financial statements and during the reporting period. Actual results could materially differ from these estimates. For further information, refer to the audited Consolidated Financial Statements and Notes thereto included in the Company's Annual Report on Form 10-K for the year ended December 31, 2022, as filed with the Securities and Exchange Commission (SEC) on February 21, 2023.

The accompanying Consolidated Balance Sheet as of December 31, 2022 was derived from the audited Consolidated Financial Statements but does not include all disclosures required by U.S. GAAP for a full set of financial statements. This Quarterly Report on Form 10-Q should be read in conjunction with the Company's Consolidated Financial Statements and Notes included in the Company's Annual Report on Form 10-K filed on February 21, 2023 as referenced above.

Note 2 – Recent Accounting Pronouncements

The Company did not recently adopt any accounting pronouncements that had a material impact on the Company's Consolidated Financial Statements. There are no pending accounting pronouncements that are expected to have a material impact on the Company's Consolidated Financial Statements.

Note 3 – Net Income per Common Share

Basic net income per share is computed based on the weighted-average number of common shares outstanding. Diluted net income per share is computed based on the weighted-average number of common shares outstanding, increased by the number of additional shares that would have been outstanding had potentially dilutive common shares been issued and reduced by the number of shares the Company could have repurchased from the proceeds from issuance of the potentially dilutive shares. Potentially dilutive shares of common stock include stock options and other stock-based awards granted under stock-based compensation plans and shares committed to be purchased under the employee stock purchase plan. Performance stock units are excluded from the calculation of dilutive potential common shares until the performance conditions have been satisfied. Anti-dilutive options were excluded from the calculation of diluted weighted average shares outstanding and were 393,592 and 210,443 for the three months ended September 30, 2023 and 2022, respectively, and 372,353 and 202,901 for the nine months ended September 30, 2023 and 2022, respectively.

The table below sets forth the computation of basic and diluted net (loss) income per share:

(in thousands, except share and per share amounts)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Net income	\$ 7,954	\$ 3,951	\$ 10,230	\$ 11,603
Basic - weighted-average shares outstanding:	26,023,830	27,505,097	26,296,304	27,512,057
Effect of dilutive securities:				
Employee stock options and other	4,626	3,120	31,302	10,677
Diluted - weighted-average shares outstanding:	26,028,456	27,508,217	26,327,606	27,522,734
Net (loss) income per share:				
Basic	\$ 0.31	\$ 0.14	\$ 0.39	\$ 0.42
Diluted	\$ 0.31	\$ 0.14	\$ 0.39	\$ 0.42

Note 4 – Goodwill and Other Intangible Assets

There were no changes in the carrying amount of goodwill during the three and nine months ended September 30, 2023.

Intangible assets other than goodwill at September 30, 2023 and December 31, 2022 were as follows:

(in thousands)	September 30, 2023			December 31, 2022			Useful Life (in years)	Weighted Average Useful Life Remaining (in years)
	Gross	Accumulated Amortization	Net	Gross	Accumulated Amortization	Net		
Intangible assets with finite lives:								
Marketing assets	\$ 930	\$ (876)	\$ 54	\$ 930	\$ (806)	\$ 124	10.0	0.6
Non-compete agreement	825	(569)	256	828	(487)	341	2.0 - 5.0	1.6
Software technology	13,229	(7,410)	5,819	13,229	(6,383)	6,846	10.0	4.3
Software platform	25,902	(5,928)	19,974	26,054	(4,337)	21,717	12.0	9.3
Tradenames	348	(312)	36	350	(227)	123	3.0	0.3
Customer relationships	12,185	(11,656)	529	12,197	(10,098)	2,099	3.0 - 9.0	0.2
Total intangible assets	\$ 53,419	\$ (26,751)	\$ 26,668	\$ 53,588	\$ (22,338)	\$ 31,250		

Intangible assets allocated to the acquired Hubs entities consisted of intangible assets of €11.6 million in Europe and \$16.6 million in the United States as of the date of the acquisition. The Euro denominated intangible assets are translated at the end of each period using the current exchange rates resulting in a foreign currency translation adjustment that is recorded as a component of Other Comprehensive Income. Foreign currency losses related to intangible assets were \$1.9 million and \$1.7 million as of September 30, 2023 and December 31, 2022, respectively. Amortization expense for intangible assets was \$1.5 million for each of the three months ended September 30, 2023 and 2022 and \$4.5 million and \$4.6 million for the nine months ended September 30, 2023 and 2022, respectively.

Estimated aggregated amortization expense based on the current carrying value of the amortizable intangible assets and current exchange rates is as follows:

(in thousands)	Estimated Amortization Expense
Remaining 2023	\$ 1,432
2024	3,713
2025	3,619
2026	3,518
2027	3,509
Thereafter	10,877
Total estimated amortization expense	\$ 26,668

Note 5 – Fair Value Measurements

Accounting Standards Codification, *Fair Value Measurement* (ASC 820), defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. ASC 820 also establishes a fair value hierarchy that requires classification based on observable and unobservable inputs when measuring fair value. There are three levels of inputs that may be used to measure fair value:

Level 1—Quoted prices in active markets for identical assets or liabilities.

Level 2—Observable inputs other than Level 1 prices such as quoted prices for similar assets or liabilities; quoted prices in markets that are *not* active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3—Unobservable inputs that are supported by little or *no* market activity and that are significant to the fair value of the assets or liabilities.

The Company's assets and liabilities that are required to be measured or disclosed at fair value on a recurring basis include cash and cash equivalents and marketable securities. The Company's cash consists of bank deposits and cash equivalents consist primarily of money market mutual funds. The Company determines the fair value of these investments using Level 1 inputs. The Company's marketable securities consist of short-term and long-term agency, municipal, corporate and other debt securities. Fair value for the corporate debt securities is primarily determined based on quoted market prices (Level 1). Fair values for the U.S. municipal securities, U.S. government agency securities, certificates of deposit and U.S. treasury securities are primarily determined using dealer quotes or quoted market prices for similar securities (Level 2).

The following table summarizes financial assets as of September 30, 2023 and December 31, 2022 measured at fair value on a recurring basis:

(in thousands)	September 30, 2023			December 31, 2022		
	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Financial Assets:						
Cash	\$ 77,307	\$ -	\$ -	\$ 38,862	\$ -	\$ -
Money market mutual fund	6,189	-	-	17,696	-	-
Marketable securities	3,965	27,451	-	9,881	40,106	-
Total	\$ 87,461	\$ 27,451	\$ -	\$ 66,439	\$ 40,106	\$ -

Note 6 – Marketable Securities

The Company invests in short-term and long-term agency, municipal, corporate and other debt securities. The securities are categorized as available-for-sale and are recorded at fair value. The following table summarizes information regarding the Company’s short-term and long-term marketable securities as of September 30, 2023 and December 31, 2022:

(in thousands)	September 30, 2023			
	Cost	Unrealized Gains	Unrealized Losses	Fair Value
U.S. municipal securities	\$ 8,629	\$ -	\$ (209)	\$ 8,420
Corporate debt securities	2,530	-	(54)	2,476
U.S. government agency securities	20,793	-	(520)	20,273
Certificates of deposit/time deposits	249	-	(2)	247
Total marketable securities	\$ 32,201	\$ -	\$ (785)	\$ 31,416

(in thousands)	December 31, 2022			
	Cost	Unrealized Gains	Unrealized Losses	Fair Value
U.S. municipal securities	\$ 15,574	\$ -	\$ (417)	\$ 15,157
Corporate debt securities	9,578	-	(205)	9,373
U.S. government agency securities	25,275	-	(750)	24,525
Certificates of deposit/time deposits	939	-	(7)	932
Total marketable securities	\$ 51,366	\$ -	\$ (1,379)	\$ 49,987

Fair values for the corporate debt securities are primarily determined based on quoted market prices (Level 1). Fair values for the U.S. municipal securities, U.S. government agency securities, certificates of deposit and U.S. treasury securities are primarily determined using dealer quotes or quoted market prices for similar securities (Level 2).

Classification of marketable securities as current or non-current is based upon the security’s maturity date as of the date of these financial statements.

The September 30, 2023 balance of available-for-sale debt securities by contractual maturity is shown in the following table at fair value. Actual maturities may differ from contractual maturities because the issuers of the securities may have the right to prepay obligations without prepayment penalties.

(in thousands)	September 30, 2023
Due in one year or less	\$ 19,204
Due after one year through five years	12,212
Total marketable securities	\$ 31,416

Note 7 – Inventory

Inventory consists primarily of raw materials, which are recorded at the lower of cost and net realizable value using the standard cost method, which approximates first-in, first-out (FIFO) cost. The Company periodically reviews its inventory for slow-moving, damaged and discontinued items and provides allowances to reduce such items identified to their recoverable amounts.

The Company's inventory consisted of the following as of the dates indicated:

(in thousands)	September 30, 2023	December 31, 2022
Total inventory	\$ 14,435	\$ 13,965
Allowance for obsolescence	(632)	(387)
Inventory, net of allowance	\$ 13,803	\$ 13,578

Note 8 – Stock-Based Compensation

Under the Company's 2012 Long-Term Incentive Plan, as amended (the 2012 Plan), the Company had the ability to grant stock options, stock appreciation rights (SARs), restricted stock, restricted stock units, other stock-based awards and cash incentive awards through February 23, 2022. On July 8, 2022, the board of directors approved the Proto Labs, Inc. 2022 Long-Term Incentive Plan (the 2022 Plan), which was approved by the Company's shareholders at a Special Meeting of Shareholders on August 29, 2022. No awards were granted from February 23, 2022 to August 29, 2022. Awards outstanding under the 2012 Plan as of August 29, 2022 will continue to be subject to the terms of the 2012 Plan, but if those awards subsequently expire, are forfeited or cancelled or are settled in cash, the shares subject to those awards will become available for awards under the 2022 Plan. Under the 2022 Plan, the Company has the ability to grant stock options, stock appreciation rights (SARs), restricted stock, restricted stock units, other stock-based awards and cash incentive awards. Awards under the 2022 Plan have a maximum term of ten years from the date of grant. The compensation committee may provide that the vesting or payment of any award will be subject to the attainment of specified performance measures in addition to the satisfaction of any continued service requirements and the compensation committee will determine whether such measures have been achieved. The per-share exercise price of stock options and SARs granted under the 2022 Plan generally may not be less than the fair market value of a share of our common stock on the date of the grant.

Employee Stock Purchase Plan

The Company's 2012 Employee Stock Purchase Plan (ESPP) allows eligible employees to purchase a variable number of shares of the Company's common stock each offering period at a discount through payroll deductions of up to 15 percent of their eligible compensation, subject to plan limitations. The ESPP provides for six-month offering periods with a single purchase period ending May 15 and November 15, respectively. At the end of each offering period, employees are able to purchase shares at 85 percent of the lower of the fair market value of the Company's common stock on the first trading day of the offering period or on the last trading day of the offering period.

Stock-Based Compensation Expense

Stock-based compensation expense was \$4.4 million and \$4.9 million for the three months ended September 30, 2023 and 2022, respectively, and \$11.8 million and \$13.3 million for the nine months ended September 30, 2023 and 2022.

Stock Options

The following table summarizes stock option activity during the nine months ended September 30, 2023:

	Stock Options	Weighted-Average Exercise Price
Options outstanding at December 31, 2022	263,992	\$ 79.07
Granted	186,804	33.36
Exercised	-	-
Forfeited	(46,619)	63.57
Expired	(15,848)	55.67
Options outstanding at September 30, 2023	<u>388,329</u>	\$ 59.90
Exercisable at September 30, 2023	<u>121,083</u>	\$ 90.88

The outstanding options generally have a term of ten years. For employees, options granted become exercisable ratably over the vesting period, which is generally a period of four years, beginning on the first anniversary of the grant date, subject to the employee's continuing service to the Company.

The weighted-average grant date fair value of options that were granted during the nine months ended September 30, 2023 was \$16.36.

The following table provides the assumptions used in the Black-Scholes pricing model valuation of options during the nine months ended September 30, 2023 and 2022:

	Nine Months Ended September 30,	
	2023	2022
Risk-free interest rate	3.55% - 4.55%	1.94% - 3.40%
Expected life (years)	2.00 - 6.25	6.25
Expected volatility	49.23% - 55.92%	45.95% - 46.03%
Expected dividend yield	0%	0%

As of September 30, 2023, there was \$4.5 million of unrecognized compensation expense related to unvested stock options, which is expected to be recognized over a weighted-average period of 2.6 years.

Restricted Stock

Restricted stock awards are share-settled awards and restrictions lapse ratably over the vesting period, which is generally a period from three to four years, beginning on the first anniversary of the grant date, subject to the employee's continuing service to the Company. For the board of directors, restrictions generally lapse in full on the first anniversary of the grant date.

The following table summarizes restricted stock activity during the nine months ended September 30, 2023:

	Restricted Stock	Weighted- Average Grant Date Fair Value Per Share
Restricted stock at December 31, 2022	478,596	\$ 70.36
Granted	410,682	32.46
Restrictions lapsed	(137,053)	79.61
Forfeited	(78,769)	65.65
Restricted stock at September 30, 2023	<u>673,456</u>	<u>\$ 45.83</u>

As of September 30, 2023, there was \$22.0 million of unrecognized compensation expense related to non-vested restricted stock, which is expected to be recognized over a weighted-average period of 2.7 years.

Performance Stock

Performance stock units (PSUs) are expressed in terms of a target number of PSUs, with anywhere between 0 percent and 200 percent of that target number capable of being earned and vesting at the end of a three-year performance period depending on the Company's performance in the final year of the performance period and the award recipient's continued employment. Certain PSUs granted by the Company in 2021 are based on performance conditions and the related compensation cost is based on the probability that the performance conditions will be achieved. The Company's PSUs granted in 2020, 2022, 2023 and certain PSUs granted in 2021 are based on market conditions and the related compensation cost is based on the fair value at grant date calculated using a Monte Carlo pricing model.

The following table summarizes performance stock activity during the nine months ended September 30, 2023:

	Performance Stock	Weighted- Average Grant Date Fair Value Per Share
Performance stock at December 31, 2022	35,802	\$ 77.91
Granted	71,295	57.79
Restrictions lapsed	-	-
Performance change	-	-
Forfeited	-	-
Performance stock at September 30, 2023	<u>107,097</u>	<u>\$ 74.08</u>

The following table provides the assumptions used in the Monte Carlo pricing model valuation of PSUs during the nine months ended September 30, 2023 and 2022:

	Nine Months Ended September 30,	
	2023	2022
Risk-free interest rate	4.35%	1.76% - 3.40%
Expected life (years)	2.88	2.34 - 2.87
Expected volatility	58.00%	53.50% - 53.60%
Expected dividend yield	0%	0%

As of September 30, 2023, there was \$4.8 million of unrecognized compensation expense related to non-vested performance stock, which is expected to be recognized over a weighted-average period of 2.0 years.

Employee Stock Purchase Plan

The following table presents the assumptions used to estimate the fair value of the ESPP during the nine months ended September 30, 2023 and 2022:

	Nine Months Ended September 30,	
	2023	2022
Risk-free interest rate	4.60 - 4.82%	0.17 - 2.06%
Expected life (months)	6.00	6.00
Expected volatility	47.38 - 67.84%	47.05 - 53.44%
Expected dividend yield	0%	0%

Note 9 – Accumulated Other Comprehensive Income (Loss)

Other comprehensive income (loss) is comprised of foreign currency translation adjustments and net unrealized gains (losses) on investments in securities. During the nine months ended September 30, 2023 we recognized a \$3.9 million foreign currency translation loss from the substantial completion on the closure of our Japan business.

The following table presents the changes in accumulated other comprehensive income (loss) balances during the three and nine months ended September 30, 2023 and 2022:

(in thousands)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Balance at beginning of period	\$ (29,221)	\$ (36,149)	\$ (34,355)	\$ (16,817)
<i>Foreign currency translation adjustments</i>				
Other comprehensive income (loss) before reclassifications	(1,307)	(10,287)	(432)	(28,774)
Amounts reclassified from accumulated other comprehensive loss	-	-	3,906	-
Net current-period other comprehensive income (loss)	(1,307)	(10,287)	3,474	(28,774)
<i>Net unrealized gains (losses) on investments in securities</i>				
Other comprehensive income (loss) before reclassifications	240	(588)	593	(1,433)
Amounts reclassified from accumulated other comprehensive loss	-	-	-	-
Net current-period other comprehensive income (loss)	240	(588)	593	(1,433)
Balance at end of period	\$ (30,288)	\$ (47,024)	\$ (30,288)	\$ (47,024)

Note 10 – Income Taxes

The Company is subject to income tax in multiple jurisdictions and the use of estimates is required to determine the provision for income taxes. For the three months ended September 30, 2023 and 2022, the Company recorded an income tax provision of \$2.8 million and \$2.1 million, respectively. For the nine months ended September 30, 2023 and 2022, the Company recorded an income tax provision of \$7.8 million and \$7.2 million, respectively. The income tax provision is based on the estimated annual effective tax rate for the year applied to pre-tax income. The effective income tax rate for the three months ended September 30, 2023 was 25.9 percent compared to 34.5 percent in the same period of the prior year. The effective tax rate decreased by 8.6 percent for the three months ended September 30, 2023 when compared to the same period in 2022, primarily due to a decrease in losses in jurisdictions that are not eligible for tax benefits due to valuation allowances. The effective income tax rate for the nine months ended September 30, 2023 was 43.2 percent compared to 38.4 percent in the same period of the prior year. The effective tax rate increased by 4.8 percent for the nine months ended September 30, 2023 when compared to the same period in 2022, primarily due to the tax impact of the foreign currency translation loss from the substantial completion on the closure of our Japan business.

The effective income tax rate for the three and nine months ended September 30, 2023 differs from the U.S. federal statutory rate of 21.0 percent due to various factors, including operating in multiple state and foreign jurisdictions and tax credits for which the Company qualifies.

The Company had unrecognized tax benefits totaling \$3.9 million as of September 30, 2023 and \$3.2 million as of December 31, 2022, respectively, that if recognized would result in a reduction of the Company's effective tax rate. The liabilities are classified as other long-term liabilities in the accompanying consolidated balance sheets. The Company recognizes interest and penalties related to income tax matters in income tax expense and reports the liability in current or long-term income taxes payable as appropriate.

Note 11 – Segment Reporting

The Company's reportable segments are based on the internal reporting used by the Company's Chief Executive Officer, who is the chief operating decision maker (CODM), to assess operating performance and make decisions about the allocation of resources. The Corporate Unallocated and Japan category includes non-reportable segments, as well as research and development and general and administrative costs, that the Company does not allocate directly to its operating segments.

Intercompany transactions primarily relate to intercontinental activity and have been eliminated and are excluded from the reported amounts. The difference between income from operations and pre-tax income relates to foreign currency-related gains and losses and interest income on cash balances and investments, which are not allocated to business segments.

Revenue and income from operations by reportable segment for the three and nine months ended September 30, 2023 and 2022 were as follows:

(dollars in thousands)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Revenue:				
United States	\$ 103,940	\$ 98,970	\$ 298,007	\$ 295,121
Europe	26,765	21,464	80,822	69,441
Japan	-	1,287	-	8,229
Total revenue	\$ 130,705	\$ 121,721	\$ 378,829	\$ 372,791

(in thousands)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Income (Loss) from Operations:				
United States	\$ 27,178	\$ 25,293	\$ 69,713	\$ 73,984
Europe	(3,006)	(3,581)	(8,870)	(7,509)
Corporate Unallocated and Japan	(13,757)	(15,654)	(41,071)	(47,326)
Total Income from Operations	\$ 10,415	\$ 6,058	\$ 19,772	\$ 19,149

Total long-lived assets at September 30, 2023 and December 31, 2022 were as follows:

(in thousands)	September 30, 2023	December 31, 2022
Total long-lived assets:		
United States	\$ 190,927	\$ 203,816
Europe	52,095	53,835
Japan	-	134
Total Long-lived Assets	\$ 243,022	\$ 257,785

Revenue by product line for the three and nine months ended September 30, 2023 and 2022 were as follows:

(dollars in thousands)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Revenue:				
Injection Molding	\$ 51,688	\$ 48,940	\$ 152,455	\$ 155,693
CNC Machining	52,916	47,489	149,317	141,809
3D Printing	21,622	19,823	63,952	59,458
Sheet Metal	4,291	5,219	12,478	15,066
Other Revenue	188	250	627	765
Total Revenue	\$ 130,705	\$ 121,721	\$ 378,829	\$ 372,791

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our unaudited consolidated financial statements and related notes appearing elsewhere in this Quarterly Report on Form 10-Q and our Annual Report on Form 10-K for the year ended December 31, 2022.

Forward-Looking Statements

Statements contained in this report regarding matters that are not historical or current facts are “forward-looking statements” within the meaning of The Private Securities Litigation Reform Act of 1995. In some cases, you can identify forward-looking statements by the following words: “may,” “will,” “could,” “would,” “should,” “expect,” “intend,” “plan,” “anticipate,” “believe,” “estimate,” “predict,” “project,” “potential,” “continue,” “ongoing” or the negative of these terms or other comparable terminology, although not all forward-looking statements contain these words. These statements involve known and unknown risks, uncertainties and other factors that may cause our results to be materially different than those expressed or implied in such statements. Certain of these risk factors and others are described in Item 1A. “Risk Factors” of this Form 10-Q, as well as our most recent Annual Report on Form 10-K as filed with the Securities and Exchange Commission (SEC). Other unknown or unpredictable factors also could have material adverse effects on our future results. We cannot guarantee future results, levels of activity, performance or achievements. Accordingly, you should not place undue reliance on these forward-looking statements. Finally, we expressly disclaim any intent or obligation to update any forward-looking statements to reflect subsequent events or circumstances.

Overview

We are one of the world's largest and fastest digital manufacturers of custom prototypes and on-demand production parts. Our mission is to empower companies to bring new ideas to market by offering the fastest and most comprehensive digital manufacturing service in the world. Our automated quoting and manufacturing systems allow us to produce commercial-grade plastic, metal, and liquid silicone rubber parts in as fast as one day. We manufacture prototype and low volume production parts for companies worldwide, who are under increasing pressure to bring their finished products to market faster than their competition. We utilize injection molding, computer numerical control (CNC) machining, 3D printing and sheet metal fabrication to manufacture custom parts for our customers. For most of our offerings, our proprietary technology eliminates most of the time-consuming and expensive skilled labor conventionally required to quote and manufacture parts. Our customers conduct nearly all of their business with us over the Internet. We target our products to the millions of product developers and engineers who use three-dimensional computer-aided design (3D CAD) software to design products across a diverse range of end-markets. In addition, we serve procurement and supply chain professionals seeking to manufacture custom parts on-demand. Through the acquisition of Hubs (formerly 3D Hubs, Inc.) (Hubs) in 2021, we are able to provide our customers access to a global network of premium manufacturing partners who reside across North America, Europe and Asia, complementing our in-house manufacturing. We believe our use of advanced technology enables us to offer significant advantages at competitive prices to many customers and is the primary reason we have become a leading supplier of custom parts.

On May 27, 2022, our board of directors approved a plan for the closure of our manufacturing facility in Japan and announced an intention to cease operations in the region. Affected employees in Japan received severance and other transition assistance that meet or exceed local requirements. We expect to complete the closure plan within the year.

Our primary manufacturing product lines currently include Injection Molding, CNC Machining, 3D Printing and Sheet Metal. We continually seek to expand the range of sizes and geometric complexity of the parts we can make with these processes, to extend the variety of materials we are able to support, and to identify additional manufacturing processes to which we can apply our technology in order to better serve the evolving preferences and needs of product developers and engineers. In 2021, we augmented our internal manufacturing operations through our acquisition of Hubs to expand the envelope of custom parts we can provide to our customers through a network of premium manufacturing partners in each of our product lines.

Injection Molding

Our Injection Molding product line uses our 3D CAD-to-CNC machining technology for the automated design and manufacture of molds, which are then used to produce custom plastic and liquid silicone rubber injection-molded parts and over-molded and insert-molded injection-molded parts on commercially available equipment. Our Injection Molding product line works best for on-demand production, bridge tooling, pilot runs and functional prototyping. Our affordable molds and quick turnaround times help reduce design risk and limit overall production costs for product developers and engineers. Because we retain possession of the molds, customers who need short-run production often come back to Proto

Labs' Injection Molding product line for additional quantities. They do so to support pilot production for product testing, while their tooling for high-volume production is being prepared, because they need on-demand manufacturing due to disruptions in their manufacturing process, because their product requires limited annual quantity or because they need end-of-life production support. In 2017, we launched an on-demand manufacturing injection molding service. This service utilizes our existing processes, but is designed to fulfill the needs of customers with on-going production needs.

CNC Machining

Our CNC Machining product line uses commercially available CNC machines to offer milling and turning. CNC milling is a manufacturing process that cuts plastic and metal blocks into one or more custom parts based on the 3D CAD model uploaded by the customer. CNC turning is a subtractive manufacturing process that rotates a metal rod while a cutting tool is used to remove material and create final parts. Quick-turn CNC machining works best for prototyping, form and fit testing, jigs and fixtures and functional components for end-use applications.

Industrial 3D Printing

Our Industrial 3D Printing product line includes SL, SLS, DMLS, MJF, PolyJet, Carbon DLS and fused deposition modeling (FDM) processes, which offers customers a wide-variety of high-quality, precision rapid prototyping and low volume production. These processes create parts with a high level of accuracy, detail, strength and durability. Industrial 3D Printing is best suited for functional prototypes, complex designs and end-use applications.

Sheet Metal

Our Sheet Metal product line includes quick-turn and e-commerce-enabled custom sheet metal parts, providing customers with prototype and low-volume production parts. The rapid prototype sheet metal process is most often used when form, fit and function are all a priority. Our manufacturing process uses customer 3D CAD models uploaded by the customer to fabricate rapid prototyping sheet metal or end-use production parts and assemblies.

Key Financial Measures and Trends

Revenue

Our operations are comprised of three geographic operating segments in the United States, Europe and Japan. On May 27, 2022, our board of directors approved a plan for the closure of our manufacturing facility in Japan and announced an intention to cease operations in the region. Revenue is derived from our Injection Molding, CNC Machining, 3D Printing and Sheet Metal product lines. Injection Molding revenue consists of sales of custom injection molds and injection-molded parts. CNC Machining revenue consists of sales of CNC-machined custom parts. 3D Printing revenue consists of sales of 3D-printed parts. Sheet Metal revenue consists of sales of fabricated sheet metal custom parts. Our historical and current efforts to increase revenue have been directed at gaining new customers and selling to our existing customer base by increasing marketing and selling activities, including:

- expanding the breadth and scope of our products by adding more sizes and materials to our offerings;
- the introduction of our 3D Printing product line through our acquisition of FineLine in 2014;
- expanding 3D Printing to Europe through our acquisition of Alphaform in 2015;
- the introduction of our Sheet Metal product line through our acquisition of Rapid Manufacturing Group, LLC in 2017;
- continuously improving the usability of our product lines such as our web-centric applications; and
- providing customers with on-demand access to a global network of premium manufacturing partners through our acquisition of Hubs in 2021.

During the three months ended September 30, 2023, we served 23,080 unique product developers and engineers who purchased our products through our web-based customer interface, a decrease of 3.1% over the same period in 2022. During the nine months ended September 30, 2023, we served 45,668 unique product developers and engineers who purchased our products through our web-based customer interface, a decrease of 4.4% over the same period in 2022.

Cost of Revenue, Gross Profit and Gross Margin

Cost of revenue consists primarily of raw materials, equipment depreciation, employee compensation, benefits, stock-based compensation, facilities costs and overhead allocations associated with the manufacturing process for molds and customer parts. We expect our personnel-related costs to increase in order to retain and attract top talent and remain competitive in the market. Overall, we expect cost of revenue to increase in absolute dollars.

We define gross profit as our revenue less our cost of revenue, and we define gross margin as gross profit expressed as a percentage of revenue. Our gross profit and gross margin are affected by many factors, including our mix of revenue by product line, pricing, sales volume, manufacturing costs, the costs associated with increasing production capacity, the mix between domestic and foreign revenue sources, the mix between revenue produced in our internal manufacturing operations and outsourced to our external manufacturing partners, the mix between premium expedited manufacturing and longer lead times, and foreign currency exchange rates.

Operating Expenses

Operating expenses consist of marketing and sales, research and development and general and administrative expenses. Personnel-related costs are the most significant component in each of these categories.

Our business strategy is to continue to be a leading online and technology-enabled manufacturer of quick-turn, on-demand injection-molded, CNC-machined, 3D-printed and sheet metal custom parts for prototyping and low-volume production. In order to achieve our goals, we anticipate continued substantial investments in technology and personnel, resulting in increased operating expenses in the future.

Marketing and sales. Marketing and sales expense consists primarily of employee compensation, benefits, commissions, stock-based compensation, marketing programs such as electronic, print and pay-per-click advertising, trade shows and other related overhead, which includes an allocation of information technology expense including amortization of Protolabs 2.0 software assets. We expect sales and marketing expense to increase in the future as we increase the number of marketing and sales professionals and marketing programs targeted to increase our customer base and grow revenue.

Research and development. Research and development expense consists primarily of personnel and outside service costs related to the development of new processes and product lines, enhancement of existing product lines, development of software for internal use, maintenance of internally developed software, quality assurance and testing. Costs for internal use software are evaluated by project and capitalized where appropriate under ASC 350-40, *Intangibles — Goodwill and Other, Internal-Use Software*. We expect research and development expense to increase in the future as we seek to enhance our e-commerce interface technology, internal software and supporting business systems, and continue to expand our product lines.

General and administrative. General and administrative expense consists primarily of employee compensation, benefits, stock-based compensation, professional service fees related to accounting, tax and legal, and other related overhead, which includes an allocation of information technology expense including amortization of Protolabs 2.0 software assets. We expect general and administrative expense to increase in the future as we continue to grow and expand as a global organization.

Closure of Japan business. Closure of Japan business expense is driven by our decision to close the Japan manufacturing facility and exit the Japan market. The expenses consist primarily of operating expense, including employee severance, write-down of fixed assets, facility-related charges and goodwill impairment charges.

Other Income (Loss), net

Other income (loss), net primarily consists of foreign currency-related gains and losses and interest income on cash balances and investments. Our foreign currency-related gains and losses will vary depending upon movements in underlying foreign currency exchange rates. Our interest income will vary each reporting period depending on our average cash balances during the period, composition of our marketable security portfolio and the current level of interest rates.

Provision for Income Taxes

Provision for income taxes is comprised of federal, state, local and foreign taxes based on pre-tax income. Overall, our effective tax rate for 2023 and beyond may differ from historical effective tax rates due to increases in losses in foreign

operations that are not eligible for tax benefits on account of valuation allowances, as well as any future tax law changes that may impact our effective tax rate.

Results of Operations

The following table summarizes our results of operations and the related changes for the periods indicated. The results below are not necessarily indicative of the results for future periods.

(dollars in thousands)	Three Months Ended September 30,				Change		Nine Months Ended September 30,				Change	
	2023		2022		\$	%	2023		2022		\$	%
Revenue	\$ 130,705	100.0	\$ 121,721	100.0	\$ 8,984	7.4	\$ 378,829	100.0	\$ 372,791	100.0	\$ 6,038	1.6
Cost of revenue	71,423	54.6	68,089	55.9	3,334	4.9	212,648	56.1	205,933	55.2	6,715	3.3
Gross profit	59,282	45.4	53,632	44.1	5,650	10.5	166,181	43.9	166,858	44.8	(677)	(0.4)
Operating expenses												
Marketing and sales	21,682	16.6	20,594	16.9	1,088	5.3	65,863	17.4	62,235	16.7	3,628	5.8
Research and development	10,105	7.7	9,309	7.7	796	8.6	30,647	8.1	29,316	7.9	1,331	4.5
General and administrative	17,058	13.1	16,477	13.5	581	3.5	49,713	13.1	49,770	13.4	(57)	(0.1)
Closure of Japan business	22	—	1,194	1.0	(1,172)	(98.2)	186	—	6,388	1.7	(6,202)	(97.1)
Total operating expenses	48,867	37.4	47,574	39.1	1,293	2.7	146,409	38.6	147,709	39.6	(1,300)	(0.9)
Income from operations	10,415	8.0	6,058	5.0	4,357	71.9	19,772	5.2	19,149	5.1	623	3.3
Other income (loss), net	320	0.2	(24)	(0.0)	344	(1,433.3)	(1,758)	(0.5)	(323)	(0.1)	(1,435)	444.3
Income before income taxes	10,735	8.2	6,034	5.0	4,701	77.9	18,014	4.8	18,826	5.1	(812)	(4.3)
Provision for income taxes	2,781	2.1	2,083	1.7	698	33.5	7,784	2.1	7,223	1.9	561	7.8
Net income	\$ 7,954	6.1 %	\$ 3,951	3.3 %	\$ 4,003	101.3 %	\$ 10,230	2.7 %	\$ 11,603	3.1 %	\$ (1,373)	(11.8)%

Stock-based compensation expense included in the statements of operations data above for the three and nine months September 30, 2023 and 2022 were as follows:

(dollars in thousands)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Stock options, restricted stock and performance stock	\$ 4,118	\$ 4,573	\$ 10,706	\$ 12,247
Employee stock purchase plan	323	334	1,105	1,088
Total stock-based compensation expense	\$ 4,441	\$ 4,907	\$ 11,811	\$ 13,335
Cost of revenue	\$ 462	\$ 560	\$ 1,388	\$ 1,674
Operating expenses:				
Marketing and sales	962	929	2,510	2,479
Research and development	674	602	1,887	1,702
General and administrative	2,343	2,816	6,026	7,480
Total stock-based compensation expense	\$ 4,441	\$ 4,907	\$ 11,811	\$ 13,335

Comparison of Three Months Ended September 30, 2023 and 2022
Revenue

Revenue by reportable segment and the related changes for the three months ended September 30, 2023 and 2022 were as follows:

(dollars in thousands)	Three Months Ended September 30,				Change	
	2023		2022			
	\$	% of Total Revenue	\$	% of Total Revenue	\$	%
Revenue:						
United States	\$ 103,940	79.5 %	\$ 98,970	81.3 %	\$ 4,970	5.0 %
Europe	26,765	20.5 %	21,464	17.6 %	5,301	24.7
Japan	-	— %	1,287	1.1 %	(1,287)	(100.0)
Total revenue	\$ 130,705	100.0 %	\$ 121,721	100.0 %	\$ 8,984	7.4 %

Our revenue increased \$9.0 million, or 7.4%, for the three months ended September 30, 2023 compared to the same period in 2022. By reportable segment, revenue in the United States increased \$5.0 million, or 5.0%, for the three months ended September 30, 2023 compared to the same period in 2022. Revenue in Europe increased \$5.3 million, or 24.7%, and revenue in Japan decreased \$1.3 million, or 100.0% in each case for the three months ended September 30, 2023 compared to the same period in 2022. The decrease in Japan revenue was driven by our decision in the second quarter of 2022 to close our Japan operations. Revenue generated from our digital network powered by Hubs was \$22.6 million and \$12.1 million for the three months ended September 30, 2023 and 2022, respectively. International revenue was positively impacted by \$1.7 million during three months ended September 30, 2023 compared to the same period in 2022 as a result of foreign currency movements, primarily the strengthening of the British Pound and Euro relative to the United States Dollar.

During the three months ended September 30, 2023, we served 23,080 unique product developers and engineers, which is a decrease of 3.1% from the same period in 2022. Our decline in product developers and engineers served decreased at a higher rate than our revenue growth, resulting in an increase in the average spend per product developer and engineer primarily due to a larger portion of the business shifting to larger orders and improvements in average order values in digital network powered by Hubs.

Revenue by product line and the related changes for the three months ended September 30, 2023 and 2022 were as follows:

(dollars in thousands)	Three Months Ended September 30,				Change	
	2023		2022			
	\$	% of Total Revenue	\$	% of Total Revenue	\$	%
Revenue:						
Injection Molding	\$ 51,688	39.6 %	\$ 48,940	40.2 %	\$ 2,748	5.6 %
CNC Machining	52,916	40.5	47,489	39.0	5,427	11.4
3D Printing	21,622	16.5	19,823	16.3	1,799	9.1
Sheet Metal	4,291	3.3	5,219	4.3	(928)	(17.8)
Other Revenue	188	0.1	250	0.2	(62)	(24.8)
Total Revenue	\$ 130,705	100.0 %	\$ 121,721	100.0 %	\$ 8,984	7.4 %

By product line, our revenue increase was driven by a 11.4% increase in CNC Machining revenue, a 5.6% increase in Injection Molding revenue and a 9.1% increase in 3D Printing revenue, which was partially offset by a 17.8% decrease in

Sheet Metal revenue and a 24.8% decrease in Other Revenue, in each case for the three months ended September 30, 2023 compared to the same period in 2022.

Cost of Revenue, Gross Profit and Gross Margin

Cost of Revenue. Cost of revenue increased \$3.3 million, or 4.9%, for the three months ended September 30, 2023 compared to the same period in 2022, which was less than the rate of revenue increase of 7.4% for the three months ended September 30, 2023 compared to the same period in 2022. The increase in the cost of revenue of \$3.3 million was primarily driven by higher revenue volumes in our digital network offering, partly offset by reductions in contract labor, headcount and overtime leading to lower personnel and related costs of \$1.8 million and lower raw material and product costs of \$0.9 million in our digital manufacturing factory offering during the three months ended September 30, 2023 compared to the same period in 2022.

Gross Profit and Gross Margin. Gross profit increased from \$53.6 million in the three months ended September 30, 2022 to \$59.3 million in the three months ended September 30, 2023. Gross margin increased from 44.1% in the three months ended September 30, 2022 to 45.4% in the three months ended September 30, 2023.

Operating Expenses, Other (Loss) Income, net and Provision for Income Taxes

Marketing and Sales. Marketing and sales expenses increased \$1.1 million, or 5.3%, during the three months ended September 30, 2023 compared to the same period in 2022. The increase in marketing and sales expenses was primarily driven by increases in personnel and related costs of \$1.2 million and marketing program cost decreases of \$0.1 million during the three months ended September 30, 2023 when compared to the same period in 2022.

Research and Development. Our research and development expenses increased \$0.8 million, or 8.6%, during the three months ended September 30, 2023 compared to the same period in 2022 primarily due to increases of \$1.1 million in personnel and related costs, which were partially offset by decreases of \$0.3 million in professional services and other operating costs.

General and Administrative. Our general and administrative expenses increased \$0.6 million, or 3.5%, during the three months ended September 30, 2023 compared to the same period in 2022 primarily due to a \$0.5 million reserve for specific receivables deemed to be uncollectible in the current period, an increase of \$0.4 million in professional services and operating costs and a benefit of \$1.2 million in the prior year resulting from the sale of a facility during the three months ended September 30, 2022. These increases were partially offset by decreases of personnel and related costs of \$0.9 million and \$0.5 million stock based compensation costs in the current period.

Closure of Japan business. Our decision to close our Japan business resulted in minimal operating expenses during the three months ended September 30, 2023, a decrease of \$1.2 million or 98.2% compared to the same period in 2022. During the three months ended September 30, 2022, we recognized \$0.1 million of employee severance and \$1.1 million related to the write-down of fixed assets.

Other income (loss), net. We recognized other income, net of \$0.3 million for the three months ended September 30, 2023, an improvement of \$0.3 million compared to other loss, net of zero for the three months ended September 30, 2022. Other income, net for the three months ended September 30, 2023 primarily consisted of \$0.5 million in interest income on investments and other income, partially offset by \$0.2 million of foreign currency losses. Other loss, net for the three months ended September 30, 2022 primarily consisted of a \$0.4 million loss on foreign currency, which was offset by \$0.4 million in interest income on investments and other income.

Provision for Income Taxes. Our effective tax rate of 25.9% for the three months ended September 30, 2023 decreased 8.6% compared to 34.5% for the same period in 2022. The decrease in the effective tax rate is primarily due to a decrease in losses in jurisdictions that are not eligible for tax benefits due to valuation allowances. Our income tax provision of \$2.8 million for the three months ended September 30, 2023 increased \$0.7 million as compared our income tax provision of \$2.1 million to the same period in 2022.

Comparison of Nine Months Ended September 30, 2023 and 2022
Revenue

Revenue by reportable segment and the related changes for the nine months ended September 30, 2023 and 2022 were as follows:

(dollars in thousands)	Nine Months Ended September 30,				Change	
	2023		2022		\$	%
	\$	% of Total Revenue	\$	% of Total Revenue		
Revenue:						
United States	\$ 298,007	78.7 %	\$ 295,121	79.2 %	\$ 2,886	1.0 %
Europe	80,822	21.3 %	69,441	18.6 %	11,381	16.4
Japan	-	— %	8,229	2.2 %	(8,229)	(100.0)
Total revenue	\$ 378,829	100.0 %	\$ 372,791	100.0 %	\$ 6,038	1.6 %

Our revenue increased \$6.0 million, or 1.6%, for the nine months ended September 30, 2023 compared to the same period in 2022. By reportable segment, revenue in the United States increased \$2.9 million, or 1.0%, for the nine months ended September 30, 2023 compared to the same period in 2022. Revenue in Europe increased \$11.4 million, or 16.4%, and revenue in Japan decreased \$8.2 million, or 100.0% in each case for the nine months ended September 30, 2023 compared to the same period in 2022. The decrease in Japan revenue was driven by our decision in the second quarter of 2022 to close our Japan operations. Revenue generated from our digital network powered by Hubs was \$60.1 million and \$33.7 million for the nine months ended September 30, 2023 and 2022, respectively. International revenue was negatively impacted by \$1.3 million during nine months ended September 30, 2023 compared to the same period in 2022 as a result of foreign currency movements, primarily the weakening of the British Pound and Euro relative to the United States Dollar.

During the nine months ended September 30, 2023, we served 45,668 unique product developers and engineers, a decrease of 4.4% from the same period in 2022. Our decrease in product developers and engineers served decreased at a higher rate than our revenue growth, resulting in an increase in the average spend per product developer and engineer primarily due to a larger portion of the business shifting to larger orders and improvements in average order values in digital network powered by Hubs.

Revenue by product line and the related changes for the nine months ended September 30, 2023 and 2022 were as follows:

(dollars in thousands)	Nine Months Ended September 30,				Change	
	2023		2022		\$	%
	\$	% of Total Revenue	\$	% of Total Revenue		
Revenue:						
Injection Molding	\$ 152,455	40.2 %	\$ 155,693	41.8 %	\$ (3,238)	(2.1)%
CNC Machining	149,317	39.4	141,809	38.0	7,508	5.3
3D Printing	63,952	16.9	59,458	16.0	4,494	7.6
Sheet Metal	12,478	3.3	15,066	4.0	(2,588)	(17.2)
Other Revenue	627	0.2	765	0.2	(138)	(18.0)
Total Revenue	\$ 378,829	100.0 %	\$ 372,791	100.0 %	\$ 6,038	1.6 %

By product line, our revenue increase was driven by a 5.3% increase in CNC Machining revenue and a 7.6% increase in 3D Printing revenue, which was partially offset by a 2.1% decrease in Injection Molding revenue, a 17.2% decrease in Sheet Metal revenue and a 18.0% decrease in Other Revenue in each case for the nine months ended September 30, 2023 compared to the same period in 2022.

Cost of Revenue, Gross Profit and Gross Margin

Cost of Revenue. Cost of revenue increased \$6.7 million, or 3.3%, for the nine months ended September 30, 2023 compared to the same period in 2022, which was higher than the rate of revenue increase of 1.6% for the nine months ended September 30, 2023 compared to the same period in 2022. The increase in cost of revenue of \$6.7 million was primarily driven by higher revenue volumes in our digital network offering, partly offset by reductions in contract labor, headcount and overtime leading to lower personnel and related costs of \$7.9 million and lower raw material and product costs of \$2.7 million in our digital manufacturing factory offering during the nine months ended September 30, 2023 compared to the same period in 2022.

Gross Profit and Gross Margin. Gross profit decreased from \$166.9 million in the nine months ended September 30, 2022 to \$166.2 million in the nine months ended September 30, 2023. Gross margin decreased from 44.8% in the nine months ended September 30, 2022 to 43.9% in the nine months ended September 30, 2023.

Operating Expenses, Other Income (Loss), net and Provision for Income Taxes

Marketing and Sales. Marketing and sales expenses increased \$3.6 million, or 5.8%, during the nine months ended September 30, 2023 compared to the same period in 2022. The increase was driven by increases in personnel and related costs of \$3.1 million and marketing program cost increases of \$0.5 million during the nine months ended September 30, 2023 when compared to the same period in 2022.

Research and Development. Our research and development expenses increased \$1.3 million, or 4.5%, during the nine months ended September 30, 2023 compared to the same period in 2022 primarily due to personnel and related cost increases of \$2.1 million, which were partially offset by decreases in professional services and other operating costs of \$0.8 million.

General and Administrative. Our general and administrative expenses decreased \$0.1 million, or 0.1%, during the nine months ended September 30, 2023 compared to the same period in 2022 primarily due to decreases in stock based compensation costs of \$1.4 million, personnel and related costs of \$0.9 million and \$0.4 million of amortization and other costs, partially offset by the prior comparable period including a benefit of \$1.2 million related to the sale of a facility, an increase of \$0.9 million in professional services and a \$0.5 million reserve for specific receivables deemed to be uncollectible in the current period.

Closure of Japan business. Our decision to close our Japan business resulted in \$0.2 million in operating expenses during the nine months ended September 30, 2023, a decrease of \$6.2 million or 97.1% compared to the same period in 2022. During the nine months ended September 30, 2022, we recognized \$2.3 million of employee severance, \$2.3 million related to the write-down of fixed assets, \$0.9 million of facility-related charges, \$0.6 million in goodwill impairment and \$0.3 million in other closure related charges.

Other loss, net. We recognized other loss, net of \$1.8 million for the nine months ended September 30, 2023, an increase of \$1.4 million compared to other loss, net of \$0.3 million for the nine months ended September 30, 2022. Other loss, net for the nine months ended September 30, 2023 primarily consisted of a \$3.9 million foreign currency translation loss from the substantial completion on the closure of our Japan business, which was partially offset by \$2.1 million in interest income on investments and other income. Other loss, net for the nine months ended September 30, 2022 primarily consisted of a \$0.8 million loss on foreign currency, which was offset by \$0.5 million in interest income on investments and other income.

Provision for Income Taxes. Our effective tax rate of 43.2% for the nine months ended September 30, 2023 increased 4.8% compared to 38.4% for the same period in 2022. The increase in the effective tax rate is primarily due to the foreign currency translation loss from the substantial completion on the closure of our Japan business, which is not deductible for tax purposes. Our income tax provision of \$7.8 million for the nine months ended September 30, 2023 increased \$0.6 million compared to our income tax provision of \$7.2 million for the nine months ended September 30, 2022.

Liquidity and Capital Resources**Cash Flows**

The following table summarizes our cash flows during the nine months ended September 30, 2023 and 2022:

(dollars in thousands)	Nine Months Ended September 30,	
	2023	2022
Net cash provided by operating activities	\$ 56,046	\$ 51,564
Net cash provided by (used in) investing activities	9,873	(43,365)
Net cash used in financing activities	(38,737)	(12,795)
Effect of exchange rate changes on cash and cash equivalents	(244)	(1,972)
Net increase (decrease) in cash and cash equivalents	<u>\$ 26,938</u>	<u>\$ (6,568)</u>

Sources of Liquidity

Historically, we have primarily financed our operations and capital expenditures through cash flow from operations. We had cash and cash equivalents of \$83.5 million as of September 30, 2023, an increase of \$26.9 million from December 31, 2022. The increase in our cash was primarily due to cash provided by operating activities of \$56.0 million and proceeds from call redemptions and maturities of marketable securities of \$19.1 million, which were partially offset by \$9.9 million for purchases of property, equipment and other capital assets, and \$39.1 million in repurchases of common stock.

We believe that our existing cash and cash equivalents together with cash generated from operations will be sufficient to meet our working capital and capital expenditure requirements for at least the next 12 months.

Cash Flows from Operating Activities

Cash flows from operating activities were \$56.0 million during the nine months ended September 30, 2023 and primarily consisted of net income of \$10.2 million, adjusted for certain non-cash items, including depreciation and amortization of \$28.2 million, stock-based compensation expense of \$11.8 million, foreign currency translation losses of \$3.9 million, interest on finance lease obligations of \$0.9 million and changes in operating assets and liabilities and other items totaling \$10.6 million, which were partially offset by deferred taxes of \$9.2 million and a gain on the disposal of property and equipment of \$0.5 million. Cash flows from operating activities were \$51.6 million during the nine months ended September 30, 2022 and primarily consisted of net income of \$11.6 million, adjusted for certain non-cash items, including depreciation and amortization of \$30.0 million and stock-based compensation expense of \$13.3 million, impairments related to the closure of our Japan business of \$2.8 million, changes in operating assets and liabilities and other items totaling \$3.9 million, which were partially offset by deferred taxes of \$8.9 million and a gain on disposal of property and equipment of \$1.2 million.

Cash flows from operating activities increased \$4.5 million during the nine months ended September 30, 2023 compared to the same period in 2022, primarily due to increases in interest on finance lease obligations of \$0.9 million, foreign currency translation losses of \$3.9 million and changes in operating assets and liabilities totaling \$6.7 million, which were partially offset by decreases in net income of \$1.4 million, stock-based compensation of \$1.5 million, impairments related to the closure of Japan business of \$2.8 million and depreciation and amortization of \$1.8 million.

Cash Flows from Investing Activities

Cash provided by investing activities was \$9.9 million during the nine months ended September 30, 2023, consisting of \$19.1 million in proceeds from call redemptions and maturities of marketable securities, which were partially offset by \$9.2 million for net purchases of property, equipment and other capital assets.

Cash used in investing activities was \$43.4 million during the nine months ended September 30, 2022, consisting of \$30.2 million for net purchases of marketable securities and \$13.2 million for net purchases of property, equipment and other capital assets.

Cash Flows from Financing Activities

Cash used in financing activities was \$38.7 million during the nine months ended September 30, 2023, consisting of \$39.1 million in repurchases of common stock, \$1.4 million in purchases of shares withheld for tax obligations associated with equity transactions, and \$0.2 million for repayments of finance lease obligations, which were partially offset by \$2.0 million in proceeds from exercises of stock option.

Cash used in financing activities was \$12.8 million during the nine months ended September 30, 2022, consisting of \$13.1 million in repurchases of common stock, \$1.6 million in purchases of shares withheld for tax obligations associated with equity transactions and \$0.4 million for repayments of finance lease obligations, which were partially offset by \$2.3 million in proceeds from exercises of stock options.

Critical Accounting Estimates

We have adopted various accounting policies to prepare the Consolidated Financial Statements in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP). The preparation of these financial statements requires us to make estimates, judgements and assumptions. Our significant accounting policies and estimates are disclosed in Note 2 to the Consolidated Financial Statements included Part II, Item 8 in our Annual Report on Form 10-K for the year ended December 31, 2022. There were no material changes to our critical accounting policies and estimates during the nine months ended September 30, 2023.

Recent Accounting Pronouncements

For information on recent accounting pronouncements, see Note 2 to the Consolidated Financial Statements appearing in Part I, Item 1 in this Quarterly Report on Form 10-Q.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

Foreign Currency Risk

As a result of our foreign operations, we have revenue, expenses, assets and liabilities that are denominated in foreign currencies. We generate revenue and incur production costs and operating expenses in British Pounds, Euros and Japanese Yen.

Our operating results and cash flows are adversely impacted when the United States Dollar appreciates relative to foreign currencies. Additionally, our operating results and cash flows are adversely impacted when the British Pound appreciates relative to the Euro. As we expand internationally, our results of operations and cash flows will become increasingly subject to changes in foreign currency exchange rates.

We have not used forward contracts or currency borrowings to hedge our exposure to foreign currency risk. Foreign currency risk can be assessed by estimating the change in results of operations or financial position resulting from a hypothetical 10% adverse change in foreign exchange rates. We believe such a change would generally not have a material impact on our financial position, but could have a material impact on our results of operations. During the nine months ended September 30, 2023, we recognized a foreign currency translation loss of \$3.9 million in connection with substantially completing our closure of our Japan business. We recognized foreign currency losses of \$0.2 million and \$0.4 million during the three months ended September 30, 2023 and 2022, respectively. We recognized foreign currency losses of \$0.1 million and \$0.8 million during the nine months ended September 30, 2023 and 2022, respectively. The changes in foreign exchange rates had a positive impact on consolidated revenue of \$1.7 million for the three months ended September 30, 2023 and a negative impact of \$1.3 million for the nine months ended September 30, 2023 as compared to the same period in 2022.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934 (Exchange Act)) as of the end of the period covered by this report. Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer have concluded that, as of the end of the period covered by this quarterly report, our disclosure controls and procedures are effective and provide reasonable assurance that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported accurately and within the time frames specified in the SEC's rules and forms and accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

Changes in Internal Control over Financial Reporting

There have been no changes in our internal control over financial reporting (as such term is defined in Rule 13a-15(f) under the Exchange Act) during the period covered by this report that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION**Item 1. Legal Proceedings**

From time to time, we are subject to various legal proceedings and claims that arise in the ordinary course of our business activities. Although the results of litigation and claims cannot be predicted with certainty, as of the date of these financial statements, we do not believe we are party to any litigation the outcome of which, if determined adversely to us, would individually or in the aggregate be reasonably expected to have a material adverse effect on our business.

Item 1A. Risk Factors

Part I, Item 1A. “Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2022 includes a discussion of our risk factors. There have been no material changes from the risk factors described in our Form 10-K.

Item 2. Unregistered Sales of Equity Securities, Use of Proceeds and Issuer Purchases of Equity Securities

On February 9, 2017, our board of directors authorized the repurchase of shares of our common stock from time to time on the open market or in privately negotiated purchases, at an aggregate purchase price of up to \$50 million. On May 16, 2019, we announced that our board of directors approved a \$50 million increase in our authorized stock repurchase program and extended the term of the program through December 31, 2023, which increased the stock repurchase program to \$100 million. On December 8, 2021, our board of directors approved another \$50 million increase in our authorized stock repurchase program, which increased the total repurchases authorized to \$150 million. On November 17, 2022, our board of directors approved a \$50 million increase in our authorized stock repurchase program, which increased the total repurchases authorized to \$200 million and extended the term of the program through December 31, 2024. On February 7, 2023 our board of directors approved a \$50 million increase in our authorized stock repurchase program, which increased the stock repurchase authorized to \$250 million. We have \$93.3 million remaining under this authorization. The timing and amount of any share repurchases will be determined by our management based on market conditions and other factors.

During the three months ended September 30, 2023, we repurchased 310,568 shares of our common stock at a total purchase price of \$9.0 million under this program. Common stock repurchase activity through September 30, 2023 was as follows:

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs (in thousands) (1)
July 1, 2023 through July 31, 2023	—	\$ —	—	\$ 102,239
August 1, 2023 through August 31, 2023	228,204	\$ 28.95	228,204	\$ 95,631
September 1, 2023 through September 30, 2023	82,364	\$ 28.80	82,364	\$ 93,258
	<u>310,568</u>	<u>\$ 28.92</u>	<u>310,568</u>	<u>\$ 93,258</u>

Item 3. Defaults Upon Senior Securities

No matters to disclose.

Item 4. Mine Safety Disclosures

No matters to disclose.

Item 5. Other Information

During the three months ended September 30, 2023, none of our directors or officers (as defined in Rule 16a-1(f) of the Exchange Act) adopted, modified or terminated any contract, instruction or written plan for the purchase or sale of our securities that was intended to satisfy the affirmative defense conditions of Rule 10b5-1(c) of the Exchange Act or any non-Rule 10b5-1 trading arrangement (as defined in Item 408(c) of Regulation S-K).

Item 6. Exhibits

The following documents are filed as part of this report:

Exhibit Number	Description of Exhibit
3.1	Third Amended and Restated Articles of Incorporation of Proto Labs, Inc. (incorporated by reference to Exhibit 3.2 to the Company's Registration Statement on Form S-1/A, filed on February 13, 2012).
3.2	Articles of Amendment to Third Amended and Restated Articles of Incorporation of Proto Labs, Inc. dated May 20, 2015 (incorporated by reference to Exhibit 3.1 to the Company's Form 8-K, filed with the Commission on May 21, 2015).
3.3	Third Amended and Restated By-Laws of Proto Labs, Inc., as amended through November 15, 2022 (incorporated by reference to Exhibit 3.2 to the Company's Form 8-K, filed on November 15, 2022).
31.1	Certification of the Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act*
31.2	Certification of the Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act*
32.1	Certification of the Chief Executive Officer and the Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act*
101.INS	Inline XBRL Instance Document (the Instance Document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document)
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

* Filed herewith.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Proto Labs, Inc.

Date: November 3, 2023

/s/ Robert Bodor

Robert Bodor
President and Chief Executive Officer
(Principal Executive Officer)

Date: November 3, 2023

/s/ Daniel Schumacher

Daniel Schumacher
Chief Financial Officer
(Principal Financial Officer)

**CERTIFICATION PURSUANT TO RULE 13a-14(a) OR 15d-14(a) OF
THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF
THE SARBANES-OXLEY ACT OF 2002**

I, Robert Bodor, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Proto Labs, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

- a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
- b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
- c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
- d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting;

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

- a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
- b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 3, 2023

By: /s/ Robert Bodor

Robert Bodor
President and Chief Executive Officer
(Principal Executive Officer)

**CERTIFICATION PURSUANT TO RULE 13a-14(a) OR 15d-14(a) OF
THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF
THE SARBANES-OXLEY ACT OF 2002**

I, Daniel Schumacher, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Proto Labs, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

- a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
- b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
- c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
- d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting;

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

- a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
- b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 3, 2023

By: /s/ Daniel Schumacher

Daniel Schumacher
Chief Financial Officer
(Principal Financial Officer)

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER
PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

I, Robert Bodor, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Quarterly Report of Proto Labs, Inc. on Form 10-Q for the fiscal quarter ended September 30, 2023 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Quarterly Report on Form 10-Q fairly presents in all material respects the financial condition and results of operations of Proto Labs, Inc.

Date: November 3, 2023

By: /s/ Robert Bodor

Name: Robert Bodor

Title: President and Chief Executive Officer

I, Daniel Schumacher, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Quarterly Report of Proto Labs, Inc. on Form 10-Q for the fiscal quarter ended September 30, 2023 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Quarterly Report on Form 10-Q fairly presents in all material respects the financial condition and results of operations of Proto Labs, Inc.

Date: November 3, 2023

By: /s/ Daniel Schumacher

Name: Daniel Schumacher

Title: Chief Financial Officer