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 March 31, 2022

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	☑	Accelerated filer	☐
Non-accelerated filer	☐		
Smaller reporting company	☐	Emerging growth company	☐

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: 27,496,142 shares of Common Stock, par value $0.001 per share, were outstanding at May 2, 2022.

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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)

	March 31, 2022 (Unaudited)	December 31, 2021
Assets		
Current assets		
Cash and cash equivalents	$ 57,239	$ 65,929
Short-term marketable securities	19,914	11,580
Accounts receivable, net of allowance for doubtful accounts of $1,998 and $1,948 as of March 31, 2022 and December 31, 2021, respectively	85,960	80,051
Inventory	14,227	13,161
Income taxes receivable	687	1,321
Prepaid expenses and other current assets	10,185	11,450
Total current assets	188,212	183,492
Property and equipment, net	270,946	280,346
Goodwill	398,319	400,610
Other intangible assets, net	36,234	37,998
Long-term marketable securities	28,196	14,340
Operating lease assets	4,800	5,578
Finance lease assets	1,773	1,898
Long-term assets held for sale	1,985	-
Other long-term assets	4,286	4,320
Total assets	$ 934,751	$ 928,582
Liabilities and shareholders' equity		
Current liabilities		
Accounts payable	$ 17,511	$ 25,364
Accrued compensation	13,094	13,704
Accrued liabilities and other	23,030	11,980
Current operating lease liabilities	2,253	3,298
Current finance lease liabilities	493	550
Income taxes payable	3,870	-
Total current liabilities	60,251	54,896
Long-term operating lease liabilities	2,514	2,245
Long-term finance lease liabilities	1,269	1,351
Long-term deferred tax liabilities	32,661	35,892
Other long-term liabilities	6,021	5,705
Total liabilities	102,716	100,089
Shareholders' equity		
Preferred stock, $0.001 par value, authorized 10,000,000 shares; issued and outstanding 0 shares as of each of March 31, 2022 and December 31, 2021	-	-
Common stock, $0.001 par value, authorized 150,000,000 shares; issued and outstanding 27,493,661 and 27,465,945 shares as of March 31, 2022 and December 31, 2021, respectively	28	28
Additional paid-in capital	472,483	468,548
Retained earnings	381,829	376,734
Accumulated other comprehensive loss	(22,305)	(16,817)
Total shareholders' equity	832,035	828,493
Total liabilities and shareholders' equity	$ 934,751	$ 928,582

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 March 31,	
	2022	**2021**
Statements of Operations:		
Revenue	$ 124,168	$ 116,126
Cost of revenue	68,364	60,796
Gross profit	55,804	55,330
Operating expenses		
Marketing and sales	20,586	19,480
Research and development	10,557	12,181
General and administrative	16,771	19,408
Total operating expenses	47,914	51,069
Income from operations	7,890	4,261
Other loss, net	(300)	(313)
Income before income taxes	7,590	3,948
Provision for income taxes	2,495	236
Net income	$ 5,095	$ 3,712
Net income per share:		
Basic	$ 0.19	$ 0.14
Diluted	$ 0.19	$ 0.13
Shares used to compute net income per share:		
Basic	27,502,941	27,464,136
Diluted	27,510,477	27,698,195
Comprehensive Loss (net of tax)		
Comprehensive loss	$ (393)	$ (2,964)

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 January 1, 2022	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
Other comprehensive loss						
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 Stock		Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Total
	Shares	Amount				
Balance at January 1, 2021	26,776,796	27	284,848	362,901	(3,420)	644,356
Common shares issued on exercise of options and other, net of shares withheld for tax obligations	48,955	-	(290)	-	-	(290)
Common shares issued for Hubs acquisition	863,995	1	166,708	-		166,709
Stock-based compensation expense	-	-	5,620	-	-	5,620
Repurchases of common stock	-	-	-	-	-	-
Net income	-	-	-	3,712	-	3,712
Other comprehensive loss						
Foreign currency translation adjustment	-	-	-	-	(6,842)	(6,842)
Net unrealized gains (losses) on investments in securities	-	-	-	-	166	166
Comprehensive loss						(2,964)
Balance at March 31, 2021	27,689,746	$ 28	$ 456,886	$ 366,613	$ (10,096)	$ 813,431

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

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

	Three Months Ended March 31, 2022	Three Months Ended March 31, 2021
Operating activities		
Net income	$ 5,095	$ 3,712
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	10,232	10,059
Stock-based compensation expense	4,397	5,620
Deferred taxes	(3,213)	(69)
Other	79	126
Changes in operating assets and liabilities:		
Accounts receivable	(6,329)	(14,558)
Inventories	(675)	917
Prepaid expenses and other	1,110	2,696
Income taxes	4,519	(183)
Accounts payable	(326)	669
Accrued liabilities and other	2,894	(2,564)
Net cash provided by operating activities	17,783	6,425
Investing activities		
Purchases of property, equipment and other capital assets	(3,069)	(6,546)
Cash used for acquisitions, net of cash acquired	-	(127,709)
Purchases of marketable securities	(29,366)	(8,227)
Proceeds from sales of marketable securities	-	45,194
Proceeds from call redemptions and maturities of marketable securities	6,600	7,155
Net cash used in investing activities	(25,835)	(90,133)
Financing activities		
Proceeds from exercises of stock options	6	1,704
Purchases of shares withheld for tax obligations	(468)	(1,994)
Principal repayments of finance lease obligations	(139)	(137)
Net cash used in financing activities	(601)	(427)
Effect of exchange rate changes on cash and cash equivalents	(37)	306
Net decrease in cash and cash equivalents	(8,690)	(83,829)
Cash and cash equivalents, beginning of period	65,929	127,603
Cash and cash equivalents, end of period	$ 57,239	$ 43,774

The accompanying notes are an integral part of these 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, 2021 as filed with the Securities and Exchange Commission (SEC) on February 18, 2022.

The accompanying Consolidated Balance Sheet as of December 31, 2021 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 Form 10-Q should be read in conjunction with the Company's Consolidated Financial Statements and Notes included in the Annual Report on Form 10-K filed on February 18, 2022 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.

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. For the three months ended March 31, 2022, 233,380 anti-dilutive options were excluded from the calculation of diluted weighted average shares outstanding.

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

	Three Months Ended March 31,	
(in thousands, except share and per share amounts)	2022	2021
Net income	$ 5,095	$ 3,712
Basic - weighted-average shares outstanding:	27,502,941	27,464,136
Effect of dilutive securities:		
Employee stock options and other	7,536	234,059
Diluted - weighted-average shares outstanding:	27,510,477	27,698,195
Net income per share:		
Basic	$ 0.19	$ 0.14
Diluted	$ 0.19	$ 0.13

Note 4 – Business Combinations

On January 22, 2021, the Company acquired all of the outstanding shares of 3D Hubs, Inc. (Hubs), for $294.1 million, consisting of $127.4 million in cash and 863,995 shares of the Company's common stock valued at $166.7 million on the closing date. The purchase agreement included additional contingent consideration of up to $52.8 million subject to the achievement of performance-based targets during fiscal 2021 and fiscal 2022. The contingent consideration consisted of up to $25.0 million in cash and up to 143,983 shares of the Company's common stock valued at $27.8 million on the closing date. The Company initially recorded a liability of $13.6 million related to the contingent consideration, which was subsequently reversed when it was determined the performance based targets would not be met in 2021 and the expectation that those targets would not be met in fiscal 2022. The reversal of the contingent consideration was recorded as a decrease in general and administrative expense in the Consolidated Statements of Comprehensive Income.

Hubs is based in Amsterdam, Netherlands and is a leading online manufacturing platform that provides customers with on-demand access to a global network of premium manufacturing partners. The acquisition enhances the Company's value proposition by expanding the customer offerings, enabling the Company to more holistically serve its customers.

The fair value of the consideration paid for this acquisition has been allocated to the assets purchased and liabilities assumed based on their fair values as of the acquisition date, with any excess recorded as goodwill. The goodwill associated with the acquisition represents both the strategic and growth opportunities by significantly expanding the customer offering with a network of premium manufacturing partners. The goodwill related to the acquisition is not deductible for tax purposes.

The acquisition has been accounted for under the acquisition method of accounting in accordance with ASC 805, *Business Combinations*. The final purchase price allocation was as follows:

(in thousands)	Acquisition
Assets acquired:	
Current assets	$ 2,497
Intangible assets	30,770
Goodwill	280,925
Other long-term assets	1,139
Total assets acquired	315,331
Liabilities assumed:	
Current contingent consideration	7,093
Current liabilities	5,666
Long-term contingent consideration	6,507
Long-term deferred tax liabilities	1,688
Other long-term liabilities	255
Total liabilities assumed	21,209
Net assets acquired	294,122
Cash paid	133,847
Cash acquired	(6,434)
Net cash consideration	127,413
Equity portion of purchase price	166,709
Total purchase consideration	$ 294,122

Note 5 – Goodwill and Other Intangible Assets

The changes in the carrying amount of goodwill during the three months ended March 31, 2022 were as follows:

(in thousands)	Three Months Ended March 31, 2022
Balance as of the beginning of the period	$ 400,610
Goodwill acquired during the period	-
Foreign currency translation adjustments	(2,291)
Balance as of the end of the period	$ 398,319

Goodwill has been allocated to the acquired Hubs entities consisting of goodwill of €106.5 million in Europe and $151.3 million in the United States as of the date of the acquisition. The Euro denominated goodwill is 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.

Intangible assets other than goodwill at March 31, 2022 and December 31, 2021 were as follows:

	March 31, 2022			December 31, 2021			Useful	Weighted Average Useful Life
(in thousands)	Gross	Accumulated Amortization	Net	Gross	Accumulated Amortization	Net	Life (in years)	Remaining (in years)
Intangible assets with finite lives:								
Marketing assets	$ 930	$ (736)	$ 194	$ 930	$ (713)	$ 217	10.0	2.0
Non-compete agreement	836	(393)	443	842	(363)	479	2.0 - 5.0	2.7
Software technology	13,229	(5,356)	7,873	13,229	(5,014)	8,215	10.0	6.3
Software platform	26,432	(2,724)	23,708	26,725	(2,262)	24,463	12.0	10.8
Tradenames	355	(142)	213	359	(114)	245	3.0	1.8
Customer relationships	12,228	(8,425)	3,803	12,252	(7,873)	4,379	3.0 - 9.0	1.6
Total intangible assets	$ 54,010	$ (17,776)	$ 36,234	$ 54,337	$ (16,339)	$ 37,998		

Intangible assets have been allocated to the acquired Hubs entities consisting 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 $1.2 and $0.9 million as of March 31, 2022 and December 31, 2021, respectively. Amortization expense for intangible assets was $1.5 million for each of the three months ended March 31, 2022 and 2021.

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 2022	$ 4,608
2023	5,940
2024	3,770
2025	3,670
2026	3,567
Thereafter	14,679
Total estimated amortization expense	$ 36,234

Note 6 – Assets Held for Sale

Assets are classified as held for sale and presented separately on the Consolidated Balance Sheet when all of the following criteria for a plan of sale have been met: (1) management, having the authority to approve the action, commits to a plan to sell the assets; (2) the assets are available for immediate sale, in their present condition, subject only to terms that are usual and customary for sales of such assets; (3) an active program to locate a buyer and other actions required to complete the plan to sell the assets have been initiated; (4) the sale of the assets is probable and is expected to be completed within one year; (5) the assets are being actively marketed for a price that is reasonable in relation to their current fair value; and (6) actions required to complete the plan indicate that it is unlikely that significant changes to the plan will be made or the plan will be withdrawn. The assets are then recorded at the lower of their current carrying value or the fair market value, less costs to sell.

During the first quarter of 2022, a facility the Company owns in Maple Plain, Minnesota, encompassing approximately 35,000 square feet of manufacturing and office space, met the criteria to be held for sale. The assets held for sale were $2.0 million as of March 31, 2022 and are presented on the Company's Consolidated Balance Sheet as Long-term assets held for sale. The assets held for sale had no impact on the Company's Consolidated Statements of Operations during the three months ended March 31, 2022. The Company expects to sell the facility during fiscal 2022.

Note 7 – 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. The Company's cash equivalents measured at fair value consist 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 March 31, 2022 and December 31, 2021 measured at fair value on a recurring basis:

	March 31, 2022			December 31, 2021		
(in thousands)	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Financial Assets:						
Cash and cash equivalents	$ 49,569	$ -	$ -	$ 65,637	$ -	$ -
Money market mutual fund	7,670	-	-	292	-	-
Marketable securities	22,251	25,859	-	7,602	18,318	-
Total	$ 79,490	$ 25,859	$ -	$ 73,531	$ 18,318	$ -

Note 8 – 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 March 31, 2022 and December 31, 2021:

	March 31, 2022			
(in thousands)	Cost	Unrealized Gains	Unrealized Losses	Fair Value
U.S. municipal securities	$ 14,889	$ -	$ (264)	$ 14,625
Corporate debt securities	12,144	-	(180)	11,964
U.S. government agency securities	17,288	-	(188)	17,100
Certificates of deposit/time deposits	1,438	2	(2)	1,438
Commercial paper	2,987	-	(4)	2,983
Total marketable securities	$ 48,746	$ 2	$ (638)	$ 48,110

(in thousands)	December 31, 2021 Cost	Unrealized Gains	Unrealized Losses	Fair Value
U.S. municipal securities	$ 12,549	$ -	$ (70)	$ 12,479
Corporate debt securities	9,303	-	(44)	9,259
U.S. government agency securities	2,500	-	(12)	2,488
Certificates of deposit/time deposits	1,687	7	-	1,694
Commercial paper	-	-	-	-
Total marketable securities	$ 26,039	$ 7	$ (126)	$ 25,920

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 March 31, 2022 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)	March 31, 2022
Due in one year or less	$ 19,914
Due after one year through five years	28,196
Total marketable securities	$ 48,110

Note 9 – 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)	March 31, 2022	December 31, 2021
Total inventory	$ 14,994	$ 13,474
Allowance for obsolescence	(767)	(313)
Inventory, net of allowance	$ 14,227	$ 13,161

Note 10 – Stock-Based Compensation

Under the Company's 2012 Long-Term Incentive Plan, as amended (the 2012 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 2012 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 2012 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 $5.6 million for the three months ended March 31, 2022 and 2021, respectively.

Stock Options

The following table summarizes stock option activity during the three months ended March 31, 2022:

	Stock Options	Weighted-Average Exercise Price
Options outstanding at December 31, 2021	233,384	$ 97.78
Granted	52,992	59.40
Exercised	(201)	30.58
Forfeited	(21,287)	86.55
Options outstanding at March 31, 2022	264,888	$ 91.06
Exercisable at March 31, 2022	126,595	$ 87.42

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 to five 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, options generally become exercisable in full on the first anniversary of the grant date.

The weighted-average grant date fair value of options that were granted during the three months ended March 31, 2022 was $27.84.

The following table provides the assumptions used in the Black-Scholes pricing model valuation of options during the three months ended March 31, 2022 and 2021:

	Three Months Ended March 31,	
	2022	2021
Risk-free interest rate	1.94%	0.80% - 0.96%
Expected life (years)	6.25	6.25
Expected volatility	45.95%	45.28 - 45.35%
Expected dividend yield	0%	0%

As of March 31, 2022, there was $4.9 million of unrecognized compensation expense related to unvested stock options, which is expected to be recognized over a weighted-average period of 2.9 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 five 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 three months ended March 31, 2022:

	Restricted Stock	Weighted-Average Grant Date Fair Value Per Share
Restricted stock at December 31, 2021	343,782	$ 111.79
Granted	44,782	59.40
Restrictions lapsed	(35,207)	123.15
Forfeited	(11,068)	109.73
Restricted stock at March 31, 2022	342,289	$ 103.84

As of March 31, 2022, there was $23.7 million of unrecognized compensation expense related to non-vested restricted stock, which is expected to be recognized over a weighted-average period of 2.5 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. The Company's PSUs granted from 2017 to 2019 and certain PSUs granted 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 and 2022 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 three months ended March 31, 2022:

	Performance Stock	Weighted-Average Grant Date Fair Value Per Share
Performance stock at December 31, 2021	16,839	$ 115.56
Granted	32,620	100.33
Restrictions lapsed	-	-
Performance change	-	-
Forfeited	-	-
Performance stock at March 31, 2022	49,459	$ 105.52

The following table provides the assumptions used in the Monte Carlo pricing model valuation of PSUs during the three months ended March 31, 2022 and 2021:

	Three Months Ended March 31,	
	2022	2021
Risk-free interest rate	1.76%	0.22%
Expected life (years)	2.87	2.87
Expected volatility	53.50%	51.40%
Expected dividend yield	0%	0%

As of March 31, 2022, there was $3.8 million of unrecognized compensation expense related to non-vested performance stock, which is expected to be recognized over a weighted-average period of 2.7 years.

Employee Stock Purchase Plan

The following table presents the assumptions used to estimate the fair value of the ESPP during the three months ended March 31, 2022 and 2021:

	Three Months Ended March 31,	
	2022	2021
Risk-free interest rate	0.17%	0.12%
Expected life (months)	6.00	6.00
Expected volatility	53.44%	50.85%
Expected dividend yield	0%	0%

Note 11 – 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. The following table presents the changes in accumulated other comprehensive income (loss) balances during the three months ended March 31, 2022 and 2021:

(in thousands)	Three Months Ended March 31, 2022	Three Months Ended March 31, 2021
Balance at beginning of period	$ (16,817)	$ (3,420)
Foreign currency translation adjustments		
Other comprehensive income (loss) before reclassifications	(4,972)	(6,842)
Amounts reclassified from accumulated other comprehensive loss	-	-
Net current-period other comprehensive income (loss)	(4,972)	(6,842)
Net unrealized gains (losses) on investments in securities		
Other comprehensive income (loss) before reclassifications	(516)	166
Amounts reclassified from accumulated other comprehensive loss	-	-
Net current-period other comprehensive income (loss)	(516)	166
Balance at end of period	$ (22,305)	$ (10,096)

Note 12 – 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 March 31, 2022 and 2021, the Company recorded an income tax provision of $2.5 million and $0.2 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 March 31, 2022 was 32.9 percent compared to 6.0 percent in the same period of the prior year. The effective tax rate increased by 26.9 percent for the three months ended March 31, 2022 when compared to the same period in 2021, primarily due to a decrease in tax benefits from the vesting of restricted stock and the exercise of stock options.

The effective income tax rate for the three months ended March 31, 2022 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 $4.6 million as of March 31, 2022 and $4.4 million as of December 31, 2021, 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 13 – 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 months ended March 31, 2022 and 2021 were as follows:

	Three Months Ended March 31,	
(in thousands)	2022	2021
Revenue:		
United States	$ 95,496	$ 91,053
Europe	24,586	21,449
Japan	4,086	3,624
Total revenue	$ 124,168	$ 116,126

	Three Months Ended March 31,	
(in thousands)	2022	2021
Income (Loss) from Operations:		
United States	$ 22,524	$ 22,503
Europe	(1,679)	(1,371)
Corporate Unallocated and Japan	(12,955)	(16,871)
Total Income from Operations	$ 7,890	$ 4,261

Total long-lived assets at March 31, 2022 and December 31, 2021 were as follows:

(in thousands)	March 31, 2022	December 31, 2021
Total long-lived assets:		
United States	$ 209,416	$ 215,701
Europe	56,925	59,388
Japan	4,605	5,257
Total Long-lived Assets	$ 270,946	$ 280,346

Revenue by product line for the three months ended March 31, 2022 and 2021 were as follows:

	Three Months Ended March 31,	
(in thousands)	2022	2021
Revenue:		
Injection Molding	$ 53,398	$ 56,359
CNC Machining	46,098	36,703
3D Printing	19,672	17,235
Sheet Metal	4,687	5,219
Other Revenue	313	610
Total revenue	$ 124,168	$ 116,126

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, 2021.

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 manufacturer 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.

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. 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 March 31, 2022, we served 23,492 unique product developers and engineers who purchased our products through our web-based customer interface, an increase of 3.9% over the same period in 2021.

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, and foreign 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.

The launch of our Protolabs 2.0 project, an internal business systems initiative impacting both external customer-facing and internal back-end systems, in the United States in the first quarter of 2021, and our acquisition of Hubs in January 2021, led to higher operating expenses in the first quarter of 2021. 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.

Other Loss, net

Other 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 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 2022 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.

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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.

	Three Months Ended March 31,				Change	
(dollars in thousands)	2022		2021		$	%
Revenue	$ 124,168	100.0	$ 116,126	100.0	$ 8,042	6.9
Cost of revenue	68,364	55.1	60,796	52.4	7,568	12.4
Gross profit	55,804	44.9	55,330	47.6	474	0.9
Operating expenses:						
Marketing and sales	20,586	16.6	19,480	16.8	1,106	5.7
Research and development	10,557	8.5	12,181	10.5	(1,624)	(13.3)
General and administrative	16,771	13.5	19,408	16.7	(2,637)	(13.6)
Total operating expenses	47,914	38.6	51,069	44.0	(3,155)	(6.2)
Income from operations	7,890	6.3	4,261	3.7	3,629	85.2
Other loss, net	(300)	(0.2)	(313)	(0.3)	13	(4.2)
Income before income taxes	7,590	6.1	3,948	3.4	3,642	92.2
Provision for income taxes	2,495	2.0	236	0.2	2,259	957.2
Net income	$ 5,095	4.1%	$ 3,712	3.2%	$ 1,383	37.3%

Stock-based compensation expense included in the statements of operations data above for the three months ended March 31, 2022 and 2021 were as follows:

	Three Months Ended March 31,	
(dollars in thousands)	2022	2021
Stock options, restricted stock and performance stock	$ 4,006	$ 5,291
Employee stock purchase plan	391	329
Total stock-based compensation expense	$ 4,397	$ 5,620
Cost of revenue	$ 587	$ 635
Operating expenses:		
Marketing and sales	737	853
Research and development	629	624
General and administrative	2,444	3,508
Total stock-based compensation expense	$ 4,397	$ 5,620

Comparison of Three Months Ended March 31, 2022 and 2021

Revenue

Revenue by reportable segment and the related changes for the three months ended March 31, 2022 and 2021 were as follows:

	Three Months Ended March 31,				Change	
	2022		2021			
(dollars in thousands)	$	% of Total Revenue	$	% of Total Revenue	$	%
Revenue						
United States	$ 95,496	76.9%	$ 91,053	78.4%	$ 4,443	4.9%
Europe	24,586	19.8	21,449	18.5	3,137	14.6
Japan	4,086	3.3	3,624	3.1	462	12.7
Total revenue	$ 124,168	100.0%	$ 116,126	100.0%	$ 8,042	6.9%

Our revenue increased $8.0 million, or 6.9%, for the three months ended March 31, 2022 compared to the same period in 2021. By reportable segment, revenue in the United States increased $4.4 million, or 4.9%, for the three months ended March 31, 2022 compared to the same period in 2021. Revenue in Europe increased $3.1 million, or 14.6%, and revenue in Japan increased $0.5 million, or 12.7%, in each case for the three months ended March 31, 2022 compared to the same period in 2021. Our acquisition of Hubs provided revenue of $4.8 million and $3.2 million in the United States and $5.5 million and $2.6 million in Europe for each of the three months ended March 31, 2022 and 2021, respectively. Hubs revenue in 2021 represents the period from January 22, 2021, the date of acquisition, through March 31, 2021. International revenue was negatively impacted by $1.5 million during the three months ended March 31, 2022 compared to the same period in 2021 as a result of foreign currency movements, primarily the weakening of the British Pound and Euro relative to the United States Dollar.

During the three months ended March 31, 2022, we served 23,492 unique product developers and engineers, an increase of 3.9% over the same period in 2021. Our growth in product developers and engineers served increased at a lower rate than our revenue growth, resulting in an increase in the average spend per product developer and engineer. The increase in average spend per product developer and engineer was driven by price increases and a change in the mix of products with a higher average order size purchased during the quarter by product developers and engineers we serve.

Revenue by product line and the related changes for the three months ended March 31, 2022 and 2021 were as follows:

	Three Months Ended March 31,				Change	
	2022		2021			
(dollars in thousands)	$	% of Total Revenue	$	% of Total Revenue	$	%
Revenue						
Injection Molding	$ 53,398	43.0%	$ 56,359	48.5%	$ (2,961)	(5.3)%
CNC Machining	46,098	37.1	36,703	31.6	9,395	25.6
3D Printing	19,672	15.8	17,235	14.8	2,437	14.1
Sheet Metal	4,687	3.8	5,219	4.5	(532)	(10.2)
Other Revenue	313	0.3	610	0.5	(297)	(48.7)
Total revenue	$ 124,168	100.0%	$ 116,126	100.0%	$ 8,042	6.9%

By product line, our revenue increase was driven by a 25.6% increase in CNC Machining revenue and a 14.1% increase in 3D Printing revenue, which was partially offset by a 5.3% decrease in Injection Molding revenue, a 10.2% decrease in Sheet Metal revenue and a 48.7% decrease in Other Revenue, in each case for the three months ended March 31, 2022 compared to the same period in 2021.

Cost of Revenue, Gross Profit and Gross Margin

Cost of Revenue. Cost of revenue increased $7.6 million, or 12.4%, for the three months ended March 31, 2022 compared to the same period in 2021, which was greater than the rate of revenue increase of 6.9% for the three months ended March 31, 2022 compared to the same period in 2021. The $4.9 million increase in cost of revenue in our legacy business was driven by increased volumes and a labor shortage resulting in wage inflation driving personnel and related cost increases of $2.5 million, an increase in raw material and product costs of $2.1 million driven by materials cost inflation and higher logistics costs, and an increase in equipment and facility related costs of $0.3 million. Our acquisition of Hubs provided a $2.7 million increase in cost of revenue for the three months ended March 31, 2022 when compared to the same period in 2021.

Gross Profit and Gross Margin. Gross profit increased from $55.3 million in the three months ended March 31, 2021 to $55.8 million in the three months ended March 31, 2022. Gross margin decreased from 47.6% in the three months ended March 31, 2021 to 44.9% in the three months ended March 31, 2022, primarily due to labor and materials cost inflation and the mix of revenue.

Operating Expenses, Other Income, net and Provision for Income Taxes

Marketing and Sales. Marketing and sales expenses increased $1.1 million, or 5.7%, during the three months ended March 31, 2022 compared to the same period in 2021. The increase is primarily driven by information technology allocation cost increases, including amortization of Protolabs 2.0 software assets, of $0.3 million and marketing program cost increases of $0.3 million, which were partially offset by personnel and related cost decreases in our legacy business of $0.2 million. In addition, our acquisition of Hubs provided a $0.7 million increase in marketing and sales expenses during the three months ended March 31, 2022 when compared to the same period in 2021.

Research and Development. Our research and development expenses decreased $1.6 million, or 13.3%, during the three months ended March 31, 2022 compared to the same period in 2021 primarily due to personnel and related cost decreases of $2.2 million driven by personnel and contractor resources dedicated to the launch of our Protolabs 2.0 system in the first quarter of 2021. Other legacy operating costs increased $0.1 million during the three months ended March 31, 2022. In addition, our acquisition of Hubs provided a $0.5 million increase in research and development expenses during the three months ended March 31, 2022 when compared to the same period in 2021.

General and Administrative. Our general and administrative expenses decreased $2.6 million, or 13.6%, during the three months ended March 31, 2022 compared to the same period in 2021 primarily due to a decrease of $2.4 million in professional service costs primarily driven by increased transaction costs in 2021 related to our acquisition of Hubs and a decrease of $1.3 million in stock-based compensation expense primarily driven by increased stock-based compensation expense in 2021 related to the retirement of our CEO. In addition, our acquisition of Hubs provided an increase of $1.1 million in general and administrative expense during the three months ended March 31, 2022 when compared to the same period in 2021.

Other Loss, net. We recognized other loss, net of $0.3 million for the three months ended March 31, 2022, consistent with other loss, net of $0.3 million for the three months ended March 31, 2021. Other loss, net for the three months ended March 31, 2022 primarily consisted of a $0.3 million loss on foreign currency. Other loss, net for the three months ended March 31, 2021 primarily consisted of a $0.5 million loss on foreign currency, which was partially offset by $0.1 million in interest income on investments and $0.1 million in other income.

Provision for Income Taxes. Our effective tax rate of 32.9% for the three months ended March 31, 2022 increased 26.9% compared to 6.0% for the same period in 2021. The increase in the effective tax rate is primarily due to a decrease in tax benefits from the vesting of restricted stock and the exercise of stock options. Our income tax provision of $2.5 million for the three months ended March 31, 2022 increased $2.3 million compared to our income tax provision of $0.2 million for the three months ended March 31, 2021.

Liquidity and Capital Resources

Cash Flows

The following table summarizes our cash flows during the three months ended March 31, 2022 and 2021:

	Three Months Ended March 31,	
(dollars in thousands)	2022	2021
Net cash provided by operating activities	$ 17,783	$ 6,425
Net cash used in investing activities	(25,835)	(90,133)
Net cash used in financing activities	(601)	(427)
Effect of exchange rates on cash and cash equivalents	(37)	306
Net decrease in cash and cash equivalents	$ (8,690)	$ (83,829)

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 $57.2 million as of March 31, 2022, a decrease of $8.7 million from December 31, 2021. The decrease in our cash was primarily due to cash used in investing activity for purchases of marketable securities, net of $22.8 million, purchases of property, equipment and other capital assets of $3.1 million, and cash used in financing activities of $0.6 million, which were partially offset by cash generated through operations of $17.8 million.

Cash Flows from Operating Activities

Cash flows from operating activities were $17.8 million during the three months ended March 31, 2022 and primarily consisted of net income of $5.1 million, adjusted for certain non-cash items, including depreciation and amortization of $10.2 million and stock-based compensation expense of $4.4 million, which were partially offset by changes in operating assets and liabilities and other items totaling $1.9 million. Cash flows from operating activities were $6.4 million during the three months ended March 31, 2021 and primarily consisted of net income of $3.7 million, adjusted for certain non-cash items, including depreciation and amortization of $10.1 million, stock-based compensation expense of $5.6 million, which were partially offset by changes in operating assets and liabilities and other items totaling $13.0 million.

Cash flows from operating activities increased $11.4 million during the three months ended March 31, 2022 compared to the same period in 2021, primarily due to increases in net income of $1.4 million and changes in operating assets and liabilities totaling $14.3 million, which were partially offset by decreases in stock-based compensation of $1.2 million and decreases in deferred taxes of $3.1 million.

Cash Flows from Investing Activities

Cash used in investing activities was $25.8 million during the three months ended March 31, 2022, consisting of $22.7 million for net purchases of marketable securities and $3.1 million for the purchases of property, equipment and other capital assets.

Cash used in investing activities was $90.1 million during the three months ended March 31, 2021, consisting of $127.7 million in cash used for acquisitions, net of cash acquired and $6.5 million for the purchases of property, equipment and other capital assets, which were partially offset by $44.1 million for net proceeds from investments in marketable securities.

Cash Flows from Financing Activities

Cash used in financing activities was $0.6 million during the three months ended March 31, 2022, consisting of $0.5 million in shares withheld for tax obligations associated with equity transactions, and $0.1 million for repayments of finance lease obligations.

Cash used in financing activities was $0.4 million during the three months ended March 31, 2021, consisting of $2.0 million in purchases of shares withheld for tax obligations associated with equity transactions and $0.1 million for repayments of finance lease obligations, which were partially offset by $1.7 million in proceeds from the exercise of stock options.

Off-Balance Sheet Arrangements

Since our inception, we have not engaged in any off-balance sheet arrangements, including the use of structured finance, special purpose entities or variable interest entities.

Critical Accounting Policies and Use of 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). Our significant accounting policies are disclosed in Note 2 to the Consolidated Financial Statements included in our Annual Report on Form 10-K for the year ended December 31, 2021. There were no material changes to our critical accounting policies during the three months ended March 31, 2022.

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. We recognized foreign currency losses of $0.3 million and $0.5 million during the three months ended March 31, 2022 and 2021, respectively. The changes in foreign exchange rates had a negative impact on consolidated revenue of $1.5 million for the three months ended March 31, 2022 as compared to the same periods in 2021.

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, 2021 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 and Use of Proceeds

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 its 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 a $50 million increase in its authorized stock repurchase program, which increased the total expenditure authorized to $150 million. We have $61.9 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.

The Company had no repurchases in the first quarter of 2022.

Item 3. Defaults Upon Senior Securities

No matters to disclose.

Item 4. Mine Safety Disclosures

No matters to disclose.

Item 5. Other Information

No matters to disclose.

Item 6. Exhibits

The following documents are filed as part of this report:

Exhibit Number	Description of Exhibit
3.1[1]	Third Amended and Restated Articles of Incorporation of Proto Labs, Inc.
3.2[2]	Articles of Amendment to Third Amended and Restated Articles of Incorporation of Proto Labs, Inc. dated May 20, 2015
3.3[3]	Second Amended and Restated By-Laws of Proto Labs, Inc., as amended through November 8, 2016
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)

(1) Previously filed as Exhibit 3.2 to the Company’s Registration Statement on Form S-1/A, filed with the Commission on February 13, 2012, and incorporated by reference herein.
(2) Previously filed as Exhibit 3.1 to the Company's Form 8-K, filed with the Commission on May 21, 2015 and incorporated by reference herein.
(3) Previously filed as Exhibit 3.1 to the Company's Form 8-K, filed with the Commission on November 8, 2016 and incorporated by reference herein.
* 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: May 6, 2022	/s/ Robert Bodor
	Robert Bodor President and Chief Executive Officer (Principal Executive Officer)
Date: May 6, 2022	/s/ Daniel Schumacher
	Daniel Schumacher Interim Chief Financial Officer (Principal Financial Officer)

Exhibit 31.1

**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: May 6, 2022

By: /s/ Robert Bodor
Robert Bodor
President and Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

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: May 6, 2022

By: /s/ Daniel Schumacher
Daniel Schumacher
Interim Chief Financial Officer
(Principal Financial Officer)

Exhibit 32.1

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 March 31, 2022 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: May 6, 2022

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 March 31, 2022 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: May 6, 2022

By:	/s/ Daniel Schumacher
Name:	Daniel Schumacher
Title:	Interim Chief Financial Officer