

**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, 2021**

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: 27,589,649 shares of Common Stock, par value \$0.001 per share, were outstanding at October 28, 2021.

Proto Labs, Inc.
TABLE OF CONTENTS

<u>Item</u>	<u>Description</u>	<u>Page</u>
	PART I	
1.	Financial Statements	2
2.	Management's Discussion and Analysis of Financial Condition and Results of Operations	16
3.	Quantitative and Qualitative Disclosures about Market Risk	26
4.	Controls and Procedures	27
	PART II	
1.	Legal Proceedings	28
1A.	Risk Factors	28
2.	Unregistered Sales of Equity Securities and Use of Proceeds	28
3.	Defaults Upon Senior Securities	28
4.	Mine Safety Disclosures	28
5.	Other Information	28
6.	Exhibits	29

PART I. FINANCIAL INFORMATION**Item 1. Financial Statements**

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

	September 30, 2021 (Unaudited)	December 31, 2020
Assets		
Current assets		
Cash and cash equivalents	\$ 47,802	\$ 127,603
Short-term marketable securities	16,542	34,088
Accounts receivable, net of allowance for doubtful accounts of \$1,993 and \$1,781 as of September 30, 2021 and December 31, 2020, respectively	85,629	57,877
Inventory	9,813	10,862
Income taxes receivable	1,766	540
Prepaid expenses and other current assets	10,571	11,032
Total current assets	172,123	242,002
Property and equipment, net	283,019	282,666
Goodwill	404,240	128,752
Other intangible assets, net	39,816	14,350
Long-term marketable securities	19,557	59,357
Operating lease assets	5,197	9,855
Finance lease assets	2,022	2,396
Other long-term assets	4,337	4,826
Total assets	\$ 930,311	\$ 744,204
Liabilities and shareholders' equity		
Current liabilities		
Accounts payable	\$ 22,735	\$ 18,248
Accrued compensation	15,269	11,989
Accrued liabilities and other	12,636	16,193
Current contingent consideration	2,506	-
Current operating lease liabilities	2,362	3,272
Current finance lease liabilities	555	552
Total current liabilities	56,063	50,254
Long-term contingent consideration	2,294	-
Long-term operating lease liabilities	2,792	7,586
Long-term finance lease liabilities	1,498	1,919
Long-term deferred tax liabilities	36,331	33,854
Other long-term liabilities	6,712	6,235
Total liabilities	105,690	99,848
Shareholders' equity		
Preferred stock, \$0.001 par value, authorized 10,000,000 shares; issued and outstanding 0 shares as of each of September 30, 2021 and December 31, 2020	-	-
Common stock, \$0.001 par value, authorized 150,000,000 shares; issued and outstanding 27,603,649 and 26,776,796 shares as of September 30, 2021 and December 31, 2020, respectively	28	27
Additional paid-in capital	464,900	284,848
Retained earnings	373,151	362,901
Accumulated other comprehensive loss	(13,458)	(3,420)
Total shareholders' equity	824,621	644,356
Total liabilities and shareholders' equity	\$ 930,311	\$ 744,204

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,	
	2021	2020	2021	2020
Statements of Operations:				
Revenue	\$ 125,342	\$ 107,504	\$ 364,516	\$ 329,187
Cost of revenue	70,018	52,861	197,237	163,988
Gross profit	55,324	54,643	167,279	165,199
Operating expenses				
Marketing and sales	21,422	16,705	61,946	51,821
Research and development	10,614	7,915	33,855	25,550
General and administrative	16,361	12,354	44,186	38,983
Total operating expenses	48,397	36,974	139,987	116,354
Income from operations	6,927	17,669	27,292	48,845
Other income (expense), net	136	728	(40)	2,549
Income before income taxes	7,063	18,397	27,252	51,394
Provision for income taxes	2,228	3,700	5,790	10,106
Net income	<u>\$ 4,835</u>	<u>\$ 14,697</u>	<u>\$ 21,462</u>	<u>\$ 41,288</u>
Net income per share:				
Basic	<u>\$ 0.17</u>	<u>\$ 0.55</u>	<u>\$ 0.78</u>	<u>\$ 1.54</u>
Diluted	<u>\$ 0.17</u>	<u>\$ 0.55</u>	<u>\$ 0.77</u>	<u>\$ 1.54</u>
Shares used to compute net income per share:				
Basic	27,713,229	26,736,709	27,638,611	26,724,715
Diluted	27,730,105	26,886,433	27,707,784	26,861,647
Comprehensive Income (net of tax)				
Comprehensive income	<u>\$ (508)</u>	<u>\$ 17,807</u>	<u>\$ 11,424</u>	<u>\$ 41,782</u>

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, 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
<i>Other comprehensive loss</i>						
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	<u>27,689,746</u>	<u>\$ 28</u>	<u>\$ 456,886</u>	<u>\$ 366,613</u>	<u>\$ (10,096)</u>	<u>\$ 813,431</u>
Common shares issued on exercise of options and other, net of shares withheld for tax obligations	85,317	-	(81)	-	-	(81)
Stock-based compensation expense	-	-	4,941	-	-	4,941
Repurchases of common stock	(14,000)	-	(149)	(1,061)	-	(1,210)
Net income	-	-	-	12,915	-	12,915
<i>Other comprehensive income</i>						
Foreign currency translation adjustment	-	-	-	-	2,030	2,030
Net unrealized gains (losses) on investments in securities	-	-	-	-	(49)	(49)
Comprehensive income						14,896
Balance at June 30, 2021	<u>27,761,063</u>	<u>\$ 28</u>	<u>\$ 461,597</u>	<u>\$ 378,467</u>	<u>\$ (8,115)</u>	<u>\$ 831,977</u>
Common shares issued on exercise of options and other, net of shares withheld for tax obligations	-	-	-	-	-	-
Stock-based compensation expense	-	-	4,978	-	-	4,978
Repurchases of common stock	(157,414)	-	(1,675)	(10,151)	-	(11,826)
Net income	-	-	-	4,835	-	4,835
<i>Other comprehensive loss</i>						
Foreign currency translation adjustment	-	-	-	-	(5,298)	(5,298)
Net unrealized gains (losses) on investments in securities	-	-	-	-	(45)	(45)
Comprehensive loss						(508)
Balance at September 30, 2021	<u>27,603,649</u>	<u>\$ 28</u>	<u>\$ 464,900</u>	<u>\$ 373,151</u>	<u>\$ (13,458)</u>	<u>\$ 824,621</u>

	Common Stock		Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Total
	Shares	Amount				
Balance at January 1, 2020	26,786,459	27	268,059	324,722	(7,018)	585,790
Common shares issued on exercise of options and other, net of shares withheld for tax obligations	23,525	-	(902)	-	-	(902)
Stock-based compensation expense	-	-	3,033	-	-	3,033
Repurchases of common stock	(161,460)	-	(1,616)	(9,569)	-	(11,185)
Net income	-	-	-	13,984	-	13,984
<i>Other comprehensive income</i>						
Foreign currency translation adjustment	-	-	-	-	(2,980)	(2,980)
Comprehensive income						11,004
Balance at March 31, 2020	<u>26,648,524</u>	<u>\$ 27</u>	<u>\$ 268,574</u>	<u>\$ 329,137</u>	<u>\$ (9,998)</u>	<u>\$ 587,740</u>
Common shares issued on exercise of options and other, net of shares withheld for tax obligations	96,186	-	400	-	-	400
Stock-based compensation expense	-	-	3,639	-	-	3,639
Repurchases of common stock	(38,154)	-	(382)	(3,119)	-	(3,501)
Net income	-	-	-	12,607	-	12,607
<i>Other comprehensive income</i>						
Foreign currency translation adjustment	-	-	-	-	364	364
Comprehensive income						12,971
Balance at June 30, 2020	<u>26,706,556</u>	<u>\$ 27</u>	<u>\$ 272,231</u>	<u>\$ 338,625</u>	<u>\$ (9,634)</u>	<u>\$ 601,249</u>
Common shares issued on exercise of options and other, net of shares withheld for tax obligations	46,989	-	2,820	-	-	2,820
Stock-based compensation expense	-	-	3,945	-	-	3,945
Repurchases of common stock	-	-	-	-	-	-

Net income	-	-	-	14,697	-	14,697
<i>Other comprehensive income</i>						
Foreign currency translation adjustment	-	-	-	-	3,110	3,110
Comprehensive income						17,807
Balance at September 30, 2020	<u>26,753,545</u>	<u>\$ 27</u>	<u>\$ 278,996</u>	<u>\$ 353,322</u>	<u>\$ (6,524)</u>	<u>\$ 625,821</u>

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,	
	2021	2020
Operating activities		
Net income	\$ 21,462	\$ 41,288
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	30,231	23,891
Stock-based compensation expense	15,539	10,617
Deferred taxes	(139)	6,578
Amortization of marketable securities	374	202
Realized gain on available-sale-securities	(72)	-
Fair value of contingent consideration	(8,513)	-
Other	140	(865)
Changes in operating assets and liabilities:		
Accounts receivable	(25,615)	(3,812)
Inventories	950	(316)
Prepaid expenses and other	1,009	(1,008)
Income taxes	(1,226)	(1,325)
Accounts payable	1,978	(1,257)
Accrued liabilities and other	(3,893)	8,382
Net cash provided by operating activities	<u>32,225</u>	<u>82,375</u>
Investing activities		
Purchases of property, equipment and other capital assets	(27,956)	(40,489)
Cash used for acquisitions, net of cash acquired	(127,413)	-
Purchases of other assets and investments	-	(3,000)
Purchases of marketable securities	(15,159)	(90,596)
Proceeds from sales of marketable securities	57,089	-
Proceeds from maturities of marketable securities	15,114	56,428
Net cash used in investing activities	<u>(98,325)</u>	<u>(77,657)</u>
Financing activities		
Proceeds from exercises of stock options	3,838	5,674
Purchases of shares withheld for tax obligations	(4,209)	(3,367)
Repurchases of common stock	(13,036)	(14,686)
Principal repayments of finance lease obligations	(413)	-
Net cash used in financing activities	<u>(13,820)</u>	<u>(12,379)</u>
Effect of exchange rate changes on cash and cash equivalents	119	690
Net decrease in cash and cash equivalents	<u>(79,801)</u>	<u>(6,971)</u>
Cash and cash equivalents, beginning of period	127,603	125,225
Cash and cash equivalents, end of period	<u>\$ 47,802</u>	<u>\$ 118,254</u>

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, 2020 as filed with the Securities and Exchange Commission (SEC) on February 19, 2021.

The accompanying Consolidated Balance Sheet as of December 31, 2020 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 19, 2021 as referenced above.

Note 2 – Recent Accounting Pronouncements**Recently Adopted Accounting Pronouncements**

In December 2019, the Financial Accounting Standards Board issued Accounting Standards Update (ASU) 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes* (ASU 2019-12). ASU 2019-12 attempts to simplify aspects of accounting for franchise taxes and enacted changes in tax laws or rates, and clarifies the accounting for transactions that result in a step-up in the tax basis of goodwill. ASU 2019-12 is effective for public business entities for fiscal years beginning after December 15, 2020, including interim periods within that fiscal year. The Company adopted ASU 2019-12 on January 1, 2021 and there was no 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, restricted stock units and restricted stock 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.

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

(in thousands, except share and per share amounts)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
Net income	\$ 4,835	\$ 14,697	\$ 21,462	\$ 41,288
Basic - weighted-average shares outstanding:	27,713,229	26,736,709	27,638,611	26,724,715
Effect of dilutive securities:				
Employee stock options and other	16,876	149,724	69,173	136,932
Diluted - weighted-average shares outstanding:	27,730,105	26,886,433	27,707,784	26,861,647
Net income per share:				
Basic	\$ 0.17	\$ 0.55	\$ 0.78	\$ 1.54
Diluted	\$ 0.17	\$ 0.55	\$ 0.77	\$ 1.54

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 date of close. Up to an additional \$52.8 million of contingent consideration is payable after closing, subject to the satisfaction of performance-based targets during fiscal year 2021 and fiscal year 2022, consisting 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 date of close.

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 on a preliminary basis to the assets purchased and liabilities assumed based on their estimated 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 Company recorded a contingent consideration liability of \$13.6 million as of the acquisition date representing the estimated fair value of the amounts payable to former shareholders, as outlined under the terms of the merger agreement, payable subject to the satisfaction of performance-based targets during fiscal year 2021 and fiscal year 2022, consisting 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 date of close. The fair value of the contingent consideration (Level 3) is determined using a Monte Carlo pricing model. During the three and nine months ended September 30, 2021, the Company recorded a \$0.8 million and \$8.5 million decrease, respectively, to the estimated fair value of the contingent consideration liability, which was included as a decrease in general and administrative expense in the Consolidated Statements of Comprehensive Income. Fluctuations due to foreign currency translation have been recorded in the Consolidated Statements of Shareholders' Equity.

The results of Hubs since the date of acquisition have been included with Protolabs' results. Pro forma disclosures of the consolidated results of the Company with the full year effects of Hubs, as if the acquisition had occurred on January 1, 2020, are not required and have not been separately presented since the impact to the Company's results of operations was not material.

The acquisition has been accounted for under the acquisition method of accounting in accordance with ASC 805, *Business Combinations*. In the second quarter of 2021, the Company recorded adjustments to the preliminary allocation, including a \$3.9 million decrease to intangible assets, a \$6.4 million increase to goodwill, a \$3.3 million increase to contingent consideration, a \$0.5 million decrease to deferred tax liabilities, and a decrease to cash paid of \$0.3 million. The adjustments were driven by changes to the preliminary valuation and finalization of the working capital calculation. No adjustments were made in the third quarter of 2021. As of September 30, 2021, the allocation of purchase price to assets and liabilities is preliminary. The purchase price allocation will be finalized in 2021. The preliminary allocation is as follows:

(in thousands)	Acquisition
Assets acquired:	
Current assets	\$ 2,497
Intangible assets	30,770
Goodwill	281,845
Other long-term assets	1,139
Total assets acquired	316,251
Liabilities assumed:	
Current contingent consideration	7,093
Current liabilities	5,666
Long-term contingent consideration	6,507
Long-term deferred tax liabilities	2,608
Other long-term liabilities	255
Total liabilities assumed	22,129
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 nine months ended September 30, 2021 were as follows:

(in thousands)	Nine Months Ended September 30, 2021
Balance as of the beginning of the period	\$ 128,752
Goodwill acquired during the period	281,845
Foreign currency translation adjustments	(6,357)
Balance as of the end of the period	<u>\$ 404,240</u>

Goodwill increased \$281.8 million during the nine months ended September 30, 2021 as a result of our acquisition of Hubs. Goodwill has been allocated to the acquired Hubs entities consisting of goodwill of €106.5 million in Europe and \$152.2 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 September 30, 2021 and December 31, 2020 were as follows:

(in thousands)	September 30, 2021			December 31, 2020			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	\$(690)	\$240	\$930	\$(620)	\$310	10.0	2.5
Non-compete agreement	847	(330)	517	270	(238)	32	2.0 - 5.0	3.1
Software technology	13,229	(4,672)	8,557	13,229	(3,645)	9,584	10.0	6.8
Software platform	26,933	(1,672)	25,261	-	-	-	10.0	9.3
Tradenames	362	(84)	278	-	-	-	3.0	2.3
Customer relationships	12,269	(7,306)	4,963	10,070	(5,646)	4,424	3.0 - 9.0	2.1
Total intangible assets	<u>\$ 54,570</u>	<u>\$ (14,754)</u>	<u>\$ 39,816</u>	<u>\$ 24,499</u>	<u>\$ (10,149)</u>	<u>\$ 14,350</u>		

Intangible assets increased \$30.8 million during the nine months ended September 30, 2021 as a result of our acquisition of Hubs. 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 \$0.7 million as of September 30, 2021. There was no foreign currency translation impact as of December 31, 2020. Amortization expense for intangible assets was \$1.6 million and \$0.8 million for the three months ended September 30, 2021 and 2020, respectively, and \$4.6 million and \$2.3 million for the nine months ended September 30, 2021 and 2020, 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 2021	\$ 1,555
2022	6,225
2023	6,022
2024	3,806
2025	3,725
Thereafter	18,483
Total estimated amortization expense	<u>\$ 39,816</u>

Note 6 – 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, marketable securities and contingent consideration. 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 Company's contingent consideration is the current fair value estimate of amounts owed to the former shareholders of Hubs and is determined using the Monte Carlo pricing model (Level 3).

The following table summarizes financial assets as of September 30, 2021 and December 31, 2020 measured at fair value on a recurring basis:

(in thousands)	September 30, 2021			December 31, 2020		
	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Financial Assets:						
Cash and cash equivalents	\$ 47,337	\$ -	\$ -	\$ 72,225	\$ -	\$ -
Money market mutual fund	465	-	-	55,378	-	-
Marketable securities	11,872	24,227	-	-	-	-
Total	\$ 59,674	\$ 24,227	\$ -	\$ 127,603	\$ -	\$ -
Financial Liabilities:						
Contingent consideration	\$ -	\$ -	\$ 4,800	\$ -	\$ -	\$ -
Total	\$ -	\$ -	\$ 4,800	\$ -	\$ -	\$ -

In the first quarter of 2021, the Company sold held-to-maturity securities in order to partially fund the acquisition of Hubs. As a result of the sale, all remaining marketable securities were reclassified to available-for-sale securities and reported at fair value.

The Company recorded a contingent consideration liability at the acquisition date of Hubs representing the amounts payable to former shareholders, as outlined under the terms of the merger agreement, payable subject to the satisfaction of performance-based targets during fiscal year 2021 and fiscal year 2022, consisting 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 date of close. The fair value of the contingent consideration (Level 3) is determined using a Monte Carlo pricing model. Subsequent changes in the fair value of the contingent consideration liabilities have been recorded in the Consolidated Statements of Comprehensive Income. Fluctuations due to foreign currency translation have been recorded in the Consolidated Statements of Shareholders' Equity.

Note 7 – Marketable Securities

The Company invests in short-term and long-term agency, municipal, corporate and other debt securities. As of September 30, 2021, the securities are categorized as available-for-sale and are recorded at fair value. As of December 31, 2020, the securities were categorized as held-to-maturity and were recorded at amortized cost, net of an allowance for credit losses. The change in categorization was a result of the sale of securities in the first quarter of 2021 in order to partially fund the acquisition of Hubs and did not have a material impact on our financial statements. The following table summarizes information regarding the Company's short-term and long-term marketable securities as of September 30, 2021 and December 31, 2020:

(in thousands)	September 30, 2021			
	Cost	Unrealized Gains	Unrealized Losses	Fair Value
U.S. municipal securities	\$ 18,515	\$ 28	\$ (13)	\$ 18,530
Corporate debt securities	11,852	34	(14)	11,872
U.S. government agency securities	1,500	-	(1)	1,499
Certificates of deposit/time deposits	4,160	38	-	4,198
Total marketable securities	\$ 36,027	\$ 100	\$ (28)	\$ 36,099

(in thousands)	December 31, 2020			
	Cost	Unrealized Gains	Unrealized Losses	Fair Value
U.S. municipal securities	\$ 25,003	\$ 83	\$ (2)	\$ 25,084
Corporate debt securities	42,048	211	(11)	42,248
U.S. government agency securities	18,500	6	(10)	18,496
Certificates of deposit/time deposits	5,395	93	-	5,488
Commercial paper	2,499	-	-	2,499
Total marketable securities	<u>\$ 93,445</u>	<u>\$ 393</u>	<u>\$ (23)</u>	<u>\$ 93,815</u>

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).

During the first quarter of 2020, the Company adopted the FASB ASU 2016-13, *Financial Instruments – Credit Losses*. The Company calculated the expected credit loss for each security in its portfolio using the probability-of-default method. The Company concluded the adoption of the guidance had no material impact on its consolidated financial statements.

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, 2021 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, 2021
Due in one year or less	\$ 16,542
Due after one year through five years	19,557
Total marketable securities	<u>\$ 36,099</u>

Note 8 – Inventory

Inventory consists primarily of raw materials, which are recorded at the lower of cost or market 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, 2021	December 31, 2020
Total inventory	\$ 10,102	\$ 11,122
Allowance for obsolescence	(289)	(260)
Inventory, net of allowance	<u>\$ 9,813</u>	<u>\$ 10,862</u>

Note 9 – 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 \$5.0 million and \$3.9 million for the three months ended September 30, 2021 and 2020, respectively, and \$15.5 million and \$10.6 million for the nine months ended September 30, 2021 and 2020, respectively.

Stock Options

The following table summarizes stock option activity during the nine months ended September 30, 2021:

	Stock Options	Weighted-Average Exercise Price
Options outstanding at December 31, 2020	229,531	\$ 86.46
Granted	57,901	128.14
Exercised	(28,991)	58.78
Forfeited	(9,893)	100.58
Options outstanding at September 30, 2021	<u>248,548</u>	\$ 98.84
Exercisable at September 30, 2021	<u>116,088</u>	\$ 81.47

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 nine months ended September 30, 2021 was \$57.26.

The following table provides the assumptions used in the Black-Scholes pricing model valuation of options during the nine months ended September 30, 2021 and 2020:

	Nine Months Ended September 30,	
	2021	2020
Risk-free interest rate	0.80 - 1.12%	0.50 - 1.47%
Expected life (years)	6.25	6.25
Expected volatility	45.28 - 45.53%	42.40 - 43.83%
Expected dividend yield	0%	0%

As of September 30, 2021, there was \$5.4 million of unrecognized compensation expense related to unvested stock options, which is expected to be recognized over a weighted-average period of 2.8 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 nine months ended September 30, 2021:

	Restricted Stock	Weighted- Average Grant Date Fair Value Per Share
Restricted stock at December 31, 2020	307,199	\$ 98.87
Granted	180,798	132.84
Restrictions lapsed	(113,315)	91.10
Forfeited	(22,908)	120.01
Restricted stock at September 30, 2021	<u>351,774</u>	<u>\$ 117.51</u>

As of September 30, 2021, there was \$31.7 million of unrecognized compensation expense related to non-vested restricted stock, which is expected to be recognized over a weighted-average period of 2.6 years.

Performance Stock

Performance stock units (PSUs) are expressed in terms of a target number of PSUs, with anywhere between 0 percent and 150 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 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, 2021:

	Performance Stock	Weighted- Average Grant Date Fair Value Per Share
Performance stock at December 31, 2020	19,956	\$ 118.66
Granted	15,078	203.64
Restrictions lapsed	-	-
Performance change	(8,226)	192.95
Forfeited	(4,184)	99.59
Performance stock at September 30, 2021	<u>22,624</u>	<u>\$ 148.28</u>

The following table provides the assumptions used in the Monte Carlo pricing model valuation of PSUs during the nine months ended September 30, 2021 and 2020:

	Nine Months Ended September 30,	
	2021	2020
Risk-free interest rate	0.22%	1.41%
Expected life (years)	2.87	2.88
Expected volatility	51.40%	38.70%
Expected dividend yield	0%	0%

As of September 30, 2021, there was \$2.0 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, 2021 and 2020:

	Nine Months Ended September 30,	
	2021	2020
Risk-free interest rate	0.06 - 0.12%	0.17 - 1.59%
Expected life (months)	6.00	6.00
Expected volatility	50.85 - 65.53%	42.63 - 59.99%
Expected dividend yield	0%	0%

Note 10 – 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 and nine months ended September 30, 2021 and 2020:

(in thousands)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
Balance at beginning of period	\$ (8,115)	\$ (9,634)	\$ (3,420)	\$ (7,018)
<i>Foreign currency translation adjustments</i>				
Other comprehensive income (loss) before reclassifications	(5,298)	3,110	(10,110)	494
Amounts reclassified from accumulated other comprehensive loss	-	-	-	-
Net current-period other comprehensive income (loss)	(5,298)	3,110	(10,110)	494
<i>Net unrealized gains (losses) on investments in securities</i>				
Other comprehensive income (loss) before reclassifications	(45)	-	72	-
Amounts reclassified from accumulated other comprehensive loss	-	-	-	-
Net current-period other comprehensive income (loss)	(45)	-	72	-
Balance at end of period	\$ (13,458)	\$ (6,524)	\$ (13,458)	\$ (6,524)

Note 11 – 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, 2021 and 2020, the Company recorded an income tax provision of \$2.2 million and \$3.7 million, respectively. For the nine months ended September 30, 2021 and 2020, the Company recorded an income tax provision of \$5.8 million and \$10.1 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, 2021 was 31.5 percent compared to 20.1 percent in the same period of the prior year. The effective tax rate increased by 11.4 percent for the three months ended September 30, 2021 when compared to the same period in 2020, primarily due to an increase 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, 2021 was 21.2 percent compared to 19.7 percent in the same period of the prior year. The effective tax rate increased by 1.5 percent for the nine months ended September 30, 2021 when compared to the same period in 2020, primarily due to an increase 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, 2021 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 \$5.0 million as of September 30, 2021 and \$4.8 million as of December 31, 2020, respectively, all of which, if recognized, would affect the Company's effective tax rate. 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.

On March 11, 2021, the President signed into law the ARP Act, a legislative package which is generally not significant to the Company's current tax footprint; however, the Company will continue to assess the ARP Act on an ongoing basis. Similar tax provisions and other stimulus measures have been granted either before or after June 30, 2021 by certain foreign and U.S. state jurisdictions, which the Company continues to evaluate and apply, if applicable.

Note 12 – 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, 2021 and 2020 were as follows:

(in thousands)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
Revenue:				
United States	\$ 100,127	\$ 85,608	\$ 286,524	\$ 262,507
Europe	22,155	18,897	68,259	56,413
Japan	3,060	2,999	9,733	10,267
Total revenue	<u>\$ 125,342</u>	<u>\$ 107,504</u>	<u>\$ 364,516</u>	<u>\$ 329,187</u>

(in thousands)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
Income from Operations:				
United States	\$ 23,475	\$ 25,164	\$ 72,258	\$ 74,602
Europe	(2,223)	3,764	1,469	10,389
Corporate Unallocated and Japan	(14,325)	(11,259)	(46,435)	(36,146)
Total Income from Operations	<u>\$ 6,927</u>	<u>\$ 17,669</u>	<u>\$ 27,292</u>	<u>\$ 48,845</u>

Total long-lived assets at September 30, 2021 and December 31, 2020 were as follows:

(in thousands)	September 30, 2021	December 31, 2020
Total long-lived assets:		
United States	\$ 216,996	\$ 215,721
Europe	60,187	59,388
Japan	5,836	7,557
Total Long-lived Assets	<u>\$ 283,019</u>	<u>\$ 282,666</u>

Revenue by product line for the three and nine months ended September 30, 2021 and 2020 were as follows:

(in thousands)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
Revenue:				
Injection Molding	\$ 57,685	\$ 53,257	\$ 172,212	\$ 165,927
CNC Machining	43,658	33,115	121,953	99,760
3D Printing	18,589	16,294	53,994	46,478
Sheet Metal	4,854	3,988	14,790	14,306
Other Revenue	556	850	1,567	2,716
Total revenue	<u>\$ 125,342</u>	<u>\$ 107,504</u>	<u>\$ 364,516</u>	<u>\$ 329,187</u>

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, 2020.

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 the world’s largest and fastest digital manufacturer of custom prototypes and on-demand production parts. We manufacture prototypes and low-volume production parts for companies worldwide that 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. Our proprietary technology eliminates most of the time-consuming and expensive skilled labor conventionally required to quote and manufacture parts. In January 2021, we acquired Hubs, a leading online manufacturing platform based in Amsterdam, Netherlands, that provides customers with on-demand access to a global network of premium manufacturing partners. This acquisition creates the world’s most comprehensive digital manufacturing offer, offering the broadest set of manufacturing services with the help of a global network of premium manufacturing providers. Our customers conduct nearly all of their business with us over the Internet. We target our products at 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.

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. The acquisition of Hubs broadens our offer beyond our current manufacturing capabilities and provides a broader range of price and lead time options by leveraging a network of manufacturing partners to meet the holistic needs of our customers.

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 aluminum molds and quick turnaround times help reduce design risk and limit overall production costs for product developers and engineers. In 2017, we launched an on-demand manufacturing injection molding product offering. Customers who need short-run production often come back to Protolabs’ 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.

CNC Machining

Our CNC Machining product line uses commercially available CNC machines to manufacture custom metal and plastic parts through processes such as CNC milling and CNC 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 with live tooling combines both lathe and mill capabilities to machine parts with cylindrical features from metal rod stock. Our efficiencies derive from the automation of the programming of these machines and a proprietary fixturing process.

Quick-turn CNC machining works best for prototyping, form and fit testing, jigs and fixtures and functional components for end-use applications.

3D Printing

Our 3D Printing product line includes a broad range of technologies in plastics and metals, stereolithography, selective laser sintering, direct metal laser sintering, Multi Jet Fusion, PolyJet and digital light synthesis processes, which offer 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 and assemblies, which provide 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 product developer or engineer to fabricate quick-turn prototype sheet metal or short-run production parts.

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 expanding the breadth of our product offerings, gaining new customers and selling to our existing customer base by increasing marketing and selling activities, including:

- expanding the breadth and scope of each of our product lines 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 October 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 January 2021.

During the three months ended September 30, 2021, we served 23,457 unique product developers and engineers who purchased our products through our web-based customer interface, an increase of 24.8% over the same period in 2020. The increase in product developers was driven primarily by our acquisition of Hubs. Excluding the impact of Hubs, our product developers increased 7.3% during the three months ended September 30, 2021 when compared to the same period in 2020. During the nine months ended September 30, 2021, we served 49,300 unique product developers and engineers who purchased our products through our web-based customer interface, an increase of 31.5% over the same period in 2020. The increase in unique product developers served was driven primarily by our acquisition of Hubs. Excluding the impact of Hubs, unique product developers served increased 10.7% during the nine months ended September 30, 2021 when compared to the same period in 2020.

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, overhead allocations and outsourced manufacturing costs associated with the manufacturing process for molds and custom 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. We expect our gross profit to increase in absolute dollars, however our gross margin may fluctuate based on the business mix in each reporting period. 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.

Our recent growth in operating expenses is mainly due to the launch of our Protolabs 2.0 project, an internal business systems project impacting both external customer-facing and internal back-end systems, in the fourth quarter of 2020. During the development of Protolabs 2.0, certain research and development personnel costs were capitalizable as a software development asset. Since the system was placed in service in November 2020, the personnel costs have been expensed as incurred. In addition, amortization expense for the software asset is now being recorded over the systems' estimated useful lives of seven to 10 years. 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.

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 Income, net

Other income, 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, we expect our effective tax rate for 2021 and beyond will remain consistent based on the current tax laws.

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	
	2021		2020		\$	%	2021		2020		\$	%
Revenue	\$ 125,342	100.0	\$ 107,504	100.0	\$ 17,838	16.6	\$ 364,516	100.0	\$ 329,187	100.0	\$ 35,329	10.7
Cost of revenue	70,018	55.9	52,861	49.2	17,157	32.5	197,237	54.1	163,988	49.8	33,249	20.3
Gross profit	55,324	44.1	54,643	50.8	681	1.2	167,279	45.9	165,199	50.2	2,080	1.3
Operating expenses:												
Marketing and sales	21,422	17.1	16,705	15.5	4,717	28.2	61,946	17.0	51,821	15.7	10,125	19.5
Research and development	10,614	8.5	7,915	7.4	2,699	34.1	33,855	9.3	25,550	7.9	8,305	32.5
General and administrative	17,111	13.6	12,354	11.5	4,757	38.5	52,699	14.4	38,983	11.8	13,716	35.2
Changes in fair value of contingent consideration	(750)	(0.6)	-	-	(750)	*	(8,513)	(2.3)	-	-	(8,513)	*
Total operating expenses	48,397	38.6	36,974	34.4	11,423	30.9	139,987	38.4	116,354	35.4	23,633	20.3
Income from operations	6,927	5.5	17,669	16.4	(10,742)	(60.8)	27,292	7.5	48,845	14.8	(21,553)	(44.1)
Other income (expense), net	136	0.1	728	0.7	(592)	(81.3)	(40)	-	2,549	0.8	(2,589)	(101.6)
Income before income taxes	7,063	5.6	18,397	17.1	(11,334)	(61.6)	27,252	7.5	51,394	15.6	(24,142)	(47.0)
Provision for income taxes	2,228	1.7	3,700	3.4	(1,472)	(39.8)	5,790	1.6	10,106	3.1	(4,316)	(42.7)
Net income	\$ 4,835	3.9%	\$ 14,697	13.7%	\$ (9,862)	(67.1)%	\$ 21,462	5.9%	\$ 41,288	12.5%	\$ (19,826)	(48.0)%

*Percentage change not meaningful

Stock-based compensation expense included in the statements of operations data above for the three and nine months ended September 30, 2021 and 2020 was as follows:

(dollars in thousands)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
Stock options, restricted stock and performance stock	\$ 4,551	\$ 3,624	\$ 14,405	\$ 9,693
Employee stock purchase plan	427	321	1,134	924
Total stock-based compensation expense	\$ 4,978	\$ 3,945	\$ 15,539	\$ 10,617
Cost of revenue	\$ 644	\$ 646	\$ 1,947	\$ 1,761
Operating expenses:				
Marketing and sales	1,059	865	2,841	2,233
Research and development	776	638	2,144	1,766
General and administrative	2,499	1,796	8,607	4,857
Total stock-based compensation expense	\$ 4,978	\$ 3,945	\$ 15,539	\$ 10,617

Comparison of Three Months Ended September 30, 2021 and 2020
Revenue

Revenue by reportable segment and the related changes for the three months ended September 30, 2021 and 2020 were as follows:

(dollars in thousands)	Three Months Ended September 30,				Change	
	2021		2020		\$	%
	\$	% of Total Revenue	\$	% of Total Revenue		
Revenue						
United States	\$ 100,127	79.9%	\$ 85,608	79.6%	\$ 14,519	17.0%
Europe	22,155	17.7	18,897	17.6	3,258	17.2
Japan	3,060	2.4	2,999	2.8	61	2.0
Total revenue	\$ 125,342	100.0%	\$ 107,504	100.0%	\$ 17,838	16.6%

Our revenue increased \$17.8 million, or 16.6%, for the three months ended September 30, 2021 compared to the same period in 2020. Our revenue for the three months ended September 30, 2021 includes revenue of \$8.8 million provided by our acquisition of Hubs. By reportable segment, revenue in the United States increased \$14.5 million, or 17.0%, for the three months ended September 30, 2021 compared to the same period in 2020. Revenue in Europe increased \$3.3 million, or 17.2%, and revenue in Japan increased \$0.1 million, or 2.0%, in each case for the three months ended September 30, 2021 compared to the same period in 2020. Excluding Hubs, revenue in the United States increased \$9.8 million, or 11.4%, and revenue in Europe decreased \$0.8 million, or 4.0%, in each case for the three months ended September 30, 2021 compared to the same period in 2020. International revenue was positively impacted by \$0.4 million during the three months ended September 30, 2021 compared to the same period in 2020 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, 2021, we served 23,457 unique product developers and engineers, an increase of 24.8% over the same period in 2020. The increase in unique product developers served was primarily driven by our acquisition of Hubs. Excluding the impact of Hubs, unique product developers served increased 7.3% during the three months ended September 30, 2021 when compared to the same period in 2020. Our growth in product developers and engineers served increased at a greater rate than our revenue growth, resulting in a decrease in the average spend per product developer and engineer. The decrease in average spend per product developer and engineer was driven by a change in the mix of products with a lower 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 September 30, 2021 and 2020 were as follows:

(dollars in thousands)	Three Months Ended September 30,				Change	
	2021		2020		\$	%
	\$	% of Total Revenue	\$	% of Total Revenue		
Revenue						
Injection Molding	\$ 57,685	46.0%	\$ 53,257	49.5%	\$ 4,428	8.3%
CNC Machining	43,658	34.8	33,115	30.8	10,543	31.8
3D Printing	18,589	14.8	16,294	15.2	2,295	14.1
Sheet Metal	4,854	3.9	3,988	3.7	866	21.7
Other Revenue	556	0.5	850	0.8	(294)	(34.6)
Total revenue	\$ 125,342	100.0%	\$ 107,504	100.0%	\$ 17,838	16.6%

By product line, our revenue increase was driven by a 31.8% increase in CNC Machining revenue, an 8.3% increase in Injection Molding revenue, a 14.1% increase in 3D Printing revenue, and a 21.7% increase in Sheet Metal revenue, which was partially offset by a 34.6% decrease in Other Revenue, in each case for the three months ended September 30, 2021 compared to the same period in 2020.

Cost of Revenue, Gross Profit and Gross Margin

Cost of Revenue. Cost of revenue increased \$17.2 million, or 32.5%, for the three months ended September 30, 2021 compared to the same period in 2020, which was greater than the rate of revenue increase of 16.6% for the three months ended September 30, 2021 compared to the same period in 2020. The increase in cost of revenue was driven by a \$7.2 million increase resulting from our acquisition of Hubs. The \$10.0 million increase in cost of revenue in our legacy business was driven by increased volumes and a labor shortage resulting in wage inflation, increased overtime and increased recruiting costs resulting in personnel and related cost increases of \$7.0 million and an increase in raw material and product costs of \$3.6 million driven by materials cost inflation and higher logistics costs, which were partially offset by a decrease in equipment and facility related costs of \$0.6 million.

Gross Profit and Gross Margin. Gross profit increased from \$54.6 million in the three months ended September 30, 2020 to \$55.3 million in the three months ended September 30, 2021. Gross margin decreased from 50.8% in the three months ended September 30, 2020 to 44.1% in the three months ended September 30, 2021, 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 \$4.7 million, or 28.2%, during the three months ended September 30, 2021 compared to the same period in 2020. The increase is primarily driven by personnel and related cost increases in our legacy business of \$1.6 million, information technology allocation cost increases, including amortization of Protolabs 2.0 software assets, of \$1.1 million and marketing program cost increases of \$0.4 million. In addition, our acquisition of Hubs provided \$1.6 million in marketing and sales expenses during the three months ended September 30, 2021.

Research and Development. Our research and development expenses increased \$2.7 million, or 34.1%, during the three months ended September 30, 2021 compared to the same period in 2020 primarily due to personnel and related cost increases of \$1.7 million driven by personnel and contractor resources dedicated to the launch of our Protolabs 2.0 system. During the development of Protolabs 2.0, certain research and development personnel costs were capitalizable as a software development asset. Since the system was placed in service in November 2020, the personnel costs have been expensed as incurred. Other legacy operating costs increased \$0.1 million during the three months ended September 30, 2021. In addition, increases of \$0.9 million resulted from our acquisition of Hubs.

General and Administrative. Our general and administrative expenses increased \$4.8 million, or 38.5%, during the three months ended September 30, 2021 compared to the same period in 2020 primarily due to an increase of \$0.3 million in professional service costs, an increase of \$0.7 million of personnel and related costs and an increase of \$1.0 million in administrative costs. In addition, our acquisition of Hubs provided \$2.8 million in general and administrative expense during the three months ended September 30, 2021.

Changes in fair value of contingent consideration. The fair value of contingent consideration associated with the acquisition of Hubs decreased \$0.8 million during the three months ended September 30, 2021 compared to the same period in 2020. We had no contingent consideration liabilities recorded during the three months ended September 30, 2020.

Other Income, net. We recognized other income, net of \$0.1 million for the three months ended September 30, 2021, a decrease of \$0.6 million compared to other income, net of \$0.7 million for the three months ended September 30, 2020. Other income, net for the three months ended September 30, 2021 primarily consisted of \$0.3 million in interest income on investments and other income, which was partially offset by a \$0.2 million loss on foreign currency. Other income, net for the three months ended September 30, 2020 primarily consisted of \$0.3 million in interest income on investments, a \$0.3 million gain on foreign currency and \$0.1 million in other income.

Provision for Income Taxes. Our effective tax rate of 31.5% for the three months ended September 30, 2021 increased 11.4% compared to 20.1% for the same period in 2020. The increase in the effective tax rate is primarily due to an increase in losses in jurisdictions that are not eligible for tax benefits due to valuation allowances. Our income tax provision of \$2.2 million for the three months ended September 30, 2021 decreased \$1.5 million compared to our income tax provision of \$3.7 million for the three months ended September 30, 2020, primarily due to a lower pre-tax income.

Comparison of Nine Months Ended September 30, 2021 and 2020
Revenue

Revenue by reportable segment and the related changes for the nine months ended September 30, 2021 and 2020 were as follows:

(dollars in thousands)	Nine Months Ended September 30,				Change	
	2021		2020		\$	%
	\$	% of Total Revenue	\$	% of Total Revenue		
Revenue						
United States	\$ 286,524	78.6%	\$ 262,507	79.8%	\$ 24,017	9.1%
Europe	68,259	18.7	56,413	17.1	11,846	21.0
Japan	9,733	2.7	10,267	3.1	(534)	(5.2)
Total revenue	\$ 364,516	100.0%	\$ 329,187	100.0%	\$ 35,329	10.7%

Our revenue increased \$35.3 million, or 10.7%, for the nine months ended September 30, 2021 compared to the same period in 2020. Our revenue for the nine months ended September 30, 2021 includes revenue of \$23.5 million provided by our acquisition of Hubs. By reportable segment, revenue in the United States increased \$24.0 million, or 9.1%, for the nine months ended September 30, 2021 compared to the same period in 2020. Revenue in Europe increased \$11.8 million, or 21.0% and revenue in Japan decreased \$0.5 million, or 5.2%, in each case for the nine months ended September 30, 2021 compared to the same period in 2020. Excluding Hubs, revenue in the United States increased \$11.5 million, or 4.4%, and revenue in Europe increased \$0.9 million, or 1.6%, in each case for the nine months ended September 30, 2021 compared to the same period in 2020. International revenue was positively impacted by \$3.9 million during the nine months ended September 30, 2021 compared to the same period in 2020 as a result of foreign currency movements, primarily the strengthening of the British Pound and Euro relative to the United States Dollar.

During the nine months ended September 30, 2021, we served 49,300 unique product developers and engineers, an increase of 31.5% over the same period in 2020. The increase in unique product developers served was primarily driven by our acquisition of Hubs. Excluding the impact of Hubs, unique product developers served increased 10.7% during the nine months ended September 30, 2021 when compared to the same period in 2020. Our growth in product developers and engineers served increased at a greater rate than our revenue growth, resulting in a decrease in the average spend per product developer and engineer. The decrease in average spend per product developer and engineer was driven by a change in the mix of products with a lower average order size purchased during the quarter by product developers and engineers we serve.

Revenue by product line and the related changes for the nine months ended September 30, 2021 and 2020 were as follows:

(dollars in thousands)	Nine Months Ended September 30,				Change	
	2021		2020		\$	%
	\$	% of Total Revenue	\$	% of Total Revenue		
Revenue						
Injection Molding	\$ 172,212	47.2%	\$ 165,927	50.4%	\$ 6,285	3.8%
CNC Machining	121,953	33.5	99,760	30.3	22,193	22.2
3D Printing	53,994	14.8	46,478	14.1	7,516	16.2
Sheet Metal	14,790	4.1	14,306	4.4	484	3.4
Other Revenue	1,567	0.4	2,716	0.8	(1,149)	(42.3)
Total revenue	\$ 364,516	100.0%	\$ 329,187	100.0%	\$ 35,329	10.7%

By product line, our revenue increase was driven by a 22.2% increase in CNC Machining revenue, a 16.2% increase in 3D Printing revenue, a 3.8% increase in Injection Molding revenue, and a 3.4% increase in Sheet Metal revenue, which was partially offset by a 42.3% decrease in Other Revenue, in each case for the nine months ended September 30, 2021 compared to the same period in 2020.

Cost of Revenue, Gross Profit and Gross Margin

Cost of Revenue. Cost of revenue increased \$33.2 million, or 20.3%, for the nine months ended September 30, 2021 compared to the same period in 2020, which was greater than the rate of revenue increase of 10.7% for the nine months ended September 30, 2021 compared to the same period in 2020. The increase in cost of revenue was driven by a \$20.1 million increase resulting from our acquisition of Hubs. The \$13.1 million increase in cost of revenue in our legacy business was driven by increased volumes and a labor shortage resulting in wage inflation, increased overtime and increased recruiting costs resulting in personnel and related cost increases of \$8.7 million and an increase in raw material and product costs of \$4.5 million, which were partially offset by a decrease in equipment and facility related costs of \$0.1 million.

Gross Profit and Gross Margin. Gross profit increased from \$165.2 million in the nine months ended September 30, 2020 to \$167.3 million in the nine months ended September 30, 2021. Gross margin decreased from 50.2% in the nine months ended September 30, 2020 to 45.9% in the nine months ended September 30, 2021, primarily due to labor and materials cost inflation and the mix of revenue.

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

Marketing and Sales. Marketing and sales expenses increased \$10.1 million, or 19.5%, during the nine months ended September 30, 2021 compared to the same period in 2020. In our legacy business, personnel and related cost increases of \$2.7 million, information technology allocation cost increases, including amortization of Protolabs 2.0 software assets, of \$3.3 million and marketing program cost increases of \$0.2 million. In addition, our acquisition of Hubs provided \$3.9 million in marketing and sales expense during the nine months ended September 30, 2021.

Research and Development. Our research and development expenses increased \$8.3 million, or 32.5%, during the nine months ended September 30, 2021 compared to the same period in 2020 primarily due to personnel and related cost increases of \$6.2 million driven by personnel and contractor resources dedicated to the launch of our Protolabs 2.0 system. During the development of Protolabs 2.0, certain research and development personnel costs were capitalizable as a software development asset. Since the system was placed in service in November 2020, the personnel costs have been expensed as incurred. In addition, increases of \$2.2 million resulted from our acquisition of Hubs, which were partially offset by decreases of \$0.1 in professional service costs.

General and Administrative. Our general and administrative expenses increased \$13.7 million, or 35.2%, during the nine months ended September 30, 2021 compared to the same period in 2020 primarily due to an increase of \$7.6 million resulting from our acquisition of Hubs, other professional service cost increases of \$3.7 million, stock-based compensation cost increases of \$1.7 million, administrative cost increases of \$0.3 million and personnel and related cost increases of \$0.4 million.

Changes in fair value of contingent consideration. The fair value of contingent consideration associated with the acquisition of Hubs decreased \$8.5 million during the nine months ended September 30, 2021. We had no contingent consideration liabilities recorded during the nine months ended September 30, 2020.

Other Loss, net. We recognized immaterial other loss, net for the nine months ended September 30, 2021, a decrease of \$2.6 million compared to other income, net of \$2.6 million for the nine months ended September 30, 2020. Other loss, net for the nine months ended September 30, 2021 primarily consisted of a \$0.6 million loss on foreign currency, which was offset by \$0.6 million in interest income on investments and other income. Other income, net for the nine months ended September 30, 2020 primarily consisted of \$1.2 million in interest income on investments and a \$1.2 million gain on foreign currency.

Provision for Income Taxes. Our effective tax rate of 21.2% for the nine months ended September 30, 2021 increased 1.5% compared to 19.7% for the same period in 2020. The increase in the effective tax rate is primarily due to an increase in losses in jurisdictions that are not eligible for tax benefits due to valuation allowances. Our income tax provision of \$5.8 million for the nine months ended September 30, 2021 decreased \$4.3 million compared to our income tax provision of \$10.1 million for the nine months ended September 30, 2020, due to a lower pre-tax income.

Liquidity and Capital Resources*Cash Flows*

The following table summarizes our cash flows during the nine months ended September 30, 2021 and 2020:

(dollars in thousands)	Nine Months Ended September 30,	
	2021	2020
Net cash provided by operating activities	\$ 32,225	\$ 82,375
Net cash used in investing activities	(98,325)	(77,657)
Net cash used in financing activities	(13,820)	(12,379)
Effect of exchange rates on cash and cash equivalents	119	690
Net decrease in cash and cash equivalents	<u>\$ (79,801)</u>	<u>\$ (6,971)</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 \$47.8 million as of September 30, 2021, a decrease of \$79.8 million from December 31, 2020. The decrease in our cash was primarily due to cash used in investing activity for our acquisition of Hubs of \$127.4 million, purchases of property, equipment and other capital assets of \$28.0 million, and cash used in financing activities for repurchases of common stock of \$13.0 million, which were partially offset by net proceeds from investments in marketable securities of \$57.0 million and cash generated through operations of \$32.2 million.

Cash Flows from Operating Activities

Cash flows from operating activities were \$32.2 million during the nine months ended September 30, 2021 and primarily consisted of net income of \$21.5 million, adjusted for certain non-cash items, including depreciation and amortization of \$30.2 million and stock-based compensation expense of \$15.5 million, which were partially offset by a decrease in the fair value of contingent consideration of \$8.5 million and changes in operating assets and liabilities and other items totaling \$26.5 million. Cash flows from operating activities were \$82.4 million during the nine months ended September 30, 2020 and primarily consisted of net income of \$41.3 million, adjusted for certain non-cash items, including depreciation and amortization of \$23.9 million, stock-based compensation expense of \$10.6 million and deferred taxes of \$6.6 million.

Cash flows from operating activities decreased \$50.2 million during the nine months ended September 30, 2021 compared to the same period in 2020, primarily due to decreases in net income of \$19.8 million, decreases in accounts receivable of \$21.8 million driven by timing of cash receipts, a decrease in the fair value of contingent consideration of \$8.5 million, decreases in deferred taxes of \$6.7 million, and decreases of \$4.6 million in other items, which were partially offset by increases in depreciation and amortization of \$6.3 million and increases in stock-based compensation of \$4.9 million.

Cash Flows from Investing Activities

Cash used in investing activities was \$98.3 million during the nine months ended September 30, 2021, consisting of \$127.4 million in cash used for acquisitions, net of cash acquired and \$27.9 million for the purchases of property, equipment and other capital assets, which were partially offset by \$57.0 million for net proceeds from investments in marketable securities.

Cash used in investing activities was \$77.7 million during the nine months ended September 30, 2020, consisting of \$34.2 million in net investments in marketable securities, \$40.5 million for the purchases of property, equipment and other capital assets, and \$3.0 million for purchases of other assets and investments.

Cash Flows from Financing Activities

Cash used in financing activities was \$13.8 million during the nine months ended September 30, 2021, consisting of \$13.0 million in repurchases of common stock, \$4.2 million in shares withheld for tax obligations associated with equity transactions, and \$0.4 million for repayments of finance lease obligations, which were partially offset by \$3.8 million in proceeds from the exercise of stock options.

Cash used in financing activities was \$12.4 million during the nine months ended September 30, 2020, consisting of \$14.7 million in repurchases of common stock and \$3.4 million in purchases of shares withheld for tax obligations associated with equity transactions, which were partially offset by \$5.7 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, 2020.

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 \$0.2 million and \$0.6 million during the three and nine months ended September 30, 2021, respectively. We recognized foreign currency gains of \$0.3 million and \$1.2 million during the three and nine months ended September 30, 2020, respectively. The changes in foreign exchange rates had a positive impact on consolidated revenue of \$0.4 million for the three months ended September 30, 2021 and \$3.9 million for the nine months ended September 30, 2021 as compared to the same periods in 2020.

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

During the first quarter of 2021, the Company completed the implementation of Protolabs 2.0, an internal business systems project impacting both external customer-facing and internal back-end systems. Emphasis has been on the maintenance of effective internal controls throughout development and deployment of all phases. The Company evaluated and concluded the implementation of Protolabs 2.0 has not materially affected the Company's internal control over financial reporting. Based on this evaluation, 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.

Management has excluded certain elements of Hubs from its assessment of internal control over financial reporting as of September 30, 2021. Those elements of the acquired business's internal control over financial reporting that were not fully integrated into the Company's existing internal control over financial reporting during 2021 have been excluded from management's assessment of the effectiveness of internal control over financial reporting. Hubs is a wholly-owned subsidiary of the Company; its combined total assets (excluding goodwill) and total revenues excluded from our assessment represent approximately 4% and 6%, respectively, of the related consolidated financial statements amounts as of the nine months ended September 30, 2021.

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, 2020 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, we announced that our board of directors had 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. This authorization increases the stock repurchase program to \$100 million. 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, 2021, we repurchased 157,414 shares of our common stock at a total purchase price of \$11.8 million under this program. Common stock repurchase activity for the three months ended September 30, 2021 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, 2021 through July 31, 2021	39,425	\$82.94	39,425	\$30,694
August 1, 2021 through August 31, 2021	73,168	\$73.08	73,168	\$25,347
September 1, 2021 through September 30, 2021	44,821	\$71.48	44,821	\$22,143
	<u>157,414</u>	<u>\$75.09</u>	<u>157,414</u>	<u>\$22,143</u>

¹ Effective May 15, 2019 the Board of Directors authorized the repurchase of shares of the Company's common stock from time to time on the open market or in privately negotiated purchases, at an aggregate purchase price of up to \$100 million. The term of the program runs through December 31, 2023.

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 (File No. 333-175745), 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 (File No. 001-35435), 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 (File No. 001-35435), filed with the Commission on November 8, 2016 and incorporated by reference herein.

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 2, 2021

/s/ Robert Bodor

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

Date: November 2, 2021

/s/ John A. Way

John A. Way
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;
 - e) Excluded certain elements of Hubs from its assessment of internal control over financial reporting as of September 30, 2021. Those elements of the acquired business's internal control over financial reporting that were not fully integrated into the Company's existing internal control over financial reporting during 2021 have been excluded from management's assessment of the effectiveness of internal control over financial reporting. Hubs is a wholly-owned subsidiary of the Company; its combined total assets (excluding goodwill) and total revenues excluded from our assessment represent approximately 4% and 6%, respectively, of the related consolidated financial statements amounts as of the nine months ended September 30, 2021; and
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 2, 2021

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, John A. Way, 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;
 - e) Excluded certain elements of Hubs from its assessment of internal control over financial reporting as of September 30, 2021. Those elements of the acquired business's internal control over financial reporting that were not fully integrated into the Company's existing internal control over financial reporting during 2021 have been excluded from management's assessment of the effectiveness of internal control over financial reporting. Hubs is a wholly-owned subsidiary of the Company; its combined total assets (excluding goodwill) and total revenues excluded from our assessment represent approximately 4% and 6%, respectively, of the related consolidated financial statements amounts as of the nine months ended September 30, 2021; and
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 2, 2021

By: /s/ John A. Way

John A. Way
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, 2021 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 2, 2021

By: /s/ Robert Bodor
Name: Robert Bodor
Title: President and Chief Executive Officer

I, John A. Way, 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, 2021 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 2, 2021

By: /s/ John A. Way
Name: John A. Way
Title: Chief Financial Officer