Table of Contents

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

FORM 10-Q

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended September 30, 2022

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

Commission file number: 001-38835

DESKTOP METAL, INC.

(Exact name of registrant as specified in its charter)

Delaware (State of Other Jurisdiction of incorporation or Organization)	**83-2044042** (I.R.S. Employer Identification No.)
63 3rd Avenue, Burlington, MA (Address of principal executive offices)	**01803** (Zip code)

Registrant's telephone number, including area code: (978) 224-1244

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

Title of Each Class	Trading Symbol(s)	Name Of Each Exchange On Which Registered
Class A Common Stock, $0.0001 Par Value per Share	**DM**	**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 (§232.0405 of this chapter) 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 ☒

As of November 7, 2022, there were 317,577,105 shares of the registrant's Class A common stock outstanding.

TABLE OF CONTENTS

PART I – FINANCIAL INFORMATION

Item 1. Financial Statements

DESKTOP METAL, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(UNAUDITED)
(in thousands, except share and per share amounts)

	September 30, 2022	December 31, 2021
Assets		
Current assets:		
Cash and cash equivalents	$ 66,987	$ 65,017
Current portion of restricted cash	4,072	2,129
Short-term investments	150,268	204,569
Accounts receivable	41,390	46,687
Inventory	91,223	65,399
Prepaid expenses and other current assets	18,781	18,208
Total current assets	372,721	402,009
Restricted cash, net of current portion	1,112	1,112
Property and equipment, net	57,755	58,710
Goodwill	365,253	639,301
Intangible assets, net	225,438	261,984
Other noncurrent assets	29,073	25,480
Total Assets	$ 1,051,352	$ 1,388,596
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 29,211	$ 31,558
Customer deposits	15,491	14,137
Current portion of lease liability	5,421	5,527
Accrued expenses and other current liabilities	31,430	33,829
Current portion of deferred revenue	16,309	18,189
Current portion of long-term debt, net of deferred financing costs	444	825
Total current liabilities	98,306	104,065
Long-term debt, net of current portion	343	548
Convertible notes	111,657	—
Contingent consideration, net of current portion	1,088	4,183
Lease liability, net of current portion	18,788	13,077
Deferred revenue, net of current portion	3,778	4,508
Deferred tax liability	7,994	10,695
Other noncurrent liabilities	2,646	3,170
Total liabilities	244,600	140,246
Commitments and Contingencies (Note 17)		
Stockholders' Equity		
Preferred Stock, $0.0001 par value—authorized, 50,000,000 shares; no shares issued and outstanding at September 30, 2022 and December 31, 2021, respectively	—	—
Common Stock, $0.0001 par value—500,000,000 shares authorized; 317,193,388 and 311,737,858 shares issued at September 30, 2022 and December 31, 2021, respectively, 317,069,926 and 311,473,950 shares outstanding at September 30, 2022 and December 31, 2021, respectively	32	31
Additional paid-in capital	1,864,477	1,823,344
Accumulated deficit	(996,601)	(568,611)
Accumulated other comprehensive loss	(61,156)	(6,414)
Total Stockholders' Equity	806,752	1,248,350
Total Liabilities and Stockholders' Equity	$ 1,051,352	$ 1,388,596

See notes to condensed consolidated financial statements

DESKTOP METAL, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(UNAUDITED)
(in thousands, except per share amounts)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Revenues				
Products	$ 42,937	$ 23,949	$ 135,085	$ 51,820
Services	4,149	1,489	13,381	3,908
Total revenues	47,086	25,438	148,466	55,728
Cost of sales				
Products	43,639	20,450	130,454	46,427
Services	3,756	1,033	11,252	3,561
Total cost of sales	47,395	21,483	141,706	49,988
Gross profit	(309)	3,955	6,760	5,740
Operating expenses				
Research and development	22,382	19,311	78,357	45,820
Sales and marketing	16,204	13,224	56,299	29,567
General and administrative	18,924	19,833	62,472	46,821
In-process research and development assets acquired	—	15,181	—	25,581
Goodwill impairment	—	—	229,500	—
Total operating expenses	57,510	67,549	426,628	147,789
Loss from operations	(57,819)	(63,594)	(419,868)	(142,049)
Change in fair value of warrant liability	—	—	—	(56,576)
Interest expense	(680)	(12)	(1,281)	(137)
Interest and other (expense) income, net	(1,677)	(3,796)	(8,443)	(3,166)
Loss before income taxes	(60,176)	(67,402)	(429,592)	(201,928)
Income tax (expense) benefit	(598)	523	1,602	32,761
Net loss	$ (60,774)	$ (66,879)	$ (427,990)	$ (169,167)
Net loss per share—basic and diluted	$ (0.19)	$ (0.26)	$ (1.36)	$ (0.67)
Weighted average shares outstanding, basic and diluted	316,007,716	260,555,655	313,901,704	251,467,644

See notes to condensed consolidated financial statements.

DESKTOP METAL, INC.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(UNAUDITED)
(in thousands)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Net loss	$ (60,774)	$ (66,879)	$ (427,990)	$ (169,167)
Other comprehensive (loss) income, net of taxes:				
Unrealized gain (loss) on available-for-sale marketable securities, net	(389)	(7)	(418)	(11)
Foreign currency translation adjustment	(15,866)	(1,216)	(54,324)	(1,099)
Total comprehensive (loss) income, net of taxes of $0	$ (77,029)	$ (68,102)	$ (482,732)	$ (170,277)

See notes to condensed consolidated financial statements.

DESKTOP METAL, INC.
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(UNAUDITED)
(in thousands, except share amounts)

	Three Months Ended September 30, 2022					
	Common Stock Voting		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive (Loss) Income	Total Stockholders' Equity
	Shares	Amount				
BALANCE—July 1, 2022	315,147,677	$ 32	$ 1,851,836	$ (935,827)	$ (44,901)	$ 871,140
Exercise of Common Stock options	1,147,289	—	1,771	—	—	1,771
Vesting of restricted Common Stock	21,786	—	—	—	—	—
Vesting of restricted stock units	765,093	—	—	—	—	—
Net settlement of shares for employee tax withholdings upon vesting of restricted stock units	(11,919)	—	(39)	—	—	(39)
Issuance of Common Stock related to settlement of contingent consideration	—	—	—	—	—	—
Stock-based compensation expense	—	—	10,909	—	—	10,909
Net loss	—	—	—	(60,774)	—	(60,774)
Other comprehensive income (loss)	—	—	—	—	(16,255)	(16,255)
BALANCE—September 30, 2022	317,069,926	$ 32	$ 1,864,477	$ (996,601)	$ (61,156)	$ 806,752

	Nine Months Ended September 30, 2022					
	Common Stock Voting		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive (Loss) Income	Total Stockholders' Equity
	Shares	Amount				
BALANCE—January 1, 2022	311,473,950	$ 31	$ 1,823,344	$ (568,611)	$ (6,414)	$ 1,248,350
Exercise of Common Stock options	2,168,289	—	3,035	—	—	3,035
Vesting of restricted Common Stock	135,341	—	—	—	—	—
Vesting of restricted stock units	3,248,204	1	—	—	—	1
Repurchase of shares for employee tax withholdings	(68,060)	—	(228)	—	—	(228)
Issuance of Common Stock related to settlement of contingent consideration	112,202	—	500	—	—	500
Stock-based compensation expense	—	—	37,826	—	—	37,826
Net loss	—	—	—	(427,990)	—	(427,990)
Other comprehensive income (loss)	—	—	—	—	(54,742)	(54,742)
BALANCE—September 30, 2022	317,069,926	$ 32	$ 1,864,477	$ (996,601)	$ (61,156)	$ 806,752

	Three Months Ended September 30, 2021					
	Common Stock Voting		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive (Loss) Income	Total Stockholders' Equity
	Shares	Amount				
BALANCE—July 1, 2021	259,545,731	$ 26	$ 1,387,779	$ (430,565)	$ 104	$ 957,344
Exercise of Common Stock options	1,615,484	—	1,576	—	—	1,576
Vesting of restricted Common Stock	295,599	—	—	—	—	—
Vesting of restricted stock units	259,735	—	—	—	—	—
Net share settlement related to employee tax withholdings upon vesting of restricted stock units	(40,299)	—	(309)	—	—	(309)
Issuance of Common Stock for acquisitions	—	—	—	—	—	—
Issuance of common stock for acquired in-process research and development	—	—	—	—	—	—
Net share settlement related to employee tax withholdings upon vesting of restricted stock awards	(109,150)	—	(958)	—	—	(958)
Stock-based compensation expense	—	—	9,951	—	—	9,951
Net loss	—	—	—	(66,879)	—	(66,879)
Other comprehensive income (loss)	—	—	—	—	(1,223)	(1,223)
BALANCE—September 30, 2021	261,567,100	$ 26	$ 1,398,039	$ (497,444)	$ (1,119)	$ 899,502

	Nine Months Ended September 30, 2021					
	Common Stock Voting		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive (Loss) Income	Total Stockholders' Equity
	Shares	Amount				
BALANCE—January 1, 2021	224,626,597	$ 23	$ 844,188	$ (328,277)	$ (9)	$ 515,925
Exercise of Common Stock options	4,462,218	—	5,241	—	—	5,241
Vesting of restricted Common Stock	407,629	—	—	—	—	—
Vesting of restricted stock units	303,656	—	—	—	—	—
Net settlement of shares related to employee tax withholdings upon vesting of restricted stock units	(49,471)	—	(454)	—	—	(454)
Issuance of Common Stock for acquisitions	9,049,338	1	208,988	—	—	208,989
Issuance of common stock for acquired in-process research and development	334,370	—	4,300	—	—	4,300
Net share settlement related to employee tax withholdings upon vesting of restricted stock awards	(109,150)	—	(958)			(958)
Stock-based compensation expense	—	—	16,167	—	—	16,167
Vesting of Trine Founder shares	1,850,938	—	—	—	—	—
Exercise of warrants	20,690,975	2	320,567	—	—	320,569
Net loss	—	—	—	(169,167)	—	(169,167)
Other comprehensive income (loss)	—	—	—	—	(1,110)	(1,110)
BALANCE—September 30, 2021	261,567,100	$ 26	$ 1,398,039	$ (497,444)	$ (1,119)	$ 899,502

See notes to condensed consolidated financial statements.

DESKTOP METAL, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(UNAUDITED)
(in thousands)

	Nine Months Ended September 30,	
	2022	2021
Cash flows from operating activities:		
Net loss	$ (427,990)	$ (169,167)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	38,294	15,576
Stock-based compensation	37,826	16,167
Goodwill impairment	229,500	—
Change in fair value of warrant liability	—	56,576
Change in fair value of subscription agreement	—	2,920
Amortization (accretion) of discount on investments	(305)	2,189
Amortization of debt financing cost	—	9
Amortization of deferred costs on convertible notes	276	—
Provision for bad debt	1,038	316
Acquired in-process research and development	—	25,581
Loss on disposal of property and equipment	209	19
Foreign exchange (gains) losses on intercompany transactions, net	1,261	—
Net increase (decrease) in accrued interest related to marketable securities	771	(414)
Net unrealized (gain) loss on equity investment	6,172	1,880
Net unrealized (gain) loss on other investments	745	(639)
Deferred tax benefit	(1,602)	(32,761)
Change in fair value of contingent consideration	(254)	(166)
Foreign currency transaction (gain) loss	(59)	—
Changes in operating assets and liabilities:		
Accounts receivable	3,166	(8,476)
Inventory	(31,195)	(11,067)
Prepaid expenses and other current assets	(969)	(3,096)
Other assets	1,196	(118)
Accounts payable	(2,959)	4,243
Accrued expenses and other current liabilities	(3,855)	(9,294)
Customer deposits	2,360	(1,298)
Deferred revenue	(1,589)	1,295
Change in right of use assets and lease liabilities, net	(2,850)	(340)
Other liabilities	24	6
Net cash used in operating activities	(150,789)	(110,059)
Cash flows from investing activities:		
Purchases of property and equipment	(8,157)	(4,145)
Purchase of other investments	—	(3,620)
Proceeds from other investments	3,155	—
Purchase of equity investment	—	(20,000)
Proceeds from sale of property and equipment	6	—
Purchase of marketable securities	(158,404)	(330,873)
Proceeds from sales and maturities of marketable securities	205,650	163,882
Proceeds from capital grant	200	—
Cash paid to acquire in-process research and development	—	(21,220)
Cash paid for acquisitions, net of cash acquired	(23)	(191,146)
Net cash provided by (used in) investing activities	42,427	(407,122)
Cash flows from financing activities:		
Proceeds from the exercise of stock options	3,036	5,241
Proceeds from the exercise of stock warrants	—	170,665
Payment of taxes related to net share settlement upon vesting of restricted stock units	(230)	(454)
Repayment of loans	(421)	—
Proceeds from issuance of convertible notes	115,000	—
Costs incurred in connection with the issuance of convertible notes	(3,619)	—
Repayment of term loan	—	(10,000)
Net cash provided by financing activities	113,766	165,452
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(1,491)	(56)
Net increase (decrease) in cash, cash equivalents, and restricted cash	3,913	(351,785)
Cash, cash equivalents, and restricted cash at beginning of period	68,258	484,137
Cash, cash equivalents, and restricted cash at end of period	$ 72,171	$ 132,352

	Nine Months Ended September 30,	
	2022	2021
Supplemental disclosures of cash flow information		
Reconciliation of cash, cash equivalents and restricted cash reported within the condensed consolidated balance sheets that sum to the total shown in the condensed consolidated statements of cash flows:		
Cash and cash equivalents	$ 66,987	131,676
Restricted cash included in other current assets	4,072	—
Restricted cash included in other noncurrent assets	1,112	676
Total cash, cash equivalents and restricted cash shown in the condensed consolidated statements of cash flows	$ 72,171	$ 132,352
Supplemental cash flow information:		
Interest paid	$ —	$ 137
Taxes paid	$ —	$ 150
Non-cash investing and financing activities:		
Net unrealized (gain) loss on investments	$ 418	$ 11
Exercise of private placement warrants	$ —	$ 149,904
Common Stock issued for acquisitions	$ —	$ 208,989
Common Stock issued for acquisition of in-process research and development	$ —	$ 4,300
Common Stock issued for settlement of contingent consideration	$ 500	$ —
Cash held back in acquisitions	$ —	$ 50
Additions to right of use assets and lease liabilities	$ 10,742	$ 891
Purchase of property and equipment included in accounts payable	$ 1,507	$ 77
Purchase of property and equipment included in accrued expense	$ —	$ 33
Contingent consideration in connection with acquisitions	$ —	$ 6,083
Transfers from property and equipment to inventory	$ 2,470	$ —
Transfers from inventory to property and equipment	$ 3,475	$ —
Deferred contract costs	$ 1,341	$ —

See notes to condensed consolidated financial statements.

1. ORGANIZATION, NATURE OF BUSINESS, AND RISK AND UNCERTAINTIES

Organization and Nature of Business

Desktop Metal, Inc. is a Delaware corporation headquartered in Burlington, Massachusetts. The company was founded in 2015 and is accelerating the transformation of manufacturing with 3D printing solutions for engineers, designers, and manufacturers. The Company designs, produces and markets 3D printing systems to a variety of end customers.

On December 9, 2020 (the "Closing Date"), Trine Acquisition Corp. ("Trine") consummated the previously announced merger pursuant to the Agreement and Plan of Merger, dated August 26, 2020, by and among Trine, Desktop Metal, Inc. and Sparrow Merger Sub, Inc., pursuant to which Sparrow Merger Sub, Inc. merged with and into Desktop Metal, Inc., with Desktop Metal, Inc. becoming our wholly owned subsidiary (the "Business Combination"). Upon the closing of the Business Combination, Trine changed its name to Desktop Metal, Inc. and Desktop Metal, Inc. changed its name to Desktop Metal Operating, Inc.

Unless otherwise indicated or the context otherwise requires, references in this Quarterly Report on Form 10-Q to the "Company" and "Desktop Metal" refer to the consolidated operations of Desktop Metal, Inc. and its subsidiaries. References to "Trine" refer to the company prior to the consummation of the Business Combination and references to "Legacy Desktop Metal" refer to Desktop Metal Operating, Inc. prior to the consummation of the Business Combination.

Legacy Desktop Metal was deemed the accounting acquirer in the Business Combination based on an analysis of the criteria outlined in Accounting Standards Codification ("ASC") 805. This determination was primarily based on Legacy Desktop Metal's stockholders prior to the Business Combination having a majority of the voting power in the combined company, Legacy Desktop Metal having the ability to appoint a majority of the Board of Directors of the combined company, Legacy Desktop Metal's existing management comprising the senior management of the combined company, Legacy Desktop Metal comprising the ongoing operations of the combined company, Legacy Desktop Metal being the larger entity based on historical revenues and business operations, and the combined company assuming Legacy Desktop Metal's name. Accordingly, for accounting purposes, the Business Combination was treated as the equivalent of Legacy Desktop Metal issuing stock for the net assets of Trine, accompanied by a recapitalization. The net assets of Trine are stated at historical cost, with no goodwill or other intangible assets recorded.

While Trine was the legal acquirer in the Business Combination, because Legacy Desktop Metal was deemed the accounting acquirer, the historical financial statements of Legacy Desktop Metal became the historical financial statements of the combined company upon the consummation of the Business Combination. As a result, the financial statements included in this report reflect (i) the historical operating results of Legacy Desktop Metal prior to the Business Combination; (ii) the combined results of Trine and Legacy Desktop Metal following the close of the Business Combination; (iii) the assets and liabilities of Legacy Desktop Metal at their historical cost; and (iv) the Company's equity structure for all periods presented.

In accordance with guidance applicable to these circumstances, the equity structure has been restated in all comparative periods up to the Closing Date to reflect the number of shares of the Company's common stock, $0.0001 par value per share, issued to Legacy Desktop Metal's stockholders in connection with the Business Combination. As such, the shares and corresponding capital amounts and earnings per share related to Legacy Desktop Metal convertible preferred stock and Legacy Desktop Metal common stock prior to the Business Combination have been retroactively restated as shares reflecting the exchange ratio of 1.22122 established in the Business Combination. Legacy Desktop Metal's convertible preferred stock previously classified as mezzanine was retroactively adjusted, converted into Common Stock, and reclassified to permanent as a result of the reverse recapitalization.

Risks and Uncertainties

The Company is subject to a number of risks similar to those of other companies of similar size in its industry, including, but not limited to, the need for successful development of products, the need for additional funding, competition from substitute products and services from larger companies, protection of proprietary technology, patent litigation, dependence on key individuals, and risks associated with changes in information technology. The Company has financed its operations to date primarily with proceeds from the sale of preferred stock, the Business Combination, and the sale of convertible senior notes due in 2027 (the "2027 Notes") in May 2022. The Company's long-term success is dependent upon its ability to successfully market its products and services; generate revenue; maintain or reduce its operating costs and expenses; meet its obligations; obtain additional capital when needed; and, ultimately, achieve profitable operations. Management believes that existing cash and short-term investments as of

September 30, 2022 will be sufficient to fund operating and capital expenditure requirements through at least twelve months from the date of issuance of these consolidated financial statements.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements of the Company are prepared in conformity with accounting principles generally accepted in the United States of America ("US GAAP") and pursuant to the regulations of the U.S Securities and Exchange Commission ("SEC"). Certain information and footnote disclosures normally included in financial statements prepared in accordance with US GAAP have been condensed or omitted pursuant to the rules and regulations of the SEC. The condensed consolidated financial statements include the Company's accounts and those of its subsidiaries. In the opinion of the Company's management, the financial information for the interim periods presented reflects all adjustments, which are of a normal and recurring nature, necessary for a fair presentation of the Company's financial position, results of operations, and cash flows. The results reported in these condensed consolidated financial statements are not necessarily indicative of results that may be expected for the entire year.

Principles of Consolidation

The accompanying consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. The functional currency of all wholly owned subsidiaries is U.S. Dollars. All intercompany transactions and balances have been eliminated in consolidation.

COVID-19 Pandemic

In March 2020, the World Health Organization declared the outbreak of a disease caused by a novel strain of the coronavirus ("COVID-19") to be a pandemic. As of September 30, 2022, the impact of the COVID-19 pandemic continues to unfold and there has been uncertainty and disruption in the global economy and financial markets. The Company has considered the COVID-19 pandemic related impacts on its estimates, as appropriate, within its consolidated financial statements and there may be changes to those estimates in future periods.

The COVID-19 pandemic, as well as the response to mitigate the spread and effects of COVID-19, may impact the Company and its customers, as well as the demand for its products and services. The impact of COVID-19 on the Company's operational results in subsequent periods will largely depend on future developments, and cannot be accurately predicted. These developments may include, but are not limited to, new information concerning the severity of COVID-19, the degree of success of actions take to contain or treat COVID-19, the severity and impact of new variants of COVID-19, and the reactions by consumers, companies, governmental entities, and capital markets to such actions.

Significant Accounting Policies

The Company's significant accounting policies are described in Note 2 to the financial statements in Part II, Item 8 of the Company's Annual Report on Form 10-K for the year ended December 31, 2021. There have been no material changes to the significant accounting policies from the Annual Report on Form 10-K for the year ended December 31, 2021.

Recently Issued Accounting Standards

Recently Adopted Accounting Guidance

In August 2020, the FASB issued ASU 2020-06, *Debt—Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging—Contracts in Entity's Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity's Own Equity* ("ASU 2020-06"), which reduced the number of models used to account for convertible instruments, amends the accounting for certain contracts in an entity's own equity that would have previously been accounted for as derivatives and modified the diluted earnings per share calculations for convertible instruments. We adopted ASU 2020-06 on January

1, 2022. As a result of the adoption of ASU 2020-06, the convertible notes issued in May 2022 were considered to be debt with no allocation to equity.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments—Credit Losses.* This ASU added a new impairment model (known as the current expected credit loss ("CECL") model) that is based on expected losses rather than incurred losses. Under the new guidance, an entity recognizes as an allowance its estimate of expected credit losses. The CECL model applies to most debt instruments, trade receivables, lease receivables, financial guarantee contracts, and other loan commitments. The CECL model does not have a minimum threshold for recognition of impairment losses and entities will need to measure expected credit losses on assets that have a low risk of loss. The company adopted the ASU as of January 1, 2022, which did not have a material effect on the Company's condensed consolidated financial statements.

3. REVENUE RECOGNITION

Contract Balances

The Company's deferred revenue balance was $20.1 million and $22.7 million as of September 30, 2022 and December 31, 2021, respectively. During the three and nine months ended September 30, 2022, the Company recognized $3.6 million and $14.0 million of existing deferred revenue from 2021. The deferred revenue consists of billed post-installation customer support and maintenance, cloud-based software licenses that are recognized ratably over the term of the agreement, and contracts that have outstanding performance obligations or contracts that have acceptance terms that have not yet been fulfilled.

Contract assets were not significant during the nine months ended September 30, 2022 and 2021.

Remaining Performance Obligations

At September 30, 2022, the Company had $20.1 million of remaining performance obligations, also referred to as backlog, of which approximately $16.3 million is expected to be fulfilled over the next 12 months, notwithstanding uncertainty related to the impact of COVID-19, including, but not limited to, international shipping and travel restrictions brought about by COVID-19, which could have an adverse effect on the timing of delivery and installation of products and/or services to customers. In addition, the Company also had customer deposits of $15.5 million at September 30, 2022.

4. ACQUISITIONS

2021 Acquisitions

Acquisition of EnvisionTEC

On February 16, 2021, the Company acquired EnvisionTEC, Inc. and its subsidiaries ("EnvisionTEC") pursuant to a Purchase Agreement and Plan of Merger dated January 15, 2021. This acquisition added a comprehensive portfolio in additive manufacturing across metals, polymers and composites and grew distribution channels both in quantity and through the addition of a vertically-focused channel. The total purchase price was $303.6 million, consisting of $143.8 million paid in cash and 5,036,142 shares of the Company's Common Stock with a fair value of $159.8 million as of the close of business on the transaction date.

The acquisition is accounted for as a business combination using the acquisition method of accounting. The total purchase price was allocated to the identifiable assets acquired and liabilities assumed based on the Company's estimates of their fair values on the acquisition date.

The acquisition date fair value of the consideration transferred is as follows (in thousands):

	Total Acquisition Date Fair Value
Cash consideration	$ 143,795
Equity consideration	159,847
Total consideration transferred	$ 303,642

The following table summarizes the allocation of the purchase price to the estimated fair values of assets acquired and liabilities assumed (in thousands):

	At February 16, 2021
Assets acquired:	
Cash and cash equivalents	$ 859
Restricted cash	5,004
Accounts receivable	2,982
Inventory	7,668
Prepaid expenses and other current assets	1,081
Restricted cash - noncurrent	285
Property and equipment	1,540
Intangible assets	137,300
Other noncurrent assets	1,801
Total assets acquired	$ 158,520
Liabilities assumed:	
Accounts payable	$ 1,442
Customer deposits	2,460
Current portion of lease liability	605
Accrued expenses and other current liabilities	13,706
Liability for income taxes	480
Deferred revenue	492
Current portion of long-term debt	898
Long-term debt	285
Deferred tax liability	29,009
Lease liability, net of current portion	1,189
Total liabilities assumed	$ 50,566
Net assets acquired	$ 107,954
Goodwill	$ 195,688
Total net assets acquired	$ 303,642

Subsequent to the acquisition date, the Company made certain measurement period adjustments to the preliminary purchase price allocation, which resulted in decrease to goodwill of $3.4 million. The decrease was primarily due to a decrease in deferred income tax liabilities of $4.1 million and a decrease in deferred revenue of $0.2 million related to the adoption of ASU 2021-08 and a decrease in inventory of $1.0 million related to obsolete inventory. Additionally, the Company recorded a measurement period adjustment of $0.3 million related to certain assets acquired and liabilities assumed due to clarification of information utilized to determine fair value during the measurement period. As of December 31, 2021, the measurement period was completed.

The estimated useful lives of the identifiable intangible assets acquired is as follows:

	Gross Value	Estimated Life
Acquired technology	$ 77,800	7 – 14 years
Trade name	8,600	14 years
Customer relationships	50,900	12 years
Total intangible assets	$ 137,300	

The goodwill resulting from the purchase price allocation is attributable to the workforce of the acquired business (which is not eligible for separate recognition as an identifiable intangible asset) and the expected synergistic benefits of expanding the combined companies' target markets both geographically and across industries. $16.4 million of the goodwill recognized is deductible for income tax purposes. During 2021, the Company incurred $4.8 million of acquisition-related and other transactional charges related to this acquisition, which are included in general and administrative expenses in the condensed consolidated statements of operations.

EnvisionTEC's results are included in the Company's consolidated results for the period from February 16, 2021 to December 31, 2021. During that period, EnvisionTEC's net revenues were approximately $33.3 million and net loss was approximately $11.1 million.

Acquisition of Adaptive 3D

On May 7, 2021, the Company acquired Adaptive 3D Holdings, Inc. and its affiliates ("Adaptive 3D") pursuant to a Purchase Agreement and Plan of Merger dated as of May 7, 2021. This acquisition expanded the Company's materials library to include photopolymer elastomers for use in the production of end use parts. The total purchase price was $61.8 million, consisting of $24.1 million paid in cash and 3,133,276 shares of the Company's Common Stock with a fair value of $37.7 million as of the close of business on the transaction date.

The acquisition is accounted for as a business combination using the acquisition method of accounting. The total purchase price was allocated to the identifiable assets acquired and liabilities assumed based on the Company's estimates of their fair values on the acquisition date.

The acquisition date fair value of the consideration transferred is as follows (in thousands):

	Total Acquisition Date Fair Value
Cash consideration	$ 24,083
Equity consideration	37,693
Total consideration transferred	$ 61,776

The following table summarizes the allocation of the purchase price to the estimated fair values of assets acquired and liabilities assumed (in thousands):

	At May 7, 2021
Assets acquired:	
Cash and cash equivalents	$ 2,852
Accounts receivable	504
Inventory	305
Prepaid expenses and other current assets	462
Property and equipment	558
Intangible assets	27,300
Other noncurrent assets	654
Total assets acquired	$ 32,635
Liabilities assumed:	
Accounts payable	$ 280
Current portion of lease liability	151
Accrued expenses and other current liabilities	100
PPP loan payable	311
Deferred revenue	12
Lease liability, net of current portion	502
Deferred tax liability	4,616
Total liabilities assumed	$ 5,972
Net assets acquired	$ 26,663
Goodwill	$ 35,113
Total net assets acquired	$ 61,776

Subsequent to the acquisition date, the Company made a measurement period adjustment to the preliminary purchase price allocation, which resulted in a decrease to goodwill of $0.2 million. The decrease was due to a decrease in deferred income tax liabilities of $0.2 million. As of May 7, 2022, the measurement period was completed.

The estimated useful lives of the identifiable intangible assets acquired is as follows:

	Gross Value	Estimated Life
Acquired technology	$ 27,000	14 years
Trade name	300	5 years
Total intangible assets	$ 27,300	

The goodwill resulting from the purchase price allocation is attributable to the workforce of the acquired business (which is not eligible for separate recognition as an identifiable intangible asset) and the expected synergistic benefits of expanding the combined companies' target markets both geographically and across industries. The goodwill recognized is not deductible for income tax purposes. During 2021, the Company incurred $0.3 million of acquisition-related and other transactional charges related to this acquisition, which are included in general and administrative expenses in the consolidated statements of operations.

Adaptive 3D's results are included in the Company's consolidated results for the period from May 7, 2021 to December 31, 2021. During that period, Adaptive 3D's revenues were approximately $1.1 million, and its net loss was approximately $4.9 million.

Acquisition of Aerosint

On June 24, 2021, the Company acquired all outstanding securities of Aerosint SA and its affiliates ("Aerosint"), which expanded the Company's portfolio of technologies with the addition of multi-material printing capabilities. The total purchase price was $23.8 million, consisting of $6.2 million paid in cash, 879,922 shares of the Company's Common Stock with a fair value of $11.5 million as of the close of business on the transaction date, and contingent consideration with a fair value of $6.1 million as of the acquisition

date. The Company may be required to pay this contingent consideration based on the achievement of revenue metrics and technical milestones over the three-year period following the transaction date.

The acquisition is accounted for as a business combination using the acquisition method of accounting. The total purchase price was allocated to the identifiable assets acquired and liabilities assumed based on the Company's estimates of their fair values on the acquisition date.

The acquisition included contingent consideration related to revenue metrics and technical milestones, with a fair value of $6.1 million as of the date of acquisition and a fair value of $3.9 million as of September 30, 2022. The Company will pay up to $5.5 million of contingent consideration based on stated revenue metrics, which had a fair value of $4.6 million as of the date of acquisition. During the three months ended September 30, 2022, based on the relevant revenues earned during the first year of the three-year contingent consideration period, the Company paid $1.0 million in cash and $0.5 million in shares to Aerosint shareholders, resulting in a reduction of the contingent consideration liability, which has a fair value of $2.4 million as of September 30, 2022. If Aerosint reaches certain product mass production technical milestones, the Company will pay out a maximum of $2.0 million in contingent consideration, which had a fair value of $1.5 million as of the date of acquisition, and a fair value of $1.5 million as of September 30, 2022. As of the date of acquisition, the fair value of the short-term liability was $1.4 million, and the long-term liability was $4.7 million, which the Company recorded in accrued expenses and other current liabilities and contingent consideration, net of current portion, on the condensed consolidated balance sheets. As of September 30, 2022, $2.8 million of contingent consideration is recorded in accrued expenses and other current liabilities and $1.1 million is recorded in contingent consideration, net of current portion, in the condensed consolidated balance sheets.

The acquisition date fair value of the consideration transferred is as follows (in thousands):

	Total Acquisition Date Fair Value
Cash consideration	$ 6,220
Equity consideration	11,448
Contingent consideration	6,083
Total consideration transferred	$ 23,751

The following table summarizes the allocation of the purchase price to the estimated fair values of assets acquired and liabilities assumed (in thousands):

	At June 24, 2021
Assets acquired:	
Cash and cash equivalents	$ 419
Accounts receivable	34
Inventory	166
Prepaid expenses and other current assets	697
Property and equipment	369
Intangible assets	11,726
Other noncurrent assets	336
Total assets acquired	$ 13,747
Liabilities assumed:	
Accounts payable	$ 58
Customer deposits	283
Current portion of lease liability	100
Accrued expenses and other current liabilities	169
Deferred revenue	810
Lease liability, net of current portion	226
Deferred tax liability	2,931
Total liabilities assumed	$ 4,577
Net assets acquired	$ 9,170
Goodwill	$ 14,581
Total net assets acquired	$ 23,751

Subsequent to the acquisition date, the Company made a measurement period adjustment to the preliminary purchase price allocation, which resulted in a decrease to goodwill of $0.6 million. The decrease was due to a decrease in deferred income tax liabilities. As of June 24, 2022, the measurement period was completed.

The estimated useful lives of the identifiable intangible assets acquired is as follows:

	Gross Value	Estimated Life
Acquired technology	$ 11,547	11.5 years
Trade name	179	4.5 years
Total intangible assets	$ 11,726	

The goodwill resulting from the purchase price allocation is attributable to the workforce of the acquired business (which is not eligible for separate recognition as an identifiable intangible asset) and the expected synergistic benefits of expanding the combined companies' target markets both geographically and across industries. The goodwill recognized is not deductible for income tax purposes. During 2021, the Company incurred $0.9 million of acquisition-related and other transactional charges related to this acquisition, which are included in general and administrative expenses in the consolidated statements of operations.

Aerosint's results are included in the Company's consolidated results for the period from June 24, 2021 to December 31, 2021. During that period, Aerosint's revenues were $0.6 million and net loss was $0.4 million.

Acquisition of Dental Arts Labs

On July 30, 2021, the Company acquired Dental Arts Laboratories, Inc., ("Dental Arts Labs"), which expanded the Company's portfolio in additive and conventional manufacturing within the healthcare industry. The purchase price was $26.0 million paid in cash. The Company also issued 1,190,468 restricted stock units with a grant date fair value of $11.0 million, which are subject to a

four-year vesting period and continuing employment. The Company will recognize compensation expense for these restricted stock units over the vesting period.

The acquisition is accounted for as a business combination using the acquisition method of accounting. The total purchase price was allocated to the identifiable assets acquired and liabilities assumed based on the Company's estimates of their fair values on the acquisition date.

The acquisition date fair value of the consideration transferred is as follows (in thousands):

	Total Acquisition Date Fair Value
Cash consideration	$ 26,042
Total consideration transferred	$ 26,042

The following table summarizes the allocation of the purchase price to the estimated fair values of assets acquired and liabilities assumed (in thousands):

	At July 30, 2021
Assets acquired:	
Cash and cash equivalents	$ 858
Accounts receivable	3,707
Inventory	2,438
Prepaid expenses and other current assets	3,853
Property and equipment	8,643
Intangible assets	5,000
Other noncurrent assets	4,636
Total assets acquired	$ 29,135
Liabilities assumed:	
Accounts payable	$ 1,949
Current portion of lease liability	535
Accrued expenses and other current liabilities	1,795
Current portion of long-term debt	3,888
Long-term debt	3
Lease liability, net of current portion	3,762
Total liabilities assumed	$ 11,932
Net assets acquired	$ 17,203
Goodwill	$ 8,839
Total net assets acquired	$ 26,042

Subsequent to the acquisition date, the Company made a working capital adjustment to the preliminary purchase price allocation, which resulted in decrease to goodwill of $0.3 million. As of June 30, 2022, the measurement period was completed.

The estimated useful lives of the identifiable intangible assets acquired is as follows:

	Gross Value	Estimated Life
Trade name	$ 1,300	8.5 years
Customer relationships	3,700	9.5 years
Total intangible assets	$ 5,000	

The goodwill resulting from the purchase price allocation is attributable to the workforce of the acquired business (which is not eligible for separate recognition as an identifiable intangible asset) and the expected synergistic benefits of expanding the combined companies' target markets both geographically and across industries. The goodwill recognized is deductible for income tax purposes. During 2021, the Company incurred $0.6 million of acquisition-related and other transactional charges related to this acquisition, which are included in general and administrative expenses in the consolidated statements of operations.

Dental Arts Labs' results are included in the Company's consolidated results for the period from July 30, 2021 to December 31, 2021. During that period, Dental Arts Labs' revenues were $14.1 million and net loss was $0.3 million.

Acquisition of A.I.D.R.O.

On September 7, 2021, the Company purchased the entire corporate capital of A.I.D.R.O. Srl ("A.I.D.R.O."). This acquisition expanded the Company's parts production capabilities and application expertise in the hydraulics industry. The purchase price for the A.I.D.R.O. acquisition was $5.7 million paid in cash, of which $4.9 million was paid at closing and the remaining $0.8 million was deposited to an escrow account subsequent to September 30, 2022. The Company also issued 364,050 restricted stock units with a grant date fair value of $3.2 million, which are subject to a four-year vesting period and continuing employment. The Company will recognize compensation expense for these restricted stock units over the vesting period.

The acquisition is accounted for as a business combination using the acquisition method of accounting. The total purchase price was allocated to the identifiable assets acquired and liabilities assumed based on the Company's estimates of their fair values on the acquisition date.

The acquisition date fair value of the consideration transferred is as follows (in thousands):

	Total Acquisition Date Fair Value
Cash consideration	$ 5,683
Total consideration transferred	$ 5,683

The following table summarizes the allocation of the purchase price to the estimated fair values of assets acquired and liabilities assumed (in thousands):

	At September 7, 2021
Assets acquired:	
Cash and cash equivalents	$ 855
Accounts receivable	966
Inventory	906
Prepaid expenses and other current assets	412
Property and equipment	691
Intangible assets	1,080
Other noncurrent assets	1,100
Total assets acquired	$ 6,010
Liabilities assumed:	
Accounts payable	$ 1,307
Current portion of lease liability	72
Accrued expenses and other current liabilities	508
Current portion of long-term debt, net of deferred financing costs	138
Long-term debt	764
Lease liability, net of current portion	750
Deferred tax liability	75
Other noncurrent liabilities	228
Total liabilities assumed	$ 3,842
Net assets acquired	$ 2,168
Goodwill	$ 3,515
Total net assets acquired	$ 5,683

Subsequent to the acquisition date, the Company made a working capital adjustment to the preliminary purchase price allocation, which resulted in an immaterial increase to goodwill. As of September 7, 2022, the measurement period was completed.

The estimated useful lives of the identifiable intangible assets acquired is as follows:

	Gross Value	Estimated Life
Trade name	$ 142	4 years
Customer relationships	938	15 years
Total intangible assets	$ 1,080	

The goodwill resulting from the purchase price allocation is attributable to the workforce of the acquired business (which is not eligible for separate recognition as an identifiable intangible asset) and the expected synergistic benefits of expanding the combined companies' target markets both geographically and across industries. The goodwill recognized is not deductible for income tax purposes. During 2021, the Company incurred $0.4 million of acquisition-related and other transactional charges related to this acquisition, which are included in general and administrative expenses in the consolidated statements of operations.

A.I.D.R.O.'s results are included in the Company's consolidated results for the period from September 7, 2021 to December 31, 2021. During that period, A.I.D.R.O.'s revenues were $1.7 million and net loss was $0.2 million.

Acquisition of Brewer Dental

On October 14, 2021, the Company acquired Larry Brewer Dental Lab, Inc. ("Brewer Dental"), which expanded the Company's portfolio in additive and conventional manufacturing within the healthcare and dental industry. The purchase price was $7.6 million paid in cash, of which $7.0 million was paid at closing and the remaining $0.5 million will be paid 24 months after closing. The Company also issued 252,096 restricted stock units with a grant date fair value of $1.8 million, which are subject to a four-year

vesting period and continuing employment. The Company will recognize compensation expense for these restricted stock units over the vesting period.

The total purchase price was allocated to the identifiable assets acquired and liabilities assumed based on the Company's preliminary estimates of their fair values on the acquisition date. The fair values assigned to Brewer Dental's tangible and intangible assets and liabilities assumed, and the related deferred tax assets and liabilities, are considered preliminary and are based on the information available at the date of the acquisition. The Company is in the process of finalizing its purchase price allocation, and the tax basis of the assets and liabilities acquired. This may result in potential adjustments to the carrying value of the respective recorded assets and liabilities, establishment of certain intangible assets, revisions of useful lives of intangible assets, establishment of potential acquisition contingencies, and the determination of any residual amount that will be allocated to goodwill. Adjustments that impact the deferred tax liability recorded in the business combination could result in an increase or decrease in the Company's recorded valuation allowance that will be recognized in the accompanying statement of operations.

The acquisition date fair value of the consideration transferred is as follows (in thousands):

	Total Acquisition Date Fair Value
Cash consideration	$ 7,613
Total consideration transferred	$ 7,613

The following table summarizes the preliminary allocation of the purchase price to the estimated fair values of assets acquired and liabilities assumed (in thousands):

	At October 14, 2021
Assets acquired:	
Cash and cash equivalents	$ 1,574
Accounts receivable	524
Inventory	226
Property and equipment	375
Intangible assets	2,630
Other noncurrent assets	706
Total assets acquired	$ 6,035
Liabilities assumed:	
Accounts payable	$ 34
Current portion of lease liability	87
Accrued expenses and other current liabilities	145
Lease liability, net of current portion	619
Total liabilities assumed	$ 885
Net assets acquired	$ 5,150
Goodwill	$ 2,463
Total net assets acquired	$ 7,613

The estimated useful lives of the identifiable intangible assets acquired is as follows:

	Gross Value	Estimated Life
Trade name	$ 230	8 years
Customer relationships	2,400	8 years
Total intangible assets	$ 2,630	

The goodwill resulting from the purchase price allocation is attributable to the workforce of the acquired business (which is not eligible for separate recognition as an identifiable intangible asset) and the expected synergistic benefits of expanding the combined companies' target markets both geographically and across industries. The goodwill recognized is deductible for income tax purposes. During 2021, the Company incurred immaterial acquisition-related and other transactional charges related to this acquisition, which are included in general and administrative expenses in the consolidated statements of operations.

Brewer Dental's results are included in the Company's consolidated results for the period from October 14, 2021 to December 31, 2021. During that period, Brewer Dental's revenues were $1.4 million and net income was $0.1 million.

Acquisition of May Dental

On October 29, 2021, the Company acquired May Dental Lab, Inc. ("May Dental"), which expanded the Company's portfolio in additive and conventional manufacturing within the healthcare and dental industry. The aggregate purchase price was $12.5 million paid in cash, of which $11.8 million was paid at closing and the remaining $0.8 million will be paid 24 months after closing, subject to the Limited Liability Interest Purchase Agreement. The Company also issued 357,642 restricted stock units with a grant date fair value of $2.5 million, which are subject to a four-year vesting period and continuing employment. The Company will recognize compensation expense for these restricted stock units over the vesting period.

The total purchase price was allocated to the identifiable assets acquired and liabilities assumed based on the Company's preliminary estimates of their fair values on the acquisition date. The fair values assigned to May Dental's tangible and intangible assets and liabilities assumed, and the related deferred tax assets and liabilities, are considered preliminary and are based on the information available at the date of the acquisition. The Company is in the process of finalizing its purchase price allocation, and the tax basis of the assets and liabilities acquired. This may result in potential adjustments to the carrying value of the respective recorded assets and liabilities, establishment of certain intangible assets, revisions of useful lives of intangible assets, establishment of potential acquisition contingencies, and the determination of any residual amount that will be allocated to goodwill. Adjustments that impact the deferred tax liability recorded in the business combination could result in an increase or decrease in the Company's recorded valuation allowance that will be recognized in the accompanying statement of operations.

The acquisition date fair value of the consideration transferred is as follows (in thousands):

	Total Acquisition Date Fair Value
Cash consideration	$ 12,522
Total consideration transferred	$ 12,522

The following table summarizes the preliminary allocation of the purchase price to the estimated fair values of assets acquired and liabilities assumed (in thousands):

	At October 29, 2021
Assets acquired:	
Cash and cash equivalents	$ 230
Accounts receivable	677
Inventory	343
Prepaid expenses and other current assets	98
Property and equipment	495
Intangible assets	4,340
Other noncurrent assets	1,416
Total assets acquired	$ 7,599
Liabilities assumed:	
Accounts payable	$ 209
Current portion of lease liability	201
Accrued expenses and other current liabilities	255
Lease liability, net of current portion	1,216
Total liabilities assumed	$ 1,881
Net assets acquired	$ 5,718
Goodwill	$ 6,804
Total net assets acquired	$ 12,522

Subsequent to the acquisition date, the Company made a working capital adjustment to the preliminary purchase price allocation, which resulted in an immaterial increase to goodwill.

The estimated useful lives of the identifiable intangible assets acquired is as follows:

	Gross Value	Estimated Life
Trade name	$ 3,900	9 years
Customer relationships	440	10 years
Total intangible assets	$ 4,340	

The goodwill resulting from the purchase price allocation is attributable to the workforce of the acquired business (which is not eligible for separate recognition as an identifiable intangible asset) and the expected synergistic benefits of expanding the combined companies' target markets both geographically and across industries. The goodwill recognized is deductible for income tax purposes. During 2021, the Company incurred immaterial acquisition-related and other transactional charges related to this acquisition, which are included in general and administrative expenses in the consolidated statements of operations.

May Dental's results are included in the Company's consolidated results for the period from October 29, 2021 to December 31, 2021. During that period, May Dental's revenues were $1.3 million and net loss was $0.1 million.

Acquisition of ExOne

On November 12, 2021, the Company acquired The ExOne Company and its affiliates ("ExOne"). The acquisition of ExOne extends the Company's product platforms with complementary solutions to create a comprehensive portfolio combining throughput, flexibility, and materials breadth while allowing customers to optimize production based on their specific application needs. The Company acquired all of ExOne's outstanding common stock for an aggregate purchase price of $613.0 million, consisting of $201.4 paid in cash and 48,218,063 shares of Common Stock with a fair value of $411.6 million as of the close of business on the transaction date. The Company also granted 86,020 incentive stock options with a weighted-average exercise price of $4.47 to certain employees of ExOne in exchange for unvested ExOne stock options. The acquisition will be accounted for as a business combination using the

acquisition method of accounting. The Company is currently finalizing the allocation of the purchase price and expects the purchase price to be allocated primarily to goodwill and intangible assets.

The total purchase price was allocated to the identifiable assets acquired and liabilities assumed based on the Company's preliminary estimates of their fair values on the acquisition date. The fair values assigned to ExOne's tangible and intangible assets and liabilities assumed, and the related deferred tax assets and liabilities, are considered preliminary and are based on the information available at the date of the acquisition. The Company is in the process of finalizing its purchase price allocation, and the tax basis of the assets and liabilities acquired. This may result in potential adjustments to the carrying value of the respective recorded assets and liabilities, establishment of certain intangible assets, revisions of useful lives of intangible assets, establishment of potential acquisition contingencies, and the determination of any residual amount that will be allocated to goodwill. Adjustments that impact the deferred tax liability recorded in the business combination could result in an increase or decrease in the Company's recorded valuation allowance that will be recognized in the accompanying statement of operations.

The acquisition date fair value of the consideration transferred is as follows (in thousands):

	Total Acquisition Date Fair Value
Cash consideration	$ 201,399
Equity consideration	411,603
Total consideration transferred	$ 613,002

The following table summarizes the preliminary allocation of the purchase price to the estimated fair values of assets acquired and liabilities assumed (in thousands):

	At November 12, 2021
Assets acquired:	
Cash and cash equivalents	$ 119,068
Restricted cash - current	3,007
Accounts receivable	13,611
Inventory	27,200
Prepaid expenses and other current assets	5,165
Property and equipment	33,991
Intangible assets	82,100
Other noncurrent assets	2,734
Total assets acquired	$ 286,876
Liabilities assumed:	
Accounts payable	$ 5,830
Accrued expenses and other current liabilities	10,368
Current portion of deferred revenue	15,331
Customer deposits	10,168
Current portion of operating lease liability	1,919
Deferred tax liability	3,465
Lease liability, net of current portion	332
Deferred revenue, net of current portion	147
Other noncurrent liabilities	321
Total liabilities assumed	$ 47,881
Net assets acquired	$ 238,995
Goodwill	$ 374,007
Total net assets acquired	$ 613,002

Subsequent to the acquisition date the Company made a measurement adjustment to the preliminary purchase allocation which resulted in an increase to goodwill of $0.6 million.

The estimated useful lives of the identifiable intangible assets acquired is as follows:

	Gross Value	Estimated Life
Developed Technology	$ 72,900	8 years
Trade name	1,300	4 years
Customer relationships	7,900	12 years
Total intangible assets	$ 82,100	

The goodwill resulting from the purchase price allocation is attributable to the workforce of the acquired business (which is not eligible for separate recognition as an identifiable intangible asset) and the expected synergistic benefits of expanding the combined companies' target markets both geographically and across industries. The goodwill recognized is not deductible for income tax purposes. During 2021, the Company incurred $8.5 million of acquisition-related and other transactional charges related to this acquisition, which are included in general and administrative expenses in the consolidated statements of operations.

ExOne's results are included in the Company's consolidated results for the period from November 12, 2021 to December 31, 2021. During that period, ExOne's revenues were $15.5 million and net loss was $6.9 million.

Pro Forma Information (unaudited)

The following unaudited pro forma financial information is based on the historical financial statements of the Company and presents the Company's results as if the acquisitions of EnvisionTEC, Adaptive 3D, Aerosint, Dental Arts Labs, A.I.D.R.O., Brewer Dental, May Dental, and ExOne had occurred on January 1, 2020 (in thousands):

	Year Ended December 31,	
	2021	2020
	(unaudited)	(unaudited)
Net revenues	$ 207,688	$ 164,947
Net income (loss)	$ (273,319)	$ (138,346)

The unaudited pro forma financial information was computed by combining the historical financial information of the Company and EnvisionTEC, Adaptive 3D, Aerosint, Dental Arts, A.I.D.R.O., Brewer Dental, May Dental, and ExOne along with the effects of the acquisition method of accounting for business combinations as though the companies were combined on January 1, 2020. The unaudited pro forma information does not reflect the potential benefits of cost and funding synergies, opportunities to earn additional revenues, or other factors, and therefore does not represent what the actual net revenues and net loss would have been had the companies been combined as of this date.

2021 Asset Acquisitions

Acquisition of Beacon Bio

On June 10, 2021, the Company acquired Beacon Bio, Inc. ("Beacon Bio") pursuant to a Stock Purchase Agreement. The purchase price consisted of cash consideration of $6.1 million, including transaction costs of $0.2 million, and 334,370 shares of Common Stock with a fair value of $4.3 million as of the close of business on the transaction date. The cash consideration includes a simple agreement for future equity investment of $1.0 million made by the Company in advance of the acquisition that was settled in the acquisition. Beacon Bio is engaged in research and development of PhonoGraft technology. The Company concluded the arrangement did not result in the acquisition of a business, as substantially all of the fair value of the gross assets acquired was concentrated in in-process research and development for which there was no alternative future use. Therefore, the Company accounted for the arrangement as an asset acquisition. In connection with the acquisition, the Company issued additional restricted stock units to retain research and development employees and contractors of Beacon Bio through the expected term to complete the development, which vest over a service period of 3 years and are accounted for as post-combination expense.

The acquired in-process research and development asset consists of a license to commercialize the PhonoGraft technology. Due to the stage of development of this license at the date of the acquisition, significant research, development, and risk remained, and it was not yet probable that there was future economic benefit from this asset. Absent successful clinical results and regulatory approval for this asset, there was no alternative future use associated with this asset. Accordingly, the value of the asset was expensed in the condensed consolidated statements of operations and no deferred tax liability has been recorded.

Acquisition of Meta Additive

On September 9, 2021, the Company acquired Meta Additive Ltd ("Meta Additive"), pursuant to a Stock Purchase Agreement of the same date. Meta Additive is engaged in research and development of binder jet printing. The purchase price consisted of cash consideration of $15.2 million, including transaction costs of $0.2 million. The Company concluded the arrangement did not result in the acquisition of a business, as substantially all of the fair value of the gross assets acquired was concentrated in in-process research and development for which there was no alternative future use. The Company accounted for the arrangement as an asset acquisition. In connection with the acquisition, the Company issued 1,101,592 restricted stock units with a fair value of $9.0 million as of the acquisition date to retain key employees of Meta Additive through the expected term to complete the development, which vest over a service period of 4 years and are accounted for as post-combination expense. In June 2022, per the terms of the acquisition agreement, the Company accelerated 895,044 RSUs for certain key employees in connection with the Initiative described in *Note 24. Restructuring Charges*.

The acquired in-process research and development asset consists of the development of novel functional binders to provide advanced additive manufacturing solutions. Due to the stage of development of this technology at the date of the acquisition, significant research, development, and risk remained, and it was not yet probable that there was future economic benefit from this asset. Absent successful commercialization of this asset, there was no associated alternative future use. Accordingly, the value of the assets was expensed in the condensed consolidated statements of operations and no deferred tax liability has been recorded.

5. CASH EQUIVALENTS AND SHORT-TERM INVESTMENTS

The Company's cash equivalents and short-term investments are invested in the following (in thousands):

	September 30, 2022			
	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
Money market funds	$ 52,029	$ —	$ —	$ 52,029
Total cash equivalents	52,029	—	—	52,029
Commercial paper	71,888	—	—	71,888
Corporate bonds	29,020	—	(213)	28,807
U.S. Treasury securities	29,797	—	(110)	29,687
Government bonds	14,798	—	(137)	14,661
Asset-backed securities	3,984	—	(6)	3,978
Total short-term investments	149,487	—	(466)	149,021
Total cash equivalents and short-term investments	$ 201,516	$ —	$ (466)	$ 201,050

	December 31, 2021			
	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
Money market funds	$ 46,521	$ —	$ —	$ 46,521
Total cash equivalents	46,521	—	—	46,521
Commercial paper	70,401	—	—	70,401
Corporate bonds	65,645	—	(28)	65,617
Government bonds	36,487	—	(11)	36,476
Asset-backed securities	24,665	—	(10)	24,655
Total short-term investments	197,198	—	(49)	197,149
Total cash equivalents and short-term investments	$ 243,719	$ —	$ (49)	$ 243,670

During the year ended December 31, 2021, the Company made a $20.0 million investment in equity securities of a publicly-traded company. The Company records this investment at fair value, which was $1.2 million as of September 30, 2022. Prior to the investment, the Company entered into a subscription agreement to purchase the investment, resulting in a subscription agreement liability which was derecognized upon investment. During the three and nine months ended September 30, 2022, the Company recorded an unrealized loss due to the change in fair value of the equity securities of $0.3 million and $6.2 million, respectively, in interest and other (expense) income, net in the consolidated statements of operations.

6. FAIR VALUE MEASUREMENTS

The Company uses the following three-tier fair value hierarchy, which prioritizes the inputs used in measuring the fair values for certain of its assets and liabilities:

Level 1 is based on observable inputs, such as quoted prices in active markets;

Level 2 is based on inputs other than the quoted prices in active markets that are observable either directly or indirectly; and

Level 3 is based on unobservable inputs in which there is little or no market data, which requires the Company to develop its own assumptions.

This hierarchy requires the Company to use observable market data, when available, and to minimize the use of unobservable inputs when determining fair value. Items measured at fair value on a recurring basis include money market funds.

The following fair value hierarchy table presents information about the Company's financial assets measured at fair value on a recurring basis and indicates the fair value hierarchy of the inputs the Company utilized to determine such fair value (in thousands):

	September 30, 2022			
	Quoted Prices in Active Markets for Identical Items (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Assets:				
Money market funds	$ 52,029	$ —	$ —	$ 52,029
Commercial paper	—	71,888	—	71,888
Corporate bonds	—	28,807	—	28,807
U.S. Treasury securities	—	29,687	—	29,687
Government bonds	—	14,661	—	14,661
Asset-backed securities	—	3,978	—	3,978
Equity securities	1,248	—	—	1,248
Other investments	—	—	2,850	2,850
Total assets	$ 53,277	$ 149,021	$ 2,850	$ 205,148
Liabilities:				
Contingent consideration	$ —	$ —	$ 3,900	$ 3,900
Total liabilities	$ —	$ —	$ 3,900	$ 3,900

	December 31, 2021			
	Quoted Prices in Active Markets for Identical Items (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Assets:				
Money market funds	$ 46,521	$ —	$ —	$ 46,521
Commercial paper	—	70,401	—	70,401
Corporate bonds	—	65,617	—	65,617
Government bonds	—	36,476	—	36,476
Asset-backed securities	—	24,655	—	24,655
Equity securities	7,420	—	—	7,420
Other investments	—	—	6,750	6,750
Total assets	$ 53,941	$ 197,149	$ 6,750	$ 257,840
Liabilities:				
Contingent consideration	$ —	$ —	$ 5,654	$ 5,654
Total liabilities	$ —	$ —	$ 5,654	$ 5,654

The Company has determined that the estimated fair value of its corporate bonds and commercial paper are reported as Level 2 financial assets as they are based on model-driven valuations in which all significant inputs are observable, or can be derived from or corroborated by observable market data for substantially the full term of the asset.

Equity securities include investments made via publicly-traded securities. The Company has determined that the estimated fair value of its equity securities is reported as Level 1 financial assets as they are based on quoted market prices in active markets for identical assets. During the three and nine months ended September 30, 2022, the Company recorded an unrealized loss due to the change in fair value of the equity securities of $0.3 million and $6.2 million, respectively, in interest and other (expense) income, net in the consolidated statements of operations. Additionally, the Company recorded an initial subscription agreement liability of $0.5 million related to this investment and recognized a loss on the subscription agreement liability of $2.4 million during the year ended December 31, 2021. The initial subscription liability was recorded as a Level 3 liability as a result of the discount for lack of marketability. Upon investment, the liability was derecognized and the investment was recorded as a Level 3 investment because the equity securities were not registered for resale and a discount for lack of marketability was still applied. Subsequently, the securities were registered and the investment was transferred from Level 3 to Level 1.

Other investments include investments made via convertible debt instruments totaling $2.9 million. The other investments are reported as a Level 3 financial asset because the methodology used to develop the estimated fair values includes significant unobservable inputs reflecting management's own assumptions. Assumptions used in fair valuing convertible debt instruments include the rights and obligations of the notes the Company holds as well as the probability of a qualified financing event, acquisition, or change in control. During the three months ended September 30, 2022, the Company did not recognize any losses on convertible debt instruments. During the nine months ended September 30, 2022, the Company recognized losses on convertible debt instruments of $0.8 million. During the three and nine months ended September 30, 2021, the Company recognized immaterial gains on convertible debt instruments in interest and other (expense) income, net in the condensed consolidated statements of operations. During the three and nine months ended September 30, 2022, $3.1 million of the outstanding convertible debt instruments was repaid in full.

The fair value of the Private Placement Warrants is estimated using the Black-Scholes option pricing model and is classified as a Level 3 financial instrument. The significant assumptions used in the model were the Company's stock price, exercise price, expected term, volatility, interest rate, and dividend yield. During the nine months ended September 30, 2022 and 2021, the Company recognized no gain or loss and a loss of $56.6 million, respectively, on the Private Placement Warrants. The Private Placement Warrants were all exercised as of March 2, 2021.

The contingent consideration liability was valued using a Monte Carlo simulation in a risk-neutral framework as well as a scenario based approach (both special cases of the income approach), based on key inputs that are not all observable in the market and is classified as a Level 3 liability. The Company assesses the fair value of the contingent consideration liability at each reporting period, with any subsequent changes to the fair value of the liability reflected in the condensed consolidated statement of operations until the liability is settled. During the three and nine months ended September 30, 2022, the Company recognized a gain in fair value of contingent consideration of $0.3 million and $0.3 million, respectively. During the three months ended September 30, 2022, the Company did not make any contingent consideration payments. During the nine months ended September 30, 2022, based on the relevant revenues earned during the first year of the three-year contingent consideration period, the Company paid $1.0 million in cash and $0.5 million in shares to Aerosint, resulting in a reduction of the contingent consideration liability.

The 2027 Notes are valued as a single liability measured at amortized cost, as no other features require bifurcation and recognition as derivatives.

There were no transfers between fair value measure levels during the nine months ended September 30, 2022 and 2021. The following table presents information about the Company's movement in Level 3 assets measured at fair value (in thousands):

	Nine Months Ended September 30,	
	2022	2021
Balance at beginning of period	$ 6,750	$ 3,000
Additions	—	23,620
Changes in fair value	(745)	(4,161)
Disposals	(3,155)	—
Balance at end of period	$ 2,850	$ 22,459

The following table presents information about the Company's movement in Level 3 liabilities measured at fair value (in thousands):

	Nine Months Ended September 30,	
	2022	2021
Balance at beginning of period	$ 5,654	$ 93,328
Payment of contingent consideration liability	(1,500)	—
Changes in fair value	(254)	59,022
Additions	—	6,558
Disposals		(2,920)
Foreign currency translation	—	(167)
Exercise of private placement warrants	—	(149,904)
Balance at end of period	$ 3,900	$ 5,917

7. ACCOUNTS RECEIVABLE

The components of accounts receivable are as follows (in thousands):

	September 30, 2022	December 31, 2021
Trade receivables	$ 43,093	$ 47,352
Allowance for doubtful accounts	(1,703)	(665)
Total accounts receivable	$ 41,390	$ 46,687

The following table summarizes activity in the allowance for doubtful accounts (in thousands):

	September 30, 2022	December 31, 2021
Balance at beginning of period	$ 665	$ 500
Provision for uncollectible accounts, net of recoveries	1,324	447
Uncollectible accounts written off	(286)	(282)
Balance at end of period	$ 1,703	$ 665

8. INVENTORY

Inventory consists of the following (in thousands):

	September 30, 2022	December 31, 2021
Raw materials	$ 38,561	$ 24,887
Work in process	7,596	8,875
Finished goods:		
Deferred cost of sales	1,029	6,999
Manufactured finished goods	44,037	24,638
Total finished goods	45,066	31,637
Total inventory	$ 91,223	$ 65,399

9. PREPAID EXPENSES AND OTHER CURRENT ASSETS

Prepaid expenses and other current assets consists of the following (in thousands):

	September 30, 2022	December 31, 2021
Prepaid operating expenses	$ 10,510	$ 11,961
Prepaid taxes	1,566	1,981
Prepaid dues and subscriptions	2,924	1,889
Prepaid insurance	1,868	492
Government grants receivable	393	226
Prepaid rent	338	178
Other	1,182	1,481
Total prepaid expenses and other current assets	$ 18,781	$ 18,208

10. PROPERTY AND EQUIPMENT

Property and equipment, net consists of the following (in thousands):

	September 30, 2022	December 31, 2021
Equipment	$ 49,150	$ 42,892
Land and buildings	16,322	17,214
Automobiles	1,183	905
Furniture and fixtures	2,350	1,844
Computer equipment	2,012	1,725
Tooling	2,138	2,000
Software	2,248	2,346
Leasehold improvements	18,007	15,263
Construction in process	3,152	4,185
Property and equipment, gross	96,562	88,374
Less: accumulated depreciation	(38,807)	(29,664)
Total property and equipment, net	$ 57,755	$ 58,710

Depreciation and amortization expense was $3.1 million and $9.3 million for the three and nine months ended September 30, 2022. Depreciation and amortization expense was $1.6 million and $4.4 million for the three and nine months ended September 30, 2021.

11. GOODWILL & INTANGIBLE ASSETS

The carrying amount of goodwill at September 30, 2022 and December 31, 2021 was $365.3 million and $639.3 million respectively, and has been recorded in connection with the Company's acquisitions. The goodwill activity is as follows (in thousands):

	Goodwill
Balance at December 31, 2020	$ 2,252
Acquisition of EnvisionTEC	195,688
Acquisition of Adaptive3D	35,113
Acquisition of Aerosint	14,581
Acquisition of Dental Arts Labs	8,839
Acquisition of A.I.D.R.O.	3,515
Acquisition of Brewer Dental	2,463
Acquisition of May Dental	6,782
Acquisition of ExOne	374,636
Foreign currency translation adjustment	(4,568)
Balance at December 31, 2021	$ 639,301
Measurement period adjustments	(606)
Foreign currency translation adjustment	(43,942)
Goodwill impairment	(229,500)
Balance at September 30, 2022	$ 365,253

At June 30, 2022, a quantitative interim goodwill impairment assessment was performed due to further sustained declines in the Company's and comparable companies' stock prices in the six months ended June 30, 2022. At September 30, 2022, there was no incremental goodwill impairment recorded.

The Company estimated the fair value using the discounted cash flow method under the income approach. The significant assumptions used in the valuation include revenue growth rates, future gross profit margins and operating expenses used to calculate projected future cash flows, determination of the weighted average cost of capital, and future economic and market conditions. The terminal value is based on an exit revenue multiple which requires significant assumptions regarding the selections of appropriate multiples that consider relevant market trading data. The Company bases its estimates and assumptions on its knowledge of the

additive manufacturing industry, recent performance, expectations of future performance and other assumptions the Company believes to be reasonable.

The Company determined that the estimated fair value of the reporting unit was less than its carrying amount. During the three and nine months ended September 30, 2022, the Company recorded goodwill impairment charges of $0 and $229.5 million, respectively, in the condensed consolidated statements of operations.

Intangible assets consisted of the following (in thousands):

		September 30, 2022			December 31, 2021		
	Weighted Average Remaining Useful Lives (in years)	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Acquired technology	8.7	$ 193,194	$ 30,163	$ 163,031	$ 198,631	$ 11,421	$ 187,210
Trade name	10.4	12,435	1,945	10,490	12,475	684	11,791
Customer relationships	10.1	66,272	14,426	51,846	69,127	6,296	62,831
Capitalized software	0.7	518	447	71	518	366	152
Total intangible assets		$ 272,419	$ 46,981	$ 225,438	$ 280,751	$ 18,767	$ 261,984

During the three and nine months ended September 30, 2022 and 2021, the Company recognized the following amortization expense (in thousands):

Category	Statement of Operations Line Item	Three Months Ended September 30, 2022	Three Months Ended September 30, 2021	Nine Months Ended September 30, 2022	Nine Months Ended September 30, 2021
Acquired technology	Cost of Sales	$ 5,877	$ 2,532	$ 17,817	$ 5,942
Acquired technology	Research and Development	466	375	1,314	1,387
Trade name	General and Administrative	424	227	1,267	477
Customer relationships	Sales and Marketing	2,276	1,280	8,044	3,174
Capitalized software	Research and Development	26	45	80	135
		$ 9,069	$ 4,459	$ 28,522	$ 11,115

The Company expects to recognize the following amortization expense (in thousands):

	Amortization Expense
2022 (remaining 3 months)	$ 9,520
2023	40,908
2024	40,966
2025	38,509
2026	28,874
2027 and after	66,661
Total intangible amortization	$ 225,438

12. OTHER NONCURRENT ASSETS

The following table summarizes the Company's components of other noncurrent assets (in thousands):

	September 30, 2022	December 31, 2021
Right of use asset	$ 22,657	$ 17,794
Long-term deposits	575	390
Other investments	2,850	6,750
Other	2,991	546
Total other noncurrent assets	$ 29,073	$ 25,480

13. ACCRUED EXPENSES AND OTHER CURRENT LIABILITIES

The following table summarizes the Company's components of accrued expenses and other current liabilities (in thousands):

	September 30, 2022	December 31, 2021
Compensation and benefits related	$ 11,429	$ 17,124
Professional services	1,853	2,659
Warranty reserve	3,723	4,048
Franchise and royalty fees	1,308	2,035
Current portion of contingent consideration	2,812	1,471
2027 Notes Interest	2,686	—
Inventory purchases	1,686	1,072
Commissions	824	849
Income tax payable	285	233
Sales and use and franchise taxes	310	274
Current portion of acquisition consideration	500	—
Other	4,014	4,064
Total accrued expenses and other current liabilities	$ 31,430	$ 33,829

As of September 30, 2022, and December 31, 2021, the Company has recorded $3.7 million and $4.0 million, respectively, of warranty reserve within accrued expenses and other current liabilities in the condensed consolidated balance sheets. Warranty reserve consisted of the following (in thousands):

	September 30, 2022	December 31, 2021
Warranty reserve, at the beginning of the period	$ 4,048	$ 1,553
Warranty reserve assumed in acquisition	—	1,389
Additions to warranty reserve	2,444	2,576
Claims fulfilled	(2,769)	(1,470)
Warranty reserve, at the end of the period	$ 3,723	$ 4,048

14. DEBT

2027 Convertible Notes—In May 2022, the Company issued an aggregate of $115.0 million principal amount of convertible senior notes due in 2027 in a private offering to qualified institutional buyers pursuant to Rule 144A under the Securities Act of 1933, as amended (the "Securities Act"). The 2027 Notes consisted of $100.0 million initial placement and an over-allotment option that provided the initial purchasers of the 2027 Notes with the option to purchase an additional $15.0 million aggregate principal amount of the 2027 Notes, which was fully exercised. The 2027 Notes were issued pursuant to an indenture dated May 13, 2022. The net proceeds from the issuance of the 2027 Notes were $111.4 million, after deducting the initial purchasers' discounts and commissions

and our estimated offering expenses. The issuance costs will be treated as a debt discount for accounting purposes, which will be amortized into interest expense over the term of the 2027 Notes.

The 2027 Notes are senior unsecured obligations. The 2027 Notes accrue interest at a rate of 6.0% per annum, payable semi-annually in arrears on May 15 and November 15 of each year, beginning on November 15, 2022. The 2027 Notes will mature on May 15, 2027, unless earlier repurchased, redeemed or converted in accordance with their terms prior to such date.

Before November 15, 2026, holders of the 2027 Notes will have the right to convert their 2027 Notes only upon the occurrence of certain events and during specified periods, including:

- if the last reported sale price per share of the Company's Common Stock, par value $0.0001 per share exceeds 130% of the conversion price for each of at least 20 trading days during the 30 consecutive trading days ending on, and including, the last trading day of the immediately preceding calendar quarter;

- if during the five consecutive business days immediately after any 10 consecutive trading day period (such 10 consecutive trading day period, the "measurement period") in which the trading price per $1,000 principal amount of 2027 Notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price per share of the Company's Common Stock on such trading day and the conversion rate on such trading day;

- upon the occurrence of certain corporate events or distributions on the Company's Class A common stock; or

- if the Company calls the 2027 Notes for redemption.

From and after November 15, 2026, holders of the 2027 Notes may convert their 2027 Notes at any time at their election until the close of business on the second scheduled trading day immediately before the maturity date. The Company will settle conversions by paying or delivering cash and, if applicable, shares of its Class A common stock.

The initial conversion rate is 601.5038 shares of Class A common stock per $1,000 principal amount of 2027 Notes, which represents an initial conversion price of approximately $1.66 per share of Class A common stock. The conversion rate is subject to customary adjustments for certain events as described in the indenture governing the 2027 Notes. In addition, if certain corporate events that constitute a "Make-Whole Fundamental Change" (as defined in the indenture governing the 2027 Notes) occur, then the conversion rate will, in certain circumstances, be increased for a specified period of time.

The Company may redeem for cash all or any portion of the 2027 Notes, at the Company's option, on or after May 20, 2025, and on or before the 40th scheduled trading day immediately before the maturity date, but only if certain liquidity conditions are satisfied and the last reported sales price of the Company's Class A common stock exceeds 130% of the conversion price then in effect on (i) each of at least 20 trading days, whether or not consecutive, during the 30 consecutive trading days ending on, and including, the trading day immediately before the date the Company sends the related redemption notice and (ii) the trading day immediately before the date the Company sends such notice.

However, the Company may not redeem less than all of the outstanding 2027 Notes unless at least $100.0 million aggregate principal amount of 2027 Notes are outstanding and not called for redemption as of the time the Company sends the related redemption notice. The redemption price will be a cash amount equal to the principal amount of the 2027 Notes to be redeemed, plus accrued and unpaid interest, if any, to, but excluding, the redemption date. In addition, calling any 2027 Note for redemption will constitute a Make-Whole Fundamental Change with respect to that 2027 Note, in which case the conversion rate applicable to the conversion of that 2027 Note will be increased in certain circumstances if it is converted after it is called for redemption.

If certain corporate events that constitute a "Fundamental Change" (as defined in the indenture governing the 2027 Notes) occur, then, subject to a limited exception for certain cash mergers, holders of the 2027 Notes may require the Company to repurchase their 2027 Notes at a cash repurchase price equal to the principal amount of the 2027 Notes to be repurchased, plus accrued and unpaid interest, if any, to, but excluding, the fundamental change repurchase date. The definition of Fundamental Change includes certain business combination transactions involving the Company and certain de-listing events with respect to the Company's Class A common stock.

The 2027 Notes are valued as a single liability measured at amortized cost, which approximates fair value, as no other features require bifurcation and recognition as derivatives. The following table presents the outstanding principal amount and carrying value of the 2027 Notes as of the date indicated (in thousands):

	September 30, 2022
Principal	$ 115,000
Unamortized debt discount	(2,642)
Unamortized debt issuance costs	(701)
Net carrying value	$ 111,657

The annual effective interest rate for the 2027 Notes was approximately 6.1%. Interest expense related to the 2027 Notes for the periods presented below are as follows (in thousands):

	Three Months Ended September 30, 2022	Nine Months Ended September 30, 2022
Coupon interest	$ 1,739	$ 2,686
Amortization of debt discount	186	218
Amortization of transaction costs	50	58
Total interest expense	$ 1,975	$ 2,962

Term Loan—In June 2018, the Company entered into a $20 million term loan for 36 months. The loan provided $10 million immediately funded with the additional $10 million available to be drawn in up to three draws of not less than $2 million for 12 months from close of the facility. The loan was interest-only for the full 36 months with the principal due at maturity in June 2021. The outstanding loan was paid in full in June 2021.

PPP Loans— In connection with the acquisition of EnvisionTEC, the Company acquired $1.2 million in Paycheck Protection Program (the "PPP") loans. The PPP, established as part of the Coronavirus Aid, Relief and Economic Security Act, provided for loans to qualifying businesses. Under the terms of the CARES Act, PPP loan recipients could apply for forgiveness for all or a portion of the loan which is dependent upon the Company having initially qualified for the loan. Furthermore, the loan was subject to forgiveness to the extent loan proceeds are used for payroll costs, certain rents, utilities, and mortgage interest expense. The PPP loan had a maturity date of April 3, 2022 and an interest rate of 1%. On May 14, 2021, the outstanding loan balances were forgiven and the restricted cash that was held back from the initial purchase price in the event the loan was not forgiven was released to the seller. There is no outstanding PPP loan balance for EnvisionTEC as of December 31, 2021.

Bank Debt—In connection with the acquisition of A.I.D.R.O., the Company acquired three loans ("Bank Loans") totaling $1.1 million in aggregate. The Bank Loans have term of 4.5 years and mature from September 2024 through September 2025, with interest rates ranging from 1.70% to 2.10%. Payments of principal and interest are made quarterly. During the three and nine months ended September 30, 2022 the Company paid $0.1 million and $0.3 million, respectively, and as of September 30, 2022, $0.6 million remains outstanding. $0.2 million of the outstanding debt is recorded within current portion of long-term debt, net of deferred financing costs and $0.4 million is recorded within long-term debt, in the condensed consolidated balance sheets.

Equipment Financing Agreement—In connection with the acquisition of Dental Arts Labs, the Company acquired a thirteen-month equipment financing agreement ("Financing Agreement") in the amount of $0.5 million. The Financing Agreement provided for an advance payment of $0.5 million to secure equipment for the Company. Payments are made monthly under the Financing Agreement upon acceptance, which had not yet occurred as of December 31, 2021. Subsequent to December 31, 2021, the Company executed a delivery and acceptance certificate which commences payment. As of September 30, 2022, the outstanding financing agreement balance of $0.2 million is recorded in current portion of long-term debt, net of deferred financing costs, in the condensed consolidated balance sheets. The Financing Agreement will mature in June 2023.

15. OTHER NONCURRENT LIABILITIES

The following table summarizes the Company's components of other noncurrent liabilities (in thousands):

	September 30, 2022	December 31, 2021
Taxes payable	$ 1,034	$ 1,034
Acquisition consideration	1,250	1,750
Other	362	386
Total other noncurrent liabilities	$ 2,646	$ 3,170

16. LEASES

Lessee

At September 30, 2022, the Company recorded $22.7 million as a right of use asset and $23.6 million as an operating lease liability. At December 31, 2021, the Company recorded $17.8 million as a right of use asset and $17.8 million as an operating lease liability. The Company assesses its right of use asset and other lease-related assets for impairment. There were no impairments recorded related to these assets during the three and nine months ended September 30, 2022 and the year ended December 31, 2021.

The Company reviews all supplier, vendor, and service provider contracts to determine whether any service arrangements contain a lease component. The Company identified two service agreements that contain an embedded lease. The agreements do not contain fixed or minimum payments, and the variable lease expense was immaterial during the three and nine months ended September 30, 2022 and 2021.

Information about other lease-related balances is as follows (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Lease cost				
Operating lease cost	$ 1,507	$ 593	$ 4,286	$ 1,338
Finance lease cost	22	1	64	2
Short-term lease cost	31	37	101	82
Variable lease cost	54	46	176	131
Total lease cost	$ 1,614	$ 677	$ 4,627	$ 1,553
Other Information				
Operating cash flows used in operating leases	$ 1,580	$ 673	$ 4,675	$ 1,572
Operating cash flows used in finance leases	16	2	56	4
Weighted-average remaining lease term—operating leases (years)	12.8	4.8	12.8	4.8
Weighted-average remaining lease term—finance leases (years)	7.8	8.5	7.8	8.5
Weighted-average discount rate—operating leases	4.5 %	4.2 %	4.5 %	4.2 %
Weighted-average discount rate—finance leases	3.1 %	1.5 %	3.1 %	1.5 %

The rate implicit in the lease is not readily determinable in most of the Company's leases, and therefore the Company uses its incremental borrowing rate as the discount rate when measuring operating lease liabilities. The incremental borrowing rate represents an estimate of the interest rate the Company would incur at lease commencement to borrow an amount equal to the lease payments on a collateralized basis over the term of the lease.

Future minimum lease payments under noncancelable operating leases, including immaterial future minimum lease payments under finance leases, at September 30, 2022, are as follows (in thousands):

	Operating Leases	Finance Leases
2022 (remaining 3 months)	$ 1,604	$ 19
2023	6,180	75
2024	4,797	71
2025	4,043	70
2026	3,550	70
2027 and after	6,281	356
Total lease payments	26,455	661
Less amount representing interest	(2,824)	(83)
Total lease liability	23,631	578
Less current portion of lease liability	(5,363)	(58)
Lease liability, net of current portion	$ 18,268	$ 520

In February 2022, the Company amended its existing facility lease for the ExOne European headquarters and operating facility in Gersthofen, Germany, extending the lease term set to expire in December 2022 through December 2027, with the option to extend for two additional five-year extension periods. The rent is fixed through December 31, 2024 for an aggregate annual rent totaling $1.7 million, plus applicable taxes and is subject to adjustment on an annual basis thereafter (in accordance with the consumer price index for Germany) through December 31, 2027.

Lessor

The Company leases machinery and equipment to customers (principally 3D printing machines and related equipment) under lease arrangements classified as either operating leases or sales-type leases. At September 30, 2022, the Company estimated that the total fair market value approximated the related net book value of the machinery and equipment held under the Company's operating lease arrangements. The Company's net investment in sales-type lease arrangements at September 30, 2022 is immaterial and is recorded in prepaid expense and other current assets in the consolidated balance sheets. There was no net investment in sales-type lease arrangements at September 30, 2021.

The Company recognized the following components under operating and sales-type lease arrangements in the accompanying consolidated statements of operations and comprehensive loss for the periods indicated:

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2022		2021		2022		2021	
	Operating	Sales-type	Operating	Sales-type	Operating	Sales-type	Operating	Sales-type
Revenue	$ 70	$ —	$ —	$ —	$ 287	$ —	$ —	$ —
Interest Income [1]	—	6	—	—	—	23	—	—

[1] Interest income related to sales-type leases is recorded as a component of revenue in the consolidated statements of operations and comprehensive loss for each of the periods presented.

The Company's net investment in sales-type leases consisted of the following:

	Nine Months Ended September 30,	
	2022	2021
Future minimum lease payments receivable	$ 342	$ —
Less: Allowance for doubtful accounts	—	—
Net future minimum lease payments receivable	342	—
Less: Unearned interest income	(16)	—
Net investment in sales-type leases	$ 326	$ —

The Company did not record any provisions for bad debt related to lessees during the three and nine months ended September 30, 2022.

Future minimum lease receipts of non-cancellable operating and sales-type lease arrangements as of September 30, 2022 were as follows:

	Operating	Sales-type
2022 (remaining three months)	$ —	$ 68
2023	—	274
2024	—	—
2025	—	—
2026	—	—
Thereafter	—	—
Total minimum lease payments	$ —	$ 342
Less: Allowance for doubtful accounts		—
Less: Present value discount		(16)
Future minimum lease payments receivable		$ 326

17. COMMITMENTS AND CONTINGENCIES

Legal Proceedings

From time to time, the Company may face legal claims or actions in the normal course of business. At each reporting date, the Company evaluates whether a potential loss amount or a potential range of loss is probable and reasonably estimable under the provisions of the authoritative guidance that addresses accounting for contingencies. The Company expenses as incurred the costs related to its legal proceedings. While the outcome of these claims cannot be predicted with certainty, management does not believe the outcome of any current legal proceedings will have a material adverse impact on the Company's condensed consolidated financial statements.

Between September 2021 and the closing of the ExOne Merger on November 12, 2021, twelve putative class action complaints were filed by purported ExOne shareholders against ExOne and the former ExOne Board of Directors alleging violations of federal securities laws in connection with the S-4 filed by ExOne for the ExOne Merger. All have been dismissed.

On November 8, 2021, another purported stockholder, Leo Lissoq Goldstein, filed a Section 220 complaint in Delaware Chancery Court against ExOne (Goldstein v. The ExOne Company, Case No. 2021-0958-KSJM). Mr. Goldstein seeks to discover certain books and records of the company related to the ExOne Merger purportedly in order to investigate, among other things, the events leading up to and the disclosures made in connection with the ExOne Merger. Mr. Goldstein has also moved to intervene and stay the Campanella action, discussed below, until his Section 220 action is complete.

On November 22, 2021, purported stockholder Pietro Campanella filed a class action lawsuit against ExOne, Desktop Metal, Inc., and former ExOne directors and officers alleging breach of fiduciary duties and aiding and abetting breach of fiduciary duties in connection with the ExOne Merger (Campanella v. The ExOne Company et al., Case No. 2021-1013, Case No. 2021-1013-LWW). In particular, Mr. Campanella alleges that ExOne's proxy statement and supplemental disclosures did not adequately disclose information related to a whistleblower investigation at one of Desktop Metal's subsidiaries, EnvisionTEC, and the resignation of EnvisionTEC's CEO.

As previously disclosed, on December 21, 2021, January 14, 2022, February 2, 2022 and February 22, 2022, four alleged shareholders of Desktop Metal stock filed purported securities class action complaints in the United States District Court for the District of Massachusetts. (Luongo v. Desktop Metal, D. Mass., Case No. 1:21-cv-12099-IT; Hathaway v. Desktop Metal, D. Mass., Case No. 1:22-cv-10059-IT; Guzman-Martinez v. Desktop Metal, D. Mass, Case No. 1:22-cv-10173, Xie v. Desktop Metal, Case No. 1:22-cv-10297-IT). Each complaint alleges that Desktop Metal and certain of its officers and directors violated Sections 10(b) and 20(a) of the Securities and Exchange Act by making false or misleading statements regarding EnvisionTEC's manufacturing and product compliance practices and procedures. On February 4, 2022, the court issued an order consolidating the first three District of Massachusetts securities class actions. On July 7, 2022, the court appointed Sophia Zhou lead plaintiff for the class period of February 17, 2021 through November 15, 2021. The court also vacated its earlier order consolidating the *Xie* action with the other lawsuits and

will allow that action to proceed separately, with a new notice to investors, based on a class period of January 15, 2021 to February 16, 2021. On September 29, 2022, the Court re-consolidated the *Xie* action with the other actions for all pre-trial proceedings.

As previously disclosed, on July 12, 2022, two alleged shareholders of Desktop Metal stock filed derivative actions purportedly on behalf of Desktop Metal in the United States District Court for the District of Massachusetts. (Keyser v. Fulop, et al., Case No. 1:22-cv-11117; Qi v. Fulop, et al., Case No. 1:22-cv-1118). On July 22, 2022, an alleged shareholder of Desktop Metal stock filed a similar derivative complaint in the United States District Court for the District of Delaware (Cherry v. Fulop, et al., Case No. 1:22-cv-00962). The complaints allege that certain officers and directors of Desktop Metal caused harm to the Company by violating Section 14(A) of the Exchange Act and SEC Rule 14a-9 and breaching their fiduciary duties by making false or misleading statements regarding EnvisionTEC's manufacturing and product compliance practice and procedures.

The Company believes that these complaints are all without merit and intends to defend against them vigorously.

Commitments

The Company has entered into legally binding agreements with certain suppliers to purchase materials used in the manufacturing of the Company's products. As of September 30, 2022, the Company had outstanding purchase orders with contract manufacturers in the amount of $61.0 million which are not included in the condensed consolidated balance sheets.

The Company has also entered into licensing and royalty agreements with certain manufacturing and software companies and universities related to the use of patented technology. Under the terms of each agreement, the Company has made initial, one-time payments of $0.3 million and is obligated to pay a set percentage, ranging from 1.0% - 13%, of all consideration received by the Company for sales of related products and services, until the agreements are terminated at various dates through 2037. The Company's aggregate minimum annual commitment under these contracts is $0.3 million. During the three and nine months ended September 30, 2022 and 2021, the Company recorded immaterial licensing and royalty fees.

As a result of the acquisition of ExOne, the Company assumed short-term financial guarantees and letters of credit. Within the Company's normal course of operations, it issues these short-term financial guarantees and letters of credit through a credit facility with a German bank to third parties in connection with certain commercial transactions requiring security. The credit facility provides a capacity amount of $4.0 million for the issuance of financial guarantees and letters of credit for commercial transactions requiring security. The credit facility does not require cash collateral for the issuance of financial guarantees and letters of credit for commercial transactions requiring security for amounts up to $1.1 million. Amounts in excess of $1.1 million require cash collateral under the credit facility.

At September 30, 2022, total outstanding financial guarantees and letters of credit issued by the Company under the credit facility were $4.0 million, of which $1.9 million have expiration dates ranging from August 2022 to March 2023, and the remaining $2.1 million with no expiration date. At September 30, 2022, cash collateral of $3.5 million was required for financial guarantees and letters of credit issued under the credit facility, and is included in current portion of restricted cash in the consolidated balance sheets.

18. INCOME TAXES

The Company's provision for interim periods is determined using an estimate of the annual effective tax rate, adjusted for discrete items arising in that quarter. The Company's effective tax rate differs from the U.S. statutory tax rate primarily due to valuation allowances on its deferred tax assets as it is more likely than not that some or all of the Company's deferred tax assets will not be realized. During the three and nine months ended September 30, 2022, the Company recorded an income tax expense of $0.6 million and an income tax benefit of $1.6 million, respectively. During the three and nine months ended September 30, 2021, the Company recorded an income tax benefit of $0.5 million and $32.8 million, respectively.

The Company recognizes deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the Company's consolidated financial statements and tax returns. Deferred tax assets and liabilities are determined based upon the differences between the consolidated financial statements carrying amounts and the tax bases of existing assets and liabilities and for loss and credit carryforwards, using enacted tax rates expected to be in effect in the years in which the differences are expected

to reverse. The Company has provided a full valuation allowance against the net deferred tax assets as the Company has determined that it was more likely than not that the Company would not realize the benefits of federal and state net deferred tax assets.

The Company provides reserves for potential payments of taxes to various tax authorities related to uncertain tax positions. Amounts recognized are based on a determination of whether a tax benefit taken by the Company in its tax filings or positions is “more likely than not” to be sustained on audit. The amount associated with uncertain tax positions are recorded as a component of income tax expense. As of September 30, 2022, the Company has accrued uncertain tax positions of approximately $1.0 million related to the EnvisionTEC acquisition. The amounts relate to U.S. state and foreign tax positions. Included in the balance of unrecognized tax benefits as of September 30, 2022 are amounts that, if recognized, would impact the effective tax rate. As of December 31, 2021, the company accrued uncertain tax positions of approximately $1.0 million related to the EnvisionTEC acquisition.

19. STOCKHOLDERS’ EQUITY

As of September 30, 2022, the Company’s authorized shares consisted of 500,000,000 shares of Class A Common Stock, $0.0001 par value per share (the “Common Stock”) and 50,000,000 shares of Preferred Stock, $0.0001 par value per share (the “Preferred Stock”).

During 2015, the Company issued 34,010,977 shares of Common Stock to the initial founders and certain employees of the Company at a purchase price of $0.0001 per share. These shares are fully vested.

Trine Warrants

In Trine’s initial public offering, it sold units at a price of $10.00 per unit, which consisted of one share of Common Stock, $0.0001 par value, and one-half of a redeemable warrant (each, a “Public Warrant”). Each whole Public Warrant entitles the holder to purchase one share of Common Stock at a price of $11.50 per share and became exercisable as of 30 days from the date of the Business Combination. Unless earlier redeemed, the Public Warrants will expire five years from the completion of the Business Combination. The Company may redeem the outstanding Public Warrants in whole and not in part at a price of $0.01 per Public Warrant upon a minimum of 30 days’ prior written notice of redemption, and only in the event that the last sale price of the Company’s Common Stock is at least $18.00 per share for any 20 trading days within a 30-trading day period ending on the third trading day prior to the date on which notice of redemption is given. If the Company redeems the Public Warrants as described above, it will have the option to require all Public Warrant holders that wish to exercise to do so on a “cashless basis”. On February 26, 2021, the Company delivered a notice to redeem all of its outstanding Public Warrants that remain unexercised at 5:00 p.m. New York City time on March 29, 2021. During 2021, Public Warrants for 14,840,589 shares of the Company’s Common Stock were exercised for cash, resulting in the Company receiving net proceeds of $170.7 million. On March 29, 2021, the 166,905 outstanding Public Warrants were redeemed by the Company for $0.01 per Public Warrant. Effective March 29, 2021, all of the Public Warrants were exercised or redeemed.

The Warrant Agreement, dated as of March 14, 2019, by and between the Company and Continental Stock Transfer & Trust Company also obligated the Company to use its best efforts to file with the SEC a registration statement for the registration, under the Securities Act of 1933, as amended (the “Securities Act”), of the issuance of the shares of Common Stock issuable upon exercise of the Public Warrants, and to cause the same to become effective and remain effective while the Public Warrants remain outstanding. On February 4, 2021, the Company’s registration statement covering such shares became effective.

Simultaneously with the consummation of Trine’s initial public offering, Trine Sponsor IH, LLC (the “Sponsor”) purchased an aggregate of 8,503,000 warrants to purchase one share of Common Stock at an exercise price of $11.50 (the “Private Placement Warrants”) at a price of $1.00 per warrant ($8,503,000) in the aggregate in a private placement.

The Private Placement Warrants are identical to the Public Warrants except that the Private Placement Warrants are not redeemable by Desktop Metal, and may be exercised for cash or on a cashless basis so long as they are held by the Sponsor or any of its permitted transferees. Additionally, pursuant to the terms of the amended and restated registration rights agreement entered in connection with the Business Combination, the Sponsor had the right to have the resale of the shares of Common Stock acquired upon

exercise of the Private Placement Warrants registered under the Securities Act. On February 4, 2021, the Company's registration statement covering such shares became effective.

On February 24, 2020, Trine issued an unsecured promissory note (the "2020 Note") to the Sponsor. The 2020 Note bore no interest and was repayable in full upon consummation of the Business Combination. The Sponsor had the option to convert any unpaid balance of the 2020 Note into warrants equal to the principal amount of the 2020 Note so converted divided by $1.00. Upon closing of the Business Combination, the 2020 Note was converted into a Private Placement Warrant for 1,500,000 shares of Common Stock, with an exercise price of $11.50. The terms of these warrants are identical to the terms of the Private Placement Warrants. Pursuant to the terms of the amended and restated registration rights agreement entered in connection with the Business Combination, the Sponsor had the right to have the resale of the shares of Common Stock acquired upon exercise of such warrant registered under the Securities Act. On February 4, 2021, the Company's registration statement covering such shares became effective.

The Company's Private Placement Warrants are classified as liabilities, and are measured at fair value through earnings. During nine months ended September 30, 2022, the Company recorded no gain or loss related to the change in fair value of the private placement warrants. During the nine months ended September 30, 2021, the Company recorded a $56.6 million loss related to the change in fair value of the Private Placement Warrants, which were remeasured through the date of each exercise, calculated using the Black-Scholes warrant pricing model with the following assumptions:

		Nine Months Ended September 30, 2021
Risk-free interest rate		0.4% – 0.6 %
Expected volatility		55.0 %
Expected life (in years)		4.8
Expected dividend yield		—
Fair value of Common Stock	$	19.82 – 30.49
Exercise price	$	11.50

All of the Private Placement Warrants were exercised on a cashless basis prior to March 2, 2021, and an aggregate of 5,850,346 shares of the Company's Common Stock were issued in connection with these exercises. Effective March 2, 2021, all Private Placement Warrants were exercised.

20. STOCK BASED COMPENSATION

In 2015, the Board of Directors approved the adoption of the 2015 stock incentive plan (the "2015 Plan"). The 2015 Plan allowed for the award of incentive and nonqualified stock options, restricted stock, and other stock-based awards to employees, officers, directors, consultants, and advisers of the Company. Awards could be made under the 2015 Plan for up to 26,283,789 shares of Common Stock. Option awards expire 10 years from the grant date and generally vest over four years; however, vesting conditions can vary at the discretion of our Board of Directors.

As part of the acquisition of Make Composites, Inc. ("Make") in 2019, the Company assumed the 2018 equity incentive plan of Make (the "Make Plan"). The Make Plan allows for the award of incentive and nonqualified stock options and warrants for those employees and contractors that were hired as part of the acquisition. The Make Plan allowed for 232,304 options and warrants to be issued, which were issued in 2019, with no additional options to be issued in the future. Option awards expire 10 years from the grant date and generally vest over four years; however, vesting conditions can vary at the discretion of our Board of Directors.

In December 2020, the Board of Directors and stockholders of the Company approved the adoption of the 2020 Incentive Award Plan (the "2020 Plan" and together with the 2015 Plan and the Make Plan, the "Plans"), which became effective on the date of the Business Combination. Upon effectiveness of the 2020 Plan, the Company ceased granting new awards under the 2015 Plan.

The 2020 Plan allows for the award of incentive and nonqualified stock options, restricted stock, and other stock-based awards to employees, officers, directors, consultants, and advisers of the Company. The number of shares of common stock initially available for issuance under the 2020 Plan was 12,400,813 shares of common stock plus the number of shares subject to awards outstanding under the 2015 Plan that expire, lapse, terminate, or are exchanged for cash, surrendered, repurchased, or canceled without having been fully exercised or forfeited. In addition, the number of shares of common stock available for issuance under the 2020 Plan is

subject to an annual increase on the first day of each calendar year beginning on January 1, 2021 and ending on and including January 1, 2030 equal to the lesser of (i) 5% of the aggregate number of shares of common stock outstanding on the final day of the immediately preceding calendar year and (ii) such smaller number of shares as is determined by the Board of Directors. On January 1, 2022, 15,573,698 shares were added as available for issuance to the 2020 Plan.

Stock Options

The option activity of the Plans for the nine months ended September 30, 2022, is as follows (shares in thousands):

	Number of Shares	Weighted-Average Exercise Price per Share	Weighted-Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding at January 1, 2022	13,249	$ 1.73	7.23	$ 42,775
Granted	—	$		
Exercised	(2,168)	$ 1.40		
Forfeited/expired	(2,061)	$ 1.47		
Outstanding at September 30, 2022	9,020	$ 1.87	6.31	$ 7,478
Options vested at September 30, 2022	7,313	$ 1.94	6.00	$ 5,554
Options vested or expected to vest at September 30, 2022	9,000	$ 1.87	6.31	$ 7,456

The aggregate intrinsic value of options exercised during the nine months ended September 30, 2022 and 2021, was $4.6 million and $49.6 million, respectively.

The total stock-based compensation expense related to stock options was $0.3 million and $2.2 million during the three and nine months ended September 30, 2022, respectively, and $1.0 million and $3.4 million during the three and nine months ended September 30, 2021, respectively. Total unrecognized stock-based compensation expense related to unvested stock options at September 30, 2022, aggregated $3.1 million and is expected to be recognized over a weighted-average period of 1.8 years.

Performance-Based Stock Options (included above)

During the year ended December 31, 2020, 560,256 performance-based stock options were granted to key employees of the Company. These awards vest upon the achievement of certain performance milestones by the Company and prescribed service milestones by the employee. During the year ended December 31, 2021, 83,958 performance-based stock options were forfeited due to employee termination. During the three months ended September 30, 2022, no performance-based stock options were forfeited or expired. During the nine months ended September 30, 2022, 290,038 performance-based stock options were forfeited due to employee termination and the remaining 186,260 performance-based stock options outstanding expired without vesting as the performance milestones were not achieved by the Company. As of September 30, 2022 no unrecognized compensation cost remains.

Assumed Stock Options (included above)

In connection with the acquisition of ExOne, the Company assumed 86,020 unvested stock options which are considered post-combination expense and were valued using the Black-Scholes option-pricing model with the following assumptions:

	As of November 12, 2021
Risk-free interest rate	0.5% – 0.8 %
Expected volatility	57.2% – 59.4 %
Expected life (in years)	1.0 – 2.8
Expected dividend yield	—
Fair value of Common Stock	$ 8.61

The risk-free interest rate assumption is based upon observed interest rates appropriate for the term of the related stock options. The expected life of stock options was calculated using the average of the contractual term of the option and the weighted-average

vesting period of the option, as the Company does not have sufficient history to use an alternative method to the simplified method to calculate an expected life for employees. The Company has not paid a dividend and is not expected to pay a dividend in the foreseeable future. Expected volatility for the Common Stock was determined based on an average of the historical volatility of a peer group of similar public companies.

Restricted Stock Awards

In connection with acquisitions, the Company has granted restricted stock awards ("RSAs") that are considered post-combination expense and accounted for as stock-based compensation as the shares vest.

The activity for stock subject to vesting as of September 30, 2022, is as follows (shares in thousands):

	Shares Subject to Vesting	Weighted-Average Grant Date Fair Value
Balance of unvested shares as of January 1, 2022	264	$ 7.79
Cancelled/Forfeited	(5)	$ 8.78
Vested	(136)	$ 6.85
Balance of unvested shares as of September 30, 2022	123	$ 8.78

The total stock-based compensation expense related to RSAs was $0.2 million and $0.8 million during the three and nine months ended September 30, 2022, respectively, and $2.3 million and $2.7 million during the three and nine months ended September 30, 2021, respectively. As of September 30, 2022, the total unrecognized stock-based compensation expense related to unvested RSAs is $1.0 million, and is expected to be recognized over a weighted-average period of 1.4 years.

Restricted Stock Units

Restricted Stock Units ("RSUs") awarded to employees and non-employees generally vest over four years from the anniversary date of the grant, with one-year cliff vesting and quarterly vesting thereafter, provided service with the Company is not terminated. The fair value of RSUs is equal to the estimated fair market value of the Company's Common Stock on the date of grant.

RSU activity under the 2020 Plan for the nine months ended September 30, 2022, is as follows (shares in thousands):

	Shares Subject to Vesting	Weighted-Average Grant Date Fair Value
Balance of unvested shares as of January 1, 2022	16,395	$ 7.54
Granted	8,736	$ 3.56
Vested	(3,248)	$ 11.05
Cancelled/Forfeited	(2,851)	$ 7.50
Balance of unvested shares as of September 30, 2022	19,032	$ 5.12

The total stock-based compensation expense related to RSUs was $11.6 million and $38.2 million during the three and nine months ended September 30, 2022, respectively, and $6.7 million and $10.1 million during the three and nine months ended September 30, 2021, respectively. During the nine months ended September 30, 2022, per the terms of an acquisition agreement, the Company accelerated 895,044 RSUs for certain key employees in connection with their termination, resulting in stock compensation expense of $7.3 million. Total unrecognized compensation costs related to unvested RSUs at September 30, 2022, is $80.9 million and is expected to be recognized over a period of 2.8 years.

RSUs include awards that vest subject to certain performance and market-based criteria.

Performance-Based Restricted Stock Units (included above)

During the year ended December 31, 2021, 670,000 performance-based RSUs were granted to key employees of the Company. These awards vest upon the achievement of certain performance milestones by the Company and prescribed service milestones by the employee. No performance-based RSUs vested during the year ended December 31, 2021. During the year ended December 31, 2021,

120,000 awards expired due to performance milestones not being achieved. During the three and nine months ended September 30, 2022, no performance-based RSUs vested. During the three months ended September 30, 2022, no performance-based RSUs were forfeited. During the nine months ended September 30, 2022, 400,000 performance-based RSUs were forfeited due to employee termination. As of September 30, 2022, 150,000 performance-based RSUs remain outstanding.

During the year ended December 31, 2020, 124,300 performance-based RSUs were granted to a key employee of the Company. This award vests upon the achievement of certain performance milestones by the Company and prescribed service milestones by the employee. No performance-based RSUs vested during the year ended December 31, 2021, or during the three and nine months ended September 30, 2022. As of September 30, 2022, 124,300 performance-based RSUs remain outstanding.

Market-Based Restricted Stock Units (included above)

In October 2021 the Compensation Committee of the Company's Board of Directors awarded certain executive officers a total of up to 9,070,269 market-based RSUs. These RSUs will vest and result in the issuance of shares of Common Stock based on continuing employment and the achievement of certain market conditions set by the Company.

The Company used a Monte Carlo simulation model to estimate the grant-date fair value of the RSUs granted in October 2021. The fair value is recorded as stock compensation expense in the consolidated statements of operations over the period from the date of grant to October 2026 regardless of the actual outcome achieved.

The table below sets forth the assumptions used to value the market-based awards and the estimated grant-date fair value:

	October 2021 Awards
Risk-free interest rate	1.3 %
Expected dividend yield	— %
Remaining performance period (in years)	7.0
Expected volatility	55.0 %
Estimated grant date fair value (per share)	$ 0.98 – 4.95
Target performance (number of shares)	9,070,269

During the year ended December 31, 2021, one of the executive officers resigned from the Company, forfeiting his market-based RSUs. The service condition was not met prior to his resignation, so no stock-based compensation expense was recorded for this award. No market-based RSUs vested or were forfeited during the three and nine months ended September 30, 2022. As of September 30, 2022, 6,802,702 market-based RSUs remain outstanding.

Liability-Classified Share-Based Arrangement

During the year ended December 31, 2021, the Compensation Committee of the Company's Board of Directors provided performance goals and achievement criteria to certain key employees. If these performance criteria were met, the Company committed to issue RSUs with a target fair value of $8.5 million on the future grant date. The awards were to vest upon prescribed service milestones of the employee subsequent to the achievement of the specified performance criteria. During the nine months ended September 30, 2022, the designated employees terminated employment and the liability-classified awards were forfeited. As of September 30, 2022, there is no fair value associated with these awards. The liability-classified awards have been excluded from the potentially dilutive securities table.

Bonus Program

In June 2022, the Compensation Committee approved an amendment to the Company's bonus program ("2022 Bonus Program"). Certain employees were granted dollar bonus amounts, which are to be paid out in RSUs. The number of RSUs awarded will be determined using the closing price of the Company's Common Stock on the date of the Board's final certification of the Company's performance attainment and awards to be issued to each employee.

The Company has accounted for these awards as liability-based awards, since the monetary value of the obligation associated with the award is based predominantly on a fixed monetary amount known at inception, and it has an unconditional obligation that it must or may settle by issuing a variable number of its equity shares. The Company will recognize stock-based compensation expense over the employees' requisite service period, based on the expected attainment of the Company-wide targets. As of September 30, 2022, the Company has accrued $3.4 million associated with these awards, which is recorded in accrued expenses and other current liabilities in the condensed consolidated balance sheets. The Company has recorded stock-based compensation expense of $1.2 million and $3.4 million for the three and nine months ended September 30, 2022, which includes the reclassification of $1.2 million bonus expense recorded during the three months ended March 31, 2022, that was not previously classified as stock-based compensation expense prior to the amendment of the 2022 Bonus Plan.

Stock-Based Compensation Expense

Total stock-based compensation expense related to all of the Company's stock-based awards granted is reported in the consolidated statements of operations as follows (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Research and development[1]	$ 4,355	$ 4,450	$ 21,872	$ 7,205
General and administrative expense	3,899	3,138	11,681	5,332
Sales and marketing expense	3,052	1,732	5,725	2,653
Cost of sales	734	631	1,892	977
Total stock-based compensation expense	$ 12,040	$ 9,951	$ 41,170	$ 16,167

[1] Includes $7.3 million of stock-based compensation expense during the nine months ended September 30, 2022, incurred in connection with the Initiative described in *Note 24. Restructuring Charges*.

During the three and nine months ended September 30, 2022, the Company recognized $1.2 million and $3.4 million of stock-based compensation expense associated with liability classified awards related to the 2022 Bonus Program. During the three and nine months ended September 30, 2021, the Company did not recognize any stock-based compensation expense associated with liability classified awards.

There were 21,447,243 shares available for award under the 2020 Plan at September 30, 2022.

21. RELATED PARTY TRANSACTIONS

As a result of the acquisition of Dental Arts Labs, the Company assumed certain lease agreements with a related party for facilities in Peoria, Illinois used for research and development and administrative purposes. As of September 30, 2022, the Company recorded $3.3 million of right of use asset and lease liability. During the three and nine months ended September 30, 2022, the Company paid lease expense of $0.1 million and $0.4 million, respectively, to the related party. The Company's annual commitment related to these lease agreements is $0.5 million.

As a result of the acquisition of Brewer Dental, the Company assumed a lease agreement with a related party for a laboratory facility in Tulsa, Oklahoma. As of September 30, 2022, the Company recorded $0.6 million of right of use asset and lease liability. During the three and nine months ended September 30, 2022, the Company paid immaterial lease expense and lease expense of $0.1 million, respectively, to the related party. The Company's annual commitment related to this lease agreement is $0.1 million.

As a result of the acquisition of May Dental, the Company assumed certain lease agreements with a related party for laboratory facilities in Fenton, Missouri. As of September 30, 2022, the Company recorded $1.2 million of right of use asset and lease liability. During the three and nine months ended September 30, 2022, the Company paid immaterial lease expense and lease expense of $0.1 million, respectively, to the related party. The Company's annual commitment related to this lease agreement is $0.2 million.

The Company sells products to Lightforce Orthodontics which is affiliated with a member of the Company's Board of Directors. Management believes the sales were conducted on terms equivalent to those prevailing in an arm's-length transaction. During the three and nine months ended September 30, 2022, the Company recognized $0.3 million and $0.9 million of revenue, respectively. As of September 30, 2022, the Company has an account receivable balance of $0.2 million with Lightforce Orthodontics.

22. SEGMENT INFORMATION

In its operation of the business, management, including the Company's chief operating decision maker, who is also Chief Executive Officer, reviews the business as one segment. The Company currently ships its product to markets in the Americas, Europe Middle East and Africa ("EMEA"), and Asia Pacific ("APAC"). Disaggregated revenue data for those markets is as follows (in thousands):

Revenue for the three months ended September 30, 2022

	Americas	EMEA	APAC	Total
Products	$ 29,615	$ 9,105	$ 4,217	$ 42,937
Services	2,457	1,279	413	4,149
Total	$ 32,072	$ 10,384	$ 4,630	$ 47,086

Revenue for the three months ended September 30, 2021

	Americas	EMEA	APAC	Total
Products	$ 17,556	$ 5,031	$ 1,362	$ 23,949
Services	1,005	327	157	1,489
Total	$ 18,561	$ 5,358	$ 1,519	$ 25,438

Revenue for the nine months ended September 30, 2022

	Americas	EMEA	APAC	Total
Products	$ 94,958	$ 29,017	$ 11,110	$ 135,085
Services	8,001	4,427	953	13,381
Total	$ 102,959	$ 33,444	$ 12,063	$ 148,466

Revenue for the nine months ended September 30, 2021

	Americas	EMEA	APAC	Total
Products	$ 33,907	$ 11,326	$ 6,587	$ 51,820
Services	2,615	923	370	3,908
Total	$ 36,522	$ 12,249	$ 6,957	$ 55,728

During the three and nine months ended September 30, 2022 and 2021, the Company recognized the following revenue from service contracts and cloud-based software licenses over time, and hardware and consumable product shipments and subscription software at a point in time (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Revenue recognized at a point in time	$ 42,937	$ 23,949	$ 135,085	$ 51,820
Revenue recognized over time	4,149	1,489	13,381	3,908
Total	$ 47,086	$ 25,438	$ 148,466	$ 55,728

The Company's operations are principally in the United States. The locations of long-lived assets, including property, plant and equipment, net and operating lease right-of-use assets, are summarized as follows (in thousands):

	September 30, 2022	December 31, 2021
Americas	$ 59,492	$ 58,355
EMEA	15,526	11,289
APAC	5,395	6,861
Total long-lived assets	$ 80,413	$ 76,505

23. NET LOSS PER SHARE

The Company computes basic loss per share using net loss attributable to Common Stockholders and the weighted-average number of Common Stock shares outstanding during each period. Diluted earnings per share include shares issuable upon exercise of outstanding stock options and stock-based awards where the conversion of such instruments would be dilutive.

	Three Months Ended September 30,		Nine Months Ended September 30,	
(in thousands, except per share amounts)	2022	2021	2022	2021
Numerator for basic and diluted net loss per share:				
Net loss	$ (60,774)	$ (66,879)	$ (427,990)	$ (169,167)
Denominator for basic and diluted net loss per share:				
Weighted-average shares	316,008	260,556	313,902	251,468
Net loss per share—Basic and Diluted	$ (0.19)	$ (0.26)	$ (1.36)	$ (0.67)

The Company's potential dilutive securities, which include outstanding Common Stock options, unvested restricted stock units, unvested restricted stock awards and outstanding Common Stock warrants, have been excluded from the computation of diluted net loss per share as the effect would be to reduce the net loss per share. Therefore, the weighted-average number of common shares outstanding used to calculate both basic and diluted net loss per share attributable to common stockholders is the same. The Company excluded the following potential common shares, presented based on amounts outstanding as of September 30, 2022 and 2021, from the computation of diluted net loss per share attributable to common stockholders because including them would have an anti-dilutive effect (in thousands):

	Nine Months Ended September 30,	
	2022	2021
Common Stock options outstanding	9,020	14,500
Unvested restricted stock units outstanding	19,032	8,311
Unvested restricted stock awards outstanding	123	348
6.0% Convertible Senior Notes due 2027	86,466	—
Total shares	114,641	23,159

The dilution table above excludes RSUs to be awarded under the Company's 2022 Bonus Program, which is expected to have an impact on its outstanding awards in the first quarter of 2023. Refer to *Note 20. Stock-Based Compensation* for further details on the Company's Bonus Program.

24. RESTRUCTURING CHARGES

In June 2022, the Board of Directors approved a strategic integration and cost optimization initiative that includes a global workforce reduction of approximately 12%, facilities consolidation, and other operational savings measures (the "Initiative"). The purpose of the Initiative is to streamline the Company's operational structure, reducing its operating expenses and managing its cash flows. The Company has commenced workforce reductions in the United States and is reviewing workforce changes in other countries, the timing of which will vary according to local regulatory requirements. The Company is also conducting a facility rationalization assessment and assessing other operational savings measures, including discontinued product lines. The Company anticipates that the Initiative will be substantially complete by the end of 2023.

During the nine months ended September 30, 2022, the Company recorded the following activity in accrued expenses and other current liabilities on the balance sheet (in thousands):

	Nine Months Ended September 30, 2022
Accrued expenses, January 1, 2022	$ —
Restructuring charges	12,782
Cash payments	(1,478)
Stock-based compensation	(7,313)
Inventory write-off	(3,085)
Accrued expenses, September 30, 2022	$ 906

During the three and nine months ended September 30, 2022, the Company recorded restructuring charges of $12.8 million related to employee severance, benefits and related costs, which were expensed as follows (in thousands):

	Three Months Ended September 30, 2022	Nine Months Ended September 30, 2022
Cost of goods sold	$ 3,085	$ 3,126
Research and development[1]	—	8,117
Sales and marketing	—	667
General and administrative	—	489
Interest and other (expense) income, net	—	383
Total restructuring charges[2]	$ 3,085	12,782

[1] Includes $7.3 million of stock-based compensation expense incurred in connection with the Initiative.
[2] Lease termination costs associated with the Initiative have yet to be determined, pending completion of the facility rationalization assessment. Other costs related to operational savings measures associated with the Initiative have yet to be determined.

As of September 30, 2022, the Company had $0.9 million of restructuring charges, recorded in accrued expenses and other current liabilities in the condensed consolidated balance sheet.

In October 2022, the Company continued this initiative with further workforce reductions. As a result of these reductions, the Company incurred an additional $1.0 million of expense related to employee severance, benefits and related costs.

25. SUBSEQUENT EVENTS

On October 21, 2022, the Company appointed Jason Cole as its Chief Financial Officer and Treasurer. Mr. Cole's employment with the Company commenced on October 31, 2022, and Mr. Cole will assume the title Chief Financial Officer and Treasurer and the responsibilities of the Company's principal financial officer and principal accounting officer effective November 10, 2022.

On November 6, 2022, Arjun Aggarwal and the Company agreed Mr. Aggarwal will step down from his position as Executive Vice President, Corporate Development, after completing a transition period during which Mr. Aggarwal will serve as the Company's Executive Vice President, Corporate Development until January 2, 2023. Mr. Aggarwal's departure is not the result of any disagreement with the Company on any matter relating to the Company's operations, policies, or practices.

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

This Quarterly Report on Form 10-Q contains forward-looking statements. All statements contained in this Quarterly Report on Form 10-Q other than statements of historical fact, including statements regarding our future operating results and financial position, our business strategy and plans, market growth, trends, events, and our objectives for future operations, are forward-looking statements. The words "may," "will," "expect," "anticipate," "believe," "intend," "project," "could," "would," "estimate," "potential," "continue," "plan," "target," or the negative of these words or similar expressions are intended to identify forward-looking statements.

The forward-looking statements included herein are based on current expectations of management. Actual results may differ from those expressed in forward-looking statements due to additional factors, including those set forth in Item 1A. "Risk Factors" elsewhere in this Quarterly Report on Form 10-Q. Although we believe that expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, performance, or achievements. The events and circumstances reflected in our forward-looking statements may not be achieved or occur, and actual results could differ materially from those projected in the forward-looking statements. Moreover, we operate in an evolving environment. New risk factors and uncertainties may emerge from time to time, and it is not possible for management to predict all risk factors and uncertainties. As a result of these factors, we cannot assure you that the forward-looking statements in this Quarterly Report on Form 10-Q will prove to be accurate. Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances, or otherwise.

You should read this Quarterly Report on Form 10-Q completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements.

Business Overview

Desktop Metal is pioneering a new generation of additive manufacturing technologies focused on Additive Manufacturing 2.0, the volume production of end use parts. We offer a comprehensive portfolio of integrated additive manufacturing solutions comprised of hardware, software, materials and services with support for metals, polymers, elastomers, ceramics, sands, composites, wood and biocompatible materials. Our solutions span use cases across the product life cycle, from product development to mass production and aftermarket operations, and they address an array of industries, including automotive, healthcare and dental, consumer products, heavy industry, aerospace, machine design and research and development.

Our growth strategy begins with a commitment to research and development. Since our founding in 2015, we have invested significant resources in research and development towards building an extensive portfolio of proprietary and differentiated technologies with a focus on making additive manufacturing an easy-to-use, economic and scalable solution. These technologies represent the cornerstones of our future product introductions, are critical to enhancing our existing offerings, and are supported by over 950 patents or pending patent applications. Our additive manufacturing platforms, which leverage these technologies for the production of tools and end-use parts, enable businesses to address their specific goals through a range of solutions that span price points, throughput levels and operating environments.

Our product platforms offer several key advantages over competitive additive manufacturing systems including breakthrough print speeds, competitive part costs, accessible workflows and software, turnkey solutions and support for an extensive library of qualified materials, the sale of which represent a recurring revenue stream from customers of our additive manufacturing solutions in addition to system consumables and other services, such as installation, training and technical support. As a result of these strengths, our solutions are lowering the barriers to adopting additive manufacturing and unlocking new applications where conventional manufacturing has customarily held cost and volume advantages. Across printers, parts and materials, we intend to continue investing to advance our current technology portfolio and develop new technologies that allow us to serve a broader customer base and reach new verticals, thereby expanding our addressable market and driving adoption of Additive Manufacturing 2.0.

We leverage our core competencies in technology innovation and product development by marketing and selling our Additive Manufacturing 2.0 solutions through a leading global distribution network, managed and augmented by our own internal sales and marketing teams. This distribution network, which covers over 65 countries around the world, is composed of sales and distribution professionals with decades of experience in digital manufacturing technologies and works alongside our direct sales force to market and sell products across a range of industries and price points. Similarly, our internal manufacturing and supply chain teams to work

collaboratively with our internal engineering department and third-party contract manufacturers to scale up initial prototypes for commercialization and volume commercial shipments. Together, our hybrid distribution and manufacturing approaches allow us to produce, sell and service our products at-scale in global markets and create substantial operating leverage as we execute our strategy.

Our proprietary technology solutions also serve as the foundation for product parts offerings in which we which we directly manufacture parts for sale to our customers with a focus on key applications and verticals in which additive manufacturing can provide significant design, performance, cost and supply chain advantages relative to conventional manufacturing. These offerings will enable us to provide a more holistic suite of solutions for our customers and enable the accelerated adoption of our Additive Manufacturing 2.0 solutions across select high-value production applications, which we refer to as “killer apps”, including, but not limited to, medical and dental devices, fluid power systems, and sustainable, end-use wood parts. We believe such offerings will not only create a high-margin revenue stream, but will also facilitate lead generation for our additive manufacturing systems at scale and enable high-performance and specialized applications using new materials ahead of broader market introduction.

Operating Results

For the three and nine months ended September 30, 2022, we recognized revenues of $47.1 million and $148.5 million, respectively, and incurred net losses of $60.8 million and $428.0 million, respectively. As of September 30, 2022, we used cash in operating activities of $150.8 million, and we ended the period with $217.3 million of cash, cash equivalents, and short-term investments. As of September 30, 2022, we had $67.0 million in cash and cash equivalents, $150.3 million in short-term liquid investments, and current liabilities of $98.3 million.

Recent Developments

ExOne Acquisition

On November 12, 2021, we acquired The ExOne Company, or ExOne, pursuant to an Agreement and Plan of Merger dated August 11, 2021. The total purchase price was $613.0 million consisting of cash consideration of $201.4 million and 48,218,063 shares of our Class A Common Stock with a fair value of $411.6 million as of the close of business on the transaction date.

Convertible Debt Offering

On May 13, 2022, we issued $100.0 million principal amount of our 6.0% Convertible Senior Notes due 2027 (“2027 Notes”). The 2027 Notes were issued pursuant to, and are governed by, an indenture, dated as of May 13, 2022, between us and U.S. Bank Trust Company, National Association, as trustee. Pursuant to the purchase agreement between us and the initial purchasers of the 2027 Notes, we granted the initial purchasers an option to purchase up to an additional $15.0 million principal amount of 2027 Notes, which was exercised on May 19, 2022.

Restructuring

On June 10, 2022, the Board of Directors approved a strategic integration and cost optimization initiative that includes a global workforce reduction of approximately 12%, facilities consolidation, and other operational savings measures (the “Initiative”). The purpose of the Initiative is to streamline our operational structure, reducing our operating expenses and managing our cash flows. We have commenced workforce reductions in the United States and are reviewing workforce changes in other countries, the timing of which will vary according to local regulatory requirements. We are also conducting a facility rationalization assessment and assessing other operational savings measures. Lease termination costs associated with the Initiative have yet to be determined, pending completion of the facility rationalization assessment. Other costs related to operational savings measures associated with the Initiative have yet to be determined.

As a result of the Initiative, we anticipate $20.0 million of cost savings to be realized in the second half of 2022 and at least $100.0 million of aggregate cost savings to be realized from June 2022 through June 2024. We anticipate that the Initiative will be substantially complete by the end of 2023.

COVID-19

In March 2020, the World Health Organization declared the outbreak of COVID-19 a pandemic. In response to the pandemic, governments around the world implemented safety precautions which included quarantines, travel restrictions, business closures, cancellations of public gatherings and other measures as they deemed necessary. Many organizations and individuals, including our company and employees, took additional steps to avoid or reduce infections, including limiting travel and staying home from work. These measures disrupted normal business operations and had significant negative impacts on businesses and financial markets worldwide. In 2021, with the availability of vaccines against COVID-19, restrictions on social, business travel and government activities and functions in certain areas of the world began to be lifted, but infection rates continue to fluctuate and new variants continue to appear, leading to continued uncertainty about the pandemic. While we have largely returned to our normal operations, we continue to monitor our operations and government recommendations to maintain readiness to implement modifications if conditions warrant.

Early in the COVID-19 pandemic we experienced several adverse impacts, including extended sales cycles to close new orders for our products, delays in shipping and installing orders due to closed facilities and travel limitations and delays in collecting accounts receivable. In particular, businesses across an array of vertical markets temporarily reduced capital expenditure budgets globally as they sought to preserve liquidity to ensure the longevity of their own operations, which we believe temporarily impacted demand for purchases of our additive manufacturing solutions. In addition, facility closures at our third-party contract manufacturers and key suppliers caused delays and disruptions in product manufacturing, which impacted our costs and our ability to ship products purchased by our customers in a timely manner. While we have experienced some improvement from the severity of these negative impacts, the ongoing pandemic may continue to impact business operations worldwide, including as a result of port congestion, supplier delays and labor shortages, which may increase our costs and impact our path to profitability.

In the long-term, we believe that the COVID-19 pandemic and the subsequent disruptions in global supply chains and logistics networks will encourage organizations to reassess their supply chain structure and may accelerate their adoption of solutions such as additive manufacturing, which could allow for greater flexibility through decentralized production capabilities, on-demand inventory resiliency, reductions in supply chain complexity and a reduced reliance on overseas manufacturing.

Key Factors Affecting Operating Results

We believe that our performance and future success depend on many factors that present significant opportunities for us, but also pose risks and challenges, including those discussed below and in "*Risk Factors*" section of this Quarterly Report on Form 10-Q.

Adoption of our Additive Manufacturing Solutions

We believe the world is at an inflection point in the adoption of additive manufacturing solutions and that we are well-positioned to take advantage of this opportunity across an array of industries due to our proprietary technologies and global distribution capabilities. We expect that our results of operations, including revenue and gross margins, will fluctuate for the foreseeable future as businesses continue to shift away from conventional manufacturing processes towards additive manufacturing for end-use parts. Our turnkey and volume production solutions are designed to empower businesses to realize the full benefits of additive manufacturing at-scale, including geometric and design flexibility, mass customization and supply chain engineering, among others. The degree to which potential and current customers recognize these benefits and invest in our solutions will affect our financial results.

Pricing, Product Cost and Margins

We offer customers a range of additive manufacturing solutions spanning multiple price points, materials, throughput levels, operating environments and technologies to enable them to find the solution that achieves their specific goals. Pricing for these products may vary by region due to market-specific supply and demand dynamics and product lifecycles, and sales of certain products have, or are expected to have, higher gross margins than others. As a result, our financial performance depends, in part, on the mix of products we sell during a given period. In addition, we are subject to price competition, and our ability to compete in key markets will depend on the success of our investments in new technologies and cost improvements as well as our ability to efficiently and reliability introduce cost-effective additive manufacturing solutions for our customers.

Continued Investment and Innovation

We believe that we are a leader in mass production and turnkey additive manufacturing solutions, offering breakthrough technologies that enable high throughput and ease-of-use through our broad product portfolio. Our performance is significantly dependent on the investment we make in our research and development efforts and on our ability to be at the forefront of the additive manufacturing industry. It is essential that we continually identify and respond to rapidly evolving customer requirements, develop and introduce innovative new products, enhance existing products and generate customer demand for our solutions. We believe that investment in our additive manufacturing solutions will contribute to long-term revenue growth, but it may adversely affect our near-term profitability.

Commercial Launch of Products

We continually invest in the development of new products and enhancements to existing products to meet constantly evolving customer demands, and during the nine months ended September 30, 2022, we launched a number of new products. Prior to commercialization of new products, we must complete final testing, procurement and manufacturing ramp up of these products in-house or at our third-party contract manufacturers, as applicable. Any delays in successful completion of these steps may impact our ability to generate revenue from these products.

Acquisitions and Transaction-Related Costs

Our growth relies heavily on the successful integration of acquired companies, including our ability to realize the anticipated business opportunities from combining operations in an efficient and effective manner. We expect that the results of our operations will fluctuate as we continue to integrate these businesses, and the technologies, products, and services that they offer. Additionally, our results of operations will be impacted by non-recurring transaction-related costs, including integration costs, severance costs and other costs associated with these acquisitions.

Macroeconomic Conditions

The current macroeconomic environment is impacting our customers financially and operationally. Customers and potential customers are facing significant financial pressure as supply chain constraints and inflation drive up operating costs and rising interest rates make access to credit more expensive. In recent months, the consumer price index has increased substantially. In addition, during inflationary periods, interest rates have historically increased. In March 2022, the Federal Reserve began, and is expected to continue, to raise interest rates in an effort to curb inflation. As a consequence of these financial pressures, some customers may be lowering their capital investment plans and tightening their operational budgets, which may result in extended sales cycles, delayed purchasing decisions, and pricing pressure for our solutions. Higher interest rates may also impact our ability to obtain debt financing at attractive rates. While we reported revenue growth in the third quarter of 2022, we experienced less revenue growth than we expected, due to the negative impact of customers delaying purchase decisions amidst an uncertain macroeconomic backdrop.

Results of Operations

Comparison of the three months ended September 30, 2022, and September 30, 2021

Revenue

The following table presents the revenue of each of our revenue streams, as well as the percentage of total revenue and change from the prior year.

	For the Three Months Ended September 30,					
	2022		2021		Change in Revenues	
(Dollars in thousands)	Revenue	% of Total	Revenue	% of Total	$	%
Products Revenue	$ 42,937	91 %	$ 23,949	94 %	$ 18,988	79 %
Services Revenue	4,149	9 %	1,489	6 %	2,660	179 %
Total Revenue	**$ 47,086**	**100 %**	**$ 25,438**	**100 %**	**$ 21,648**	**85 %**

Total revenue for the three months ended September 30, 2022 and 2021 was $47.1 million and $25.4 million, respectively, an increase of $21.7 million, or 85%. The increase in total revenue was attributable to an increase in revenue from both products and services.

We sold more products during the three months ended September 30, 2022, as compared to the three months ended September 30, 2021, leading to an approximately 79% increase in product revenue. This was primarily the result of an increase in unit shipments across a more varied product mix during the third quarter of 2022 and additional revenue in connection with acquisitions that occurred during 2021.

Services revenue increased approximately 179% during the three months ended September 30, 2022, as compared to the three months ended September 30, 2021, primarily due to an increase in support and installation revenue from increased shipments during the period and additional revenue in connection with acquisitions.

The following table presents revenue by geographic region, as well as the percentage of total revenue and change from the prior period.

	For the Three Months Ended September 30,					
	2022		2021		Change in Revenues	
(Dollars in thousands)	Revenue	% of Total	Revenue	% of Total	$	%
Americas	$ 32,072	68 %	$ 18,561	73 %	$ 13,511	73 %
EMEA (Europe, the Middle East and Africa)	10,384	23 %	5,358	21 %	5,026	94 %
APAC (Asia-Pacific)	4,630	10 %	1,519	6 %	3,111	205 %
Total Revenue	**$ 47,086**	**101 %**	**$ 25,438**	**100 %**	**$ 21,648**	**85 %**

Total revenue increased during the three months ended September 30, 2022, compared to the three months ended September 30, 2021, due to an increase in unit shipments in all regions across a more varied product mix and additional revenue in connection with acquisitions.

Cost of Sales

Total cost of sales during the three months ended September 30, 2022 and 2021 was $47.4 million and $21.5 million, respectively, an increase of $25.9 million or 120%. The increase in total cost of sales was driven primarily by an increase in product cost of sales, which resulted from increased product sales.

Gross Profit and Gross Margin

The following table presents gross profit (loss) by revenue stream, as well as change in gross profit dollars from the prior period.

	For the Three Months Ended September 30,		Change in Gross Profit	
	2022	2021		
(Dollars in thousands)	Gross Profit		$	%
Products	$ (702)	$ 3,499	$ (4,201)	(120)%
Services	393	456	(63)	(14)%
Total	**$ (309)**	**$ 3,955**	**$ (4,264)**	**(108)%**

Total gross profit (loss) during the three months ended September 30, 2022 and 2021 was ($0.3) million and $4.0 million, respectively. The decrease in gross profit of $4.3 million was driven by reduced absorption of fixed overhead, a less favorable product mix sold and increases in transportation and freight costs. Additionally, we incurred a one-time excess and obsolescence charge of $3.1 million related to the Initiative described above.

The following table presents gross margin by revenue stream, as well as the change in gross margin from the prior period.

	For the Three Months Ended September 30,		Change in Gross Margin	
	2022	2021	Percentage Points	%
	Gross Margin			
Products	(2)%	15 %	(0.17)	(113)%
Services	9 %	31 %	(0.22)	(71)%
Total	**(1)%**	**16 %**	**(0.17)**	**(106)%**

Total gross margin for the three months ended September 30, 2022 and 2021 was (1)% and 16%, respectively. The decrease in total gross margin was primarily due to one-time excess and obsolescence charges in connection with the Initiative described above, an increase in amortization expense within cost of sales from acquisitions, and a less favorable product mix.

Research and Development

Research and development expenses during the three months ended September 30, 2022 and 2021 were $22.4 million and $19.3 million, respectively, an increase of $3.1 million, or 16%. The increase in research and development expenses was largely due to 2021 acquisitions which added $2.8 million in research and development expenses as well as a $0.9 million increase in payroll costs associated with additional hiring at the end of 2021. The increase is partially offset by a decrease of $0.6 million in stock compensation costs associated with the Initiative described above.

Sales and Marketing

Sales and marketing expenses during the three months ended September 30, 2022 and 2021 were $16.2 million and $13.2 million, respectively, an increase of $3.0 million, or 23%. The increase in sales and marketing expenses was primarily due to increased expense related to acquired entities of $2.4 million. In addition, compensation costs increased $2.0 million related to sales personnel hiring to support the launch and commercialization of new products. We incurred $0.9 million of restructuring charges included in sales and marketing expenses in connection with the Initiative described above. Additionally, there was growth of $0.6 million in marketing program spend driven primarily by the commercialization of new products and related marketing efforts. These increases were partially offset by a reduction in partner commission expenses of $1.1 million.

General and Administrative

General and administrative expenses during the three months ended September 30, 2022 and 2021 were $18.9 million and $19.8 million, respectively, an decrease of $0.9 million, or 5%. The decrease in general and administrative expenses was primarily due to a decrease of $6.7 million in accounting, auditing and legal fees due to a reduction in merger and acquisition activity. This decrease was partially offset by an increase in expense related to acquired entities of $2.7 million. Additionally, stock-based compensation costs increased by $0.8 million, attributable to the amendment to the 2022 bonus program. We incurred $0.3 million in restructuring charges included in general and administrative expenses in connection with the Initiative described above.

In-Process Research and Development Assets Acquired

There were no in-process research and development assets acquired during the three months ended September 30, 2022. We recognized $15.2 million of in-process research and development assets acquired during the three months ended September 30, 2021, attributable to the Meta Additive acquisition in 2021, in which we paid $15.2 million in cash, inclusive of transaction costs. As the acquired in-process research and development assets were deemed to have no current or alternative future use, the entire amount was recognized as expense in the consolidated statement of operations for the three months ended September 30, 2021.

Goodwill Impairment

There was no goodwill impairment charge recorded during the three months ended September 30, 2022 and 2021.

Change in Fair Value of Warrant Liability

There was no change in fair value of warrant liability during the three months ended September 30, 2022, and 2021. As of March 2, 2021, all Private Placement Warrants were exercised and there was no outstanding warrant liability.

Interest Expense

Interest expense during the three months ended September 30, 2022 and 2021 was $0.7 million and $0.0 million, respectively, an increase of $0.7 million. Interest expense increased due to the increase in accrued interest on the 2027 Notes.

Interest and Other (Expense) Income, Net

Interest and other (expense) income, net during the three months ended September 30, 2022 and 2021 was ($1.7) million and ($3.8) million, respectively. The decrease during the three months ended September 30, 2022, is attributable to a loss on the investment in equity securities of a publicly-traded company.

Income Taxes

We recorded an income tax expense of $0.6 million during the three months ended September 30, 2022, compared to an income tax benefit of $0.5 million during for the three months ended September 30, 2021. The increase was primarily due to the valuation allowance provided against certain German deferred tax assets during the three months ended September 30, 2022.

We have provided a valuation allowance for all of our deferred tax assets as a result of our historical net losses in the jurisdictions in which we operate, except for Japan and Belgium. We continue to assess our future taxable income by jurisdiction based on our recent historical operating results, the expected timing of reversal of temporary differences, various tax planning strategies that we may be able to enact in future periods, the impact of potential operating changes on our business and our forecast results from operations in future periods based on available information at the end of each reporting period. To the extent that we are able to reach the conclusion that deferred tax assets are realizable based on any combination of the above factors in a single, or multiple, taxing jurisdictions, a reversal of the related portion of our existing valuation allowances may occur.

Comparison of the nine months ended September 30, 2022 and 2021

The following table presents the revenue of each of our revenue streams, as well as the percentage of total revenue and change from the prior year.

	For the Nine Months Ended September 30,					
	2022		2021		Change in Revenues	
(Dollars in thousands)	Revenue	% of Total	Revenue	% of Total	$	%
Product Revenue	$ 135,085	91 %	$ 51,820	93 %	$ 83,265	161 %
Service Revenue	13,381	9 %	3,908	7 %	9,473	242 %
Total Revenue	**$ 148,466**	**100 %**	**$ 55,728**	**100 %**	**$ 92,738**	**166 %**

Total revenue for the nine months ended September 30, 2022 and 2021 was $148.5 million and $55.7 million, respectively, an increase of $92.8 million, or 167%. The increase in total revenue was attributable to an increase in revenue from both products and services.

We sold more products during the nine months ended September 30, 2022, as compared to the nine months ended September 30, 2021, leading to an approximately 161% increase in product revenue. This was primarily the result of an increase in unit shipments across a more varied product mix during the first two quarters of 2022 and additional revenue in connection with acquisitions that occurred during 2021.

Services revenue increased approximately 242% during the nine months ended September 30, 2022, as compared to the nine months ended September 30, 2021, primarily due to an increase in support and installation revenue from increased shipments during the period and additional revenue in connection with acquisitions.

The following table presents revenue by geographic region, as well as the percentage of total revenue and change from the prior period.

	For the Nine Months Ended September 30,				Change in Revenues	
	2022		2021			
(Dollars in thousands)	Revenue	% of Total	Revenue	% of Total	$	%
Americas	$ 102,959	69 %	$ 36,522	66 %	$ 66,437	182 %
EMEA	33,444	23 %	12,249	22 %	21,195	173 %
APAC	12,063	8 %	6,957	12 %	5,106	73 %
Total Revenue	**$ 148,466**	**100 %**	**$ 55,728**	**100 %**	**$ 92,738**	**166 %**

Total revenue increased during the nine months ended September 30, 2022, compared to the nine months ended September 30, 2021, due to an increase in unit shipments in all regions across a more varied product mix and additional revenue in connection with acquisitions.

Cost of Sales

Total cost of sales during the nine months ended September 30, 2022 and 2021 was $141.7 million and $50.0 million, respectively, an increase of $91.7 million or 183%. The increase in total cost of sales was driven primarily by an increase in product cost of sales, which resulted from greater product sales. Additionally, cost of sales increased $8.4 million due to amortization from intangible assets acquired through acquisitions that are included in cost of sales.

Gross Profit and Gross Margin

The following table presents gross profit by revenue stream, as well as change in gross profit (loss) dollars from the prior period.

	For the Nine Months Ended September 30,		Change in Gross Profit	
	2022	2021		
(Dollars in thousands)	Gross Profit (Loss)		$	%
Products	$ 4,631	$ 5,393	$ (762)	(14)%
Services	2,129	347	1,782	(514)%
Total	**$ 6,760**	**$ 5,740**	**$ 1,020**	**18 %**

Total gross profit during the nine months ended September 30, 2022 and 2021 was $6.8 million and $5.7 million, respectively. The increase in gross profit of $1.1 million was driven by revenue growth and a more favorable product mix sold, partially offset by one-time excess and obsolescence charges in connection with the Initiative described above.

The following table presents gross margin by revenue stream, as well as the change in gross margin from the prior period.

	For the Nine Months Ended September 30,		Change in Gross Margin	
	2022	2021	Percentage Points	%
	Gross Margin			
Products	3 %	10 %	(0.07)	(70)%
Services	16 %	9 %	0.07	(78)%
Total	**5 %**	**10 %**	**(0.05)**	**(50)%**

Total gross margin for the nine months ended September 30, 2022 and 2021 was 5% and 10%, respectively. The decrease in total gross margin was primarily due to one-time excess and obsolescence charges in connection with the Initiative described above, an increase in amortization expense within cost of sales from acquisitions, and a less favorable product mix.

Research and Development

Research and development expenses during the nine months ended September 30, 2022 and 2021 were $78.4 million and $45.8 million, respectively, an increase of $32.6 million, or 71%. The increase in research and development expenses was due primarily to an increase in stock compensation expense of $14.3 million, attributable to the amendment to the 2022 bonus program, the acceleration of RSUs for certain key employees, in connection with the Initiative described above, and grants to new hires. The increase is also due in part to 2021 acquisitions, which added $15.0 million of research and development expenses. Additionally, we incurred $2.8 million of additional personnel costs related to hiring to support research operations and $0.6 million of restructuring charges included in research and development expenses in connection with the Initiative described above.

Sales and Marketing

Sales and marketing expenses during the nine months ended September 30, 2022 and 2021 were $56.3 million and $29.6 million, respectively, an increase of $26.7 million, or 90%. The increase in sales and marketing expenses was primarily due to increased expense related to acquired entities of $8.7 million. In addition, compensation costs increased $5.2 million related to sales personnel hiring to support the launch and commercialization of new products. Additionally, there was growth of $2.6 million in marketing program spend driven primarily by the commercialization of new products and related marketing efforts. We incurred $0.5 million of restructuring charges included in sales and marketing expenses in connection with the Initiative described above.

General and Administrative

General and administrative expenses during the nine months ended September 30, 2022 and 2021 were $62.5 million and $46.8 million, respectively, an increase of $15.7 million, or 34%. The increase in general and administrative expenses was primarily due to increased expense related to acquired entities of $15.0 million. Additionally, stock-based compensation costs increased by $6.3 million, attributable to the amendment to the 2022 bonus program and grants to new hires, and personnel costs increased $2.8 million due to new hires. We incurred $0.4 million in restructuring charges included in general and administrative expenses in connection with the Initiative described above. The increase in general and administrative expenses was partially offset by a decrease of $12.4 million in accounting, auditing and legal fees due to a reduction in merger and acquisition activity.

In-Process Research and Development Assets Acquired

There were no in-process research and development assets acquired during the nine months ended September 30, 2022. We recognized $25.4 million of in-process research and development assets acquired during the nine months ended September 30, 2021, attributable to the Beacon Bio acquisition, in which we paid $10.2 million in cash and share consideration and the Meta Additive acquisition, in which we paid $15.2 million in cash consideration. As the acquired in-process research and development assets were deemed to have no current or alternative future use, the entire amount was recognized as expense in the consolidated statement of operations for the nine months ended September 30, 2021.

Goodwill Impairment

Goodwill impairment charge of $229.5 million during the nine months ended September 30, 2022, represents an impairment charge to write down the carrying amount of the goodwill. There was no goodwill impairment charge recorded during the nine months ended September 30, 2021.

Change in Fair Value of Warrant Liability

There was no change in fair value of warrant liability during the nine months ended September 30, 2022, and a change in fair value of warrant liability of ($56.6) million during the nine months ended September 30, 2021. The change in fair value is the result of the remeasurement of the Private Placement Warrant liability prior to the cashless exercise of the Private Placement Warrants. The warrant liability increased $56.6 million as a result of the remeasurement, which resulted in the $56.6 million loss. As of March 2, 2021, all Private Placement Warrants were exercised and there was no outstanding warrant liability.

Interest Expense

Interest expense during the nine months ended September 30, 2022 and 2021 was $1.3 million and $0.1 million, respectively, an increase of $1.2 million. Interest expense increased due to the increase in accrued interest on the 2027 Notes.

Interest and Other Income, Net

Interest and other (expense) income, net during the nine months ended September 30, 2022 and 2021 and was ($8.4) million and ($3.2) million, respectively, a decrease of $5.2 million. The decrease is primarily due to a loss on the investment in equity securities of a publicly-traded company as well as an unrealized loss on other investments.

Income Taxes

We recorded an income tax benefit of $1.6 million during the nine months ended September 30, 2022, compared to an income tax benefit of $32.8 million during the nine months ended September 30, 2021. The decrease was primarily due to the partial release of the valuation allowance related to the deferred tax liability acquired in the EnvisionTEC and Adaptive 3D acquisitions during the nine months ended September 30, 2021.

We have provided a valuation allowance for all of our deferred tax assets as a result of our historical net losses in the jurisdictions in which we operate, except for Japan and Belgium. We continue to assess our future taxable income by jurisdiction based on our recent historical operating results, the expected timing of reversal of temporary differences, various tax planning strategies that we may be able to enact in future periods, the impact of potential operating changes on our business and our forecast results from operations in future periods based on available information at the end of each reporting period. To the extent that we are able to reach the conclusion that deferred tax assets are realizable based on any combination of the above factors in a single, or multiple, taxing jurisdictions, a reversal of the related portion of our existing valuation allowances may occur.

Non-GAAP Financial Information

In addition to our results determined in accordance with GAAP, we believe the below non-GAAP financial measures are useful in evaluating our operational performance. We use this non-GAAP financial information to evaluate our ongoing operations and for internal planning and forecasting purposes. We believe that this non-GAAP financial information, when taken collectively, may be helpful to investors in assessing our operating performance.

The non-GAAP financial information excludes, as applicable, stock-based compensation expense, amortization of acquired intangible assets, restructuring expenses, acquisition-related and other transactional charges, inventory step-up, in-process research and development assets acquired, goodwill impairment, change in fair value of investments and change in fair value of warrant liability. These items are normally included in the comparable measures calculated and presented in accordance with GAAP. Our management excludes these items when evaluating our ongoing performance and/or evaluating earnings potential, and therefore excludes them when presenting non-GAAP financial measures. Management uses non-GAAP financial measures to supplement our GAAP results.

Stock-based compensation is a non-cash expense relating to stock-based awards issued to executive officers, employees, and outside directors, consisting of options and restricted stock units. We exclude this expense because it is a non-cash expense and we assess our internal operations excluding this expense and believe it facilitates comparisons to the performance of other companies in our industry.

Amortization of acquired intangible assets is a non-cash expense that is impacted by the timing and magnitude of our acquisitions. We believe the assessment of our operations excluding these costs is relevant to an understanding of internal operations and to comparisons with the performance of other companies in our industry.

*Restructuring expense*s are costs related to strategic integration and cost optimization initiatives which include global workforce reductions, facilities consolidation, and other operational savings measures. We believe the assessment of our operations excluding these costs is relevant to an understanding of internal operations and to comparisons with the performance of other companies in our industry.

Acquisition-related and other transactional charges are direct costs related to potential and completed acquisitions, including transaction fees, due diligence costs, severance, professional fees, and integration activities. Other transactional charges include third-party costs related to structuring unusual transactions. The occurrence and amount of these costs will vary depending on the timing and size of acquisitions. We believe excluding acquisition-related costs facilitates the comparison of our financial results to our historical operating results and to other companies in our industry.

In-process research and development assets acquired are direct costs related to assets acquisitions where the intangible assets acquired were determined to have no alternative future use. This is a non-recurring expense and we believe excluding acquired in-process research and development facilitates the comparison of our financial results to our historical operating results and to other companies in our industry.

Goodwill impairment is a non-cash charge to write down the carrying amount of goodwill following a quantitative impairment assessment where it was determined that the estimated fair value of the reporting unit was less than its carrying amount. We believe the assessment of our operations excluding this charge is relevant to an understanding of internal operations and to comparisons with the performance of other companies in our industry.

Change in fair value of investments is a non-cash gain or loss impacted by the change in fair value of convertible debt instruments and the equity investment. We believe the assessment of our operations excluding this activity is relevant to an understanding of internal operations and to comparisons with the performance of other companies in our industry.

Change in fair value of warrant liability is a non-cash gain or loss impacted by the fair value of the Private Placement Warrants. We believe the assessment of our operations excluding this activity is relevant to an understanding of internal operations and to comparisons with the performance of other companies in our industry.

We use the below non-GAAP financial measures, and we believe that they assist our investors, to make period-to-period comparisons of our operational performance because they provide a view of our operating results without items that are not, in our view, indicative of our core operating results. We believe that these non-GAAP financial measures help illustrate underlying trends in our business, and we use the measures to establish budgets and operational goals for managing our business and evaluating our performance. We believe that providing non-GAAP financial measures also affords investors a view of our operating results that may be more easily compared to the results of other companies in our industry that use similar financial measures to supplement their GAAP results.

The items excluded from the non-GAAP financial measures often have a material impact on our financial results and such items often recur. Accordingly, the non-GAAP financial measures included in this Quarterly Report on Form 10-Q should be considered in addition to, and not as a substitute for, the comparable measures prepared in accordance with GAAP. The following tables reconcile each of these non-GAAP financial measures to its most closely comparable GAAP measure in our financial statements for the three and nine months ended September 30, 2022 and 2021:

	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
(Dollars in thousands)	2022	2021	2022	2021
GAAP gross margin	$ (309)	$ 3,955	$ 6,760	$ 5,740
Stock-based compensation included in cost of sales[1]	734	341	1,892	586
Amortization of acquired intangible assets included in cost of sales	5,877	2,515	17,817	5,841
Restructuring expense in cost of sales	3,085	—	3,126	—
Acquisition-related and other transactional charges included in cost of sales	—	—	1,148	—
Inventory step-up adjustment in cost of sales	—	—	1,496	—
Non-GAAP gross margin	$ 9,387	$ 6,811	$ 32,239	$ 12,167
GAAP operating loss	$ (57,819)	$ (63,594)	$ (419,868)	$ (142,049)
Stock-based compensation[2],[3]	12,040	9,951	41,170	16,167
Amortization of acquired intangible assets	9,069	4,604	28,522	11,172
Restructuring expense	3,085	—	5,086	—
Inventory step-up adjustment in cost of sales	—	—	1,496	—
Acquisition-related and other transactional charges	1,476	5,675	6,633	13,786
In-process research and development assets acquired	—	15,181	—	25,581
Goodwill impairment	—	—	229,500	—
Non-GAAP operating loss	$ (32,149)	$ (28,183)	$ (107,461)	$ (75,343)
GAAP net loss	$ (60,774)	$ (66,879)	$ (427,990)	$ (169,167)
Stock-based compensation[2],[3]	12,040	9,951	41,170	16,167
Amortization of acquired intangible assets	9,069	4,604	28,522	11,172
Restructuring expense	3,085	—	5,469	—
Inventory step-up adjustment in cost of sales	—	—	1,496	—
Acquisition-related and other transactional charges	1,476	5,675	6,633	13,786
In-process research and development assets acquired	—	15,181	—	25,581
Goodwill impairment	—	—	229,500	—
Change in fair value of investments	2,052	4,204	8,493	4,186
Change in fair value of warrant liability	—	—	—	56,576
Non-GAAP net loss	$ (33,052)	$ (27,264)	$ (106,707)	$ (41,699)

[1] Includes $0.1 million and $0.2 million of liability-award stock-based compensation expense for the three and nine months ended September 30, 2022, respectively.

[2] Includes $7.3 million of stock-based compensation expense associated with the Initiative for the nine months ended September 30, 2022.

[3] Includes $1.2 million and $3.4 million of liability-award stock-based compensation expense for the three and nine months ended September 30, 2022, respectively.

(Dollars in thousands)	For the Three Months Ended September 30, 2022	For the Three Months Ended September 30, 2021	For the Nine Months Ended September 30, 2022	For the Nine Months Ended September 30, 2021
GAAP operating expenses	$ 57,510	$ 67,549	$ 426,628	$ 147,789
Stock-based compensation included in operating expenses[(1),(2)]	(11,306)	(9,610)	(39,278)	(15,581)
Amortization of acquired intangible assets included in operating expenses	(3,192)	(2,089)	(10,705)	(5,330)
Restructuring expense included in operating expenses	—	—	(1,960)	—
Acquisition-related and other transactional charges included in operating expenses	(1,476)	(5,675)	(5,485)	(13,786)
In-process research and development assets acquired	—	(15,181)	—	(25,581)
Goodwill impairment	—	—	(229,500)	—
Non-GAAP operating expenses	$ 41,536	$ 34,994	$ 139,700	$ 87,511

(1) Includes $7.3 million of stock-based compensation expense associated with the Initiative for the nine months ended September 30, 2022.
(2) Includes $1.1 million and $3.2 million of liability-award stock-based compensation expense for the three and nine months ended September 30, 2022, respectively.

We define “EBITDA” as net loss plus net interest income, provision for income taxes, depreciation and amortization expense.

We define “Adjusted EBITDA” as EBITDA adjusted for change in fair value of warrant liability, change in fair value of investments, inventory step-up adjustment, stock-based compensation expense, restructuring expense, goodwill impairment and transaction costs associated with acquisitions.

We believe that the use of EBITDA and Adjusted EBITDA provides an additional tool for investors to use in evaluating ongoing operating results and trends because it eliminates the effect of financing, capital expenditures, and non-cash expenses such as stock-based compensation and warrants, and provides investors with a means to compare our financial measures with those of comparable companies, which may present similar non-GAAP financial measures to investors. However, you should be aware when evaluating EBITDA and Adjusted EBITDA that we may incur future expenses similar to those excluded when calculating these measures. In addition, our presentation of these measures should not be construed as an inference that our future results will be unaffected by unusual or non-recurring items. Our computation of these measures, especially Adjusted EBITDA, may not be comparable to other similarly titled measures computed by other companies because not all companies calculate these measures in the same fashion.

Because of these limitations, EBITDA and Adjusted EBITDA should not be considered in isolation or as a substitute for performance measures calculated in accordance with GAAP. We compensate for these limitations by relying primarily on our GAAP results and using EBITDA and Adjusted EBITDA on a supplemental basis. You should review the reconciliation of net loss to EBITDA and Adjusted EBITDA below and not rely on any single financial measure to evaluate our business.

The following table reconciles net loss to EBITDA and Adjusted EBITDA during the three and nine months ended September 30, 2022 and 2021:

(Dollars in thousands)	For the Three Months Ended September 30, 2022	For the Three Months Ended September 30, 2021	For the Nine Months Ended September 30, 2022	For the Nine Months Ended September 30, 2021
Net loss attributable to common stockholders	$ (60,774)	$ (66,879)	$ (427,990)	$ (169,167)
Interest (income) expense, net	680	(104)	1,281	(286)
Income tax expense (benefit)	598	(523)	(1,602)	(32,761)
Depreciation and amortization	12,692	6,488	38,294	15,576
In-process research and development assets acquired	—	15,181	—	25,581
EBITDA	**(46,804)**	**(45,837)**	**(390,017)**	**(161,057)**
Change in fair value of warrant liability	—	—	—	56,576
Change in fair value of investments	2,052	4,204	8,493	4,186
Inventory step-up adjustment	—	—	1,496	—
Stock-based compensation expense[(1),(2)]	12,040	9,951	41,170	16,167
Restructuring expense	3,085	—	5,469	—
Goodwill impairment	—	—	229,500	—
Acquisition-related and other transactional charges	1,476	5,675	6,633	13,786
Adjusted EBITDA	**$ (28,151)**	**$ (26,007)**	**$ (97,256)**	**$ (70,342)**

[(1)] Includes $7.3 million of stock-based compensation expense associated with the Initiative for the nine months ended September 30, 2022.
[(2)] Includes $1.2 million and $3.4 million of liability-award stock-based compensation for the three and nine months ended September 30, 2022, respectively.

Liquidity and Capital Resources

We have incurred a net loss in each of our annual periods since our inception, and we have an accumulated deficit of $996.6 million as of September 30, 2022. We incurred net losses of $428.0 million and $169.2 million during the nine months ended September 30, 2022 and 2021, respectively. We expect to continue to incur additional losses and negative cash flows from operations in the near term. As of September 30, 2022, we had $217.3 million in cash, cash equivalents, and short-term investments.

Since inception, we have received cumulative net proceeds from the Business Combination, the exercise of warrants, and the sale of our preferred and common stock of $973.4 million to fund our operations, and in May 2022 we received aggregate net proceeds of $111.4 million from the sale of 6.0% Convertible Senior Notes due 2027 as described below. As of September 30, 2022, our principal sources of liquidity were our cash, cash equivalents, and short-term investments of $217.3 million which are principally invested in money market funds and fixed income instruments.

In connection with the acquisition of Dental Arts Labs, we acquired a thirteen-month equipment financing agreement, or the Financing Agreement, in the amount of $0.5 million. The Financing Agreement provides for an advance payment of $0.5 million to secure equipment. Payments are made monthly under the Financing Agreement. As of September 30, 2022, we have made payments of $0.3 million on the Financing Agreement.

In connection with the acquisition of A.I.D.R.O., we acquired three loans, the Bank Loans, totaling $1.1 million in aggregate. The Bank Loans have term of 4.5 years and mature from September 2024 through September 2025, with interest rates ranging from 1.70% to 2.10%. Payments of principal and interest are made quarterly. As of September 30, 2022, we had paid $0.5 million and $0.6 million remains outstanding.

In May 2022, we issued $115.0 million principal amount of our 6.0% Convertible Senior Notes due 2027 (“2027 Notes”). The 2027 Notes were issued pursuant to, and are governed by, an indenture, dated as of May 13, 2022, between us and U.S. Bank Trust Company, National Association, as trustee. Pursuant to the purchase agreement between us and the initial purchasers of the Notes, we granted the initial purchasers an option to purchase up to an additional $15.0 million principal amount of 2027 Notes, which was exercised on May 19, 2022. We received aggregate net proceeds of $111.4 million from the sale of the 2027 Notes.

Our material cash requirements have consisted of operating activities, research and development costs, purchase price for acquisitions, transaction costs and capital expenditures. We expect our cash expenditures to increase in connection with our ongoing activities, particularly as we continue to develop and launch new products. As of September 30, 2022, we had inventory purchase commitments of $64.3 million, with the majority payable within 12 months. In addition, as of September 30, 2022, we had lease payment obligations of $24.2 million, with $5.4 million payable within 12 months.

Capital expenditures for the nine months ended September 30, 2022, totaled $8.2 million and consisted primarily of lab equipment and leasehold improvements. As of September 30, 2022, we had capital expenditure commitments of $0.3 million, all payable within 12 months. As of September 30, 2022, we had $67.0 million in cash and cash equivalents, and $150.3 million in short-term liquid investments. This liquid asset balance significantly exceeds our current liabilities of $98.3 million as of the same date. Our future cash requirements will depend on many factors including our revenue, research and development efforts, investments in, or acquisitions of, complementary or enhancing technologies or businesses, the impacts of the COVID-19 pandemic, the timing and extent of additional capital expenditures to invest in existing and new facilities, the expansion of sales and marketing and the introduction of new products.

We expect to continue to incur net losses and negative cash flows from operations, particularly as we continue to invest in commercialization and new product development. Additionally, we may engage in future acquisitions which may require additional capital, and we may also dispose of assets or certain of our businesses. We believe that our existing capital resources will be sufficient to support our operating plan and cash commitments for at least the next 12 months. This belief is based on assumptions that may change as a result of many factors currently unknown to us; however, we expect that we may need to further increase our capital resources by issuing additional shares of our capital stock or offering debt or other equity securities, including senior or subordinated notes, debt securities convertible into equity, or shares of preferred stock. There is no assurance that sources of financing will be available on a timely basis, or on satisfactory terms, or at all. If we are unable to raise additional funds or reduce costs when needed, we may be required to delay, reduce, or terminate our product development and commercialization efforts, or forego attractive acquisition opportunities.

We have, and intend to continue to, enact cost savings measures during 2022 to preserve capital. In June 2022, we announced a strategic integration and cost optimization initiative that includes a global workforce reduction of approximately 12%, facilities consolidation, and other operational savings measures. We have commenced workforce reductions in the United States and are reviewing workforce changes in other countries, the timing of which will vary according to local regulatory requirements. In October 2022, we further reduced our United States workforce. We are also conducting a facility rationalization assessment and assessing other operational savings measures. We are currently evaluating other potential specific initiatives we may undertake to reduce our operating expenses and manage our cash flows. We expect that these initiatives could include: disposing of certain of our assets, rationalizing our product portfolio, workforce adjustments based on changes to the business, manufacturing consolidation, improving our supply chain and logistics, improving our inventory management and consolidating certain of our facilities. We expect to incur costs in the near term in connection with these initiatives, including severance costs, lease termination costs and other costs to invest in operational improvements. These initiatives may not be successful, and they may not generate the cost savings we expect. Certain future events, such as a global recession, a material supply chain disruption or other events outside our control, may occur and could negatively impact our operating results and cash position and may require us to use our existing capital resources more quickly than we currently anticipate. These events may cause us to undertake additional cost savings measures or seek additional sources of financing.

Cash Flows

Since inception, we have primarily used proceeds from the Business Combination, issuances of preferred stock and debt instruments to fund our operations and complete acquisitions. The following table sets forth a summary of cash flows for the nine months ended September 30, 2022, and 2021:

(Dollars in thousands)	For the Nine Months Ended September 30, 2022	2021
Net cash used in operating activities	$ (150,789)	$ (110,059)
Net cash provided by (used in) investing activities	42,427	(407,122)
Net cash provided by financing activities	113,766	165,452
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(1,491)	(56)
Net change in cash, cash equivalents, and restricted cash	$ 3,913	$ (351,785)

Operating Activities

Net cash used in operating activities was $150.8 million for the nine months ended September 30, 2022, primarily consisting of $427.2 million of net losses, adjusted for non-cash items, which primarily included goodwill impairment of $229.5 million, depreciation and amortization expense of $38.3 million and stock-based compensation expense of $37.8 million, as well as a $33.7 million increase in cash consumed by working capital. This increase in cash consumed by working capital was primarily driven by an increase in inventory to support new product launches and commercialization of existing products.

Net cash used in operating activities was $110.1 million for the nine months ended September 30, 2021, primarily consisting of $169.2 million of net losses, adjusted for non-cash items, which primarily included loss on change in fair value of warrant liability of $56.6 million, acquisition of in-process research and development of $25.6 million, depreciation and amortization expense of $15.6 million and stock-based compensation expense of $16.2 million, as well as a $33.8 million increase in cash consumed by working capital. The increase in cash consumed by working capital was primarily driven by an increase in certain assets including accounts receivable, inventory and prepaid expenses and other current assets, alongside a decrease in certain liabilities including accounts payable, customer deposits, and deferred revenue. This increase in cash consumed by working capital was partially offset by a decrease in certain assets including prepaid expenses and other current assets and an increase in certain liabilities including accrued expenses and other current liabilities.

Investing Activities

Net cash provided by investing activities was $42.4 million for the nine months ended September 30, 2022, primarily consisting of proceeds from sales and maturities of marketable securities of $205.7 million, partially offset by purchases of marketable securities of $158.4 million. We also purchased $8.2 million of property and equipment, and received proceeds from other investments of $3.1 million.

Net cash used in investing activities was $407.1 million for the nine months ended September 30, 2021, primarily consisting of purchases of marketable securities of $330.9 million, offset by proceeds from sales and maturities of marketable securities of $163.9 million. We also paid $191.9 million for acquisitions, and $21.2 million to acquire in-process research and development, net of cash acquired. We invested $20.0 million in an equity investment and $3.6 million in other investments, and purchased $4.1 million of property and equipment.

Financing Activities

Net cash provided by financing activities was $113.8 million for the nine months ended September 30, 2022, consisting primarily of $115.0 million of proceeds from the issuance of the 2027 Notes, partially offset by $3.6 million of convertible note costs incurred in connection with the issuance of the 2027 Notes. We also received $3.0 million in proceeds from the exercise of stock options.

Net cash provided by financing activities was $165.5 million for the nine months ended September 30, 2021, consisting primarily of $170.6 million in proceeds from the exercise of public warrants and $5.2 million in proceeds from the exercise of stock options, offset by the repayment of the term loan for $10.0 million.

Critical Accounting Policies and Significant Estimates

There were no material changes in the first nine months of 2022 to the information provided under the heading “Critical Accounting Policies and Estimates” included in our Annual Report on Form 10-K for the year ended December 31, 2021.

Off-Balance Sheet Arrangements

In the normal course of operations, ExOne’s German subsidiary, ExOne GmbH, issues short-term financial guarantees and letters of credit to third parties in connection with certain commercial transactions requiring security through a credit facility with a German bank. At September 30, 2022, total outstanding financial guarantees and letters of credit issued were $4.0 million. For further discussion related to financial guarantees and letters of credit, refer to Note 17 in our condensed consolidated financial statements in this Quarterly Report on Form 10-Q.

We have no other off-balance sheet arrangements and do not utilize any “structured debt,” “special purpose” or similar unconsolidated entities for liquidity or financing purposes.

Recent Accounting Pronouncements

Information regarding recent accounting pronouncements is included in *Note 2. Summary of Significant Accounting Policies* to our condensed consolidated financial statements in this Quarterly Report on Form 10-Q.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

We are exposed to market risks from fluctuations in interest rates and foreign currency translation, which may adversely affect our results of operations and financial condition. We seek to minimize these risks through regular operating and financing activities and, if we consider it to be appropriate, through the use of derivative financial instruments. We do not purchase, hold or sell derivative financial instruments for trading or speculative purposes.

Interest Rate Risk

Our exposure to market risk for changes in interest rates relates primarily to our cash, cash equivalents and short-term investment portfolio. Our investment strategy is focused on preserving capital and supporting our liquidity requirements, while earning a reasonable market return. We invest in a variety of U.S. government securities, corporate debt securities, asset-backed securities, and commercial paper. The market value of our marketable securities may decline if current market interest rates rise. As of September 30, 2022, the fair value of our cash, cash equivalents, and short-term investments was $217.3 million. A 10% change in interest rates would have an immaterial impact on the fair value of our investment portfolio. Our marketable securities are recorded at fair value, and gains and losses from these securities are recognized within other comprehensive income as they occur.

Foreign Currency Risk

The majority of our operations in Europe and Asia use the local currency as the functional currency. We translate the financial statements of the operations in Europe in Asia to United States dollars and as such we are exposed to foreign currency risk. Currently, we do not use foreign currency forward contracts to manage exchange rate risk, as the amount subject to foreign currency risk is not material to our overall operations and results.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Under the supervision of our Chief Executive Officer and Chief Financial Officer, our management has evaluated the effectiveness of the design and operation of our "disclosure controls and procedures" (as defined in Rules 13a-15(e) and 15(d)-15(e) under the Exchange Act) as of the end of the period covered by this Quarterly Report on Form 10-Q. As described in our Annual Report on Form 10-K for the year ended December 31, 2021, we identified material weaknesses in our internal control over financial reporting. As a result of these material weaknesses, our Chief Executive Officer and Chief Financial Officer have concluded that, as of September 30, 2022, our disclosure controls and procedures are not effective to provide reasonable assurance that information required to be disclosed in the reports we file and submit under the Securities and Exchange Act is recorded, processed, summarized and reported as and when required.

Notwithstanding these material weaknesses noted above, our management, including our Chief Executive Officer and Chief Financial Officer, has concluded that our financial statements included in this Quarterly Report on Form 10-Q present fairly, in all material respects, our financial position, results of operations, and cash flows for the periods presented in accordance with accounting principles generally accepted in the United States of America.

Changes in Internal Control Over Financial Reporting

As a result of acquisitions during 2021, and related material weaknesses identified, we continue to review the internal controls of each of these subsidiaries and make appropriate changes as deemed necessary.

During the nine months ended September 30, 2022, we continued to implement certain internal controls in connection with remediation efforts related to the material weaknesses identified in our Annual Report on Form 10-K for the year ended December 31, 2021. Except as noted in the preceding paragraph, there were no changes to our internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) that occurred during the nine months ended September 30, 2022, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Limitations on Effectiveness of Internal Controls

Our management, including our Chief Executive Officer and Chief Financial Officer, does not expect that our disclosure controls and procedures or internal control over financial reporting will prevent all errors and all fraud. A control system, no matter how well designed and implemented, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Due to the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues, errors and instances of fraud, if any, within the Company have been or will be detected.

PART II – OTHER INFORMATION

Item 1. Legal Proceedings

We are from time to time subject to various claims, lawsuits and other legal and administrative proceedings arising in the ordinary course of business. Some of these claims, lawsuits and other proceedings may involve highly complex issues that are subject to substantial uncertainties, and could result in damages, fines, penalties, non-monetary sanctions or relief. We recognize provisions for claims or pending litigation when we determine that an unfavorable outcome is probable, and the amount of loss can be reasonably estimated. Due to the inherent uncertain nature of litigation, the ultimate outcome or actual cost of settlement may materially vary from estimates. While the outcome of these claims cannot be predicted with certainty, management does not believe that the outcome of any current legal proceedings will have a material adverse impact on the Company's condensed consolidated financial statements.

As previously disclosed, between September 2021 and the closing of the ExOne Merger on November 12, 2021, twelve putative class action complaints were filed by purported ExOne shareholders against ExOne and the former ExOne Board of Directors alleging violations of federal securities laws in connection with the S-4 filed by ExOne for the ExOne Merger. All have been dismissed.

As previously disclosed, on November 8, 2021, another purported stockholder, Leo Lissoq Goldstein, filed a Section 220 complaint in Delaware Chancery Court against ExOne (Goldstein v. The ExOne Company, Case No. 2021-0958-KSJM). Mr. Goldstein seeks to discover certain books and records of the company related to the ExOne Merger purportedly in order to investigate, among other things, the events leading up to and the disclosures made in connection with the ExOne Merger. Mr. Goldstein has also moved to intervene and stay the Campanella action, discussed below, until his Section 220 action is complete.

As previously disclosed, on November 22, 2021, purported stockholder Pietro Campanella filed a class action lawsuit against ExOne, Desktop Metal, Inc., and former ExOne directors and officers alleging breach of fiduciary duties and aiding and abetting breach of fiduciary duties in connection with the ExOne Merger (Campanella v. The ExOne Company et al., Case No. 2021-1013, Case No. 2021-1013-LWW). In particular, Mr. Campanella alleges that ExOne's proxy statement and supplemental disclosures did not adequately disclose information related to a whistleblower investigation at one of Desktop Metal's subsidiaries, EnvisionTEC, and the resignation of EnvisionTEC's CEO.

As previously disclosed, on December 21, 2021, January 14, 2022, February 2, 2022, and February 22, 2022, four alleged shareholders of Desktop Metal stock filed purported securities class action complaints in the United States District Court for the District of Massachusetts. (Luongo v. Desktop Metal, D. Mass., Case No. 1:21-cv-12099-IT; Hathaway v. Desktop Metal, D. Mass., Case No. 1:22-cv-10059-IT; Guzman-Martinez v. Desktop Metal, D. Mass, Case No. 1:22-cv-10173, Xie v. Desktop Metal, Case No. 1:22-cv-10297-IT). Each complaint alleges that Desktop Metal and certain of its officers and directors violated Sections 10(b) and 20(a) of the Securities and Exchange Act by making false or misleading statements regarding EnvisionTEC's manufacturing and product compliance practices and procedures. On February 4, 2022, the court issued an order consolidating the first three District of Massachusetts securities class actions. On July 7, 2022, the court appointed Sophia Zhou lead plaintiff for the class period of February 17, 2021 through November 15, 2021. The court also vacated its earlier order consolidating the *Xie* action with the other lawsuits and will allow that action to proceed separately, with a new notice to investors, based on a class period of January 15, 2021 to February 16, 2021. On September 29, 2022, the Court re-consolidated the *Xie* action with the other actions for all pre-trial proceedings.

As previously disclosed, on July 12, 2022, two alleged shareholders of Desktop Metal stock filed derivative actions purportedly on behalf of Desktop Metal in the United States District Court for the District of Massachusetts. (Keyser v. Fulop, et al., Case No. 1:22-cv-11117; Qi v. Fulop, et al., Case No. 1:22-cv-1118). On July 22, 2022, an alleged shareholder of Desktop Metal stock filed a similar derivative complaint in the United States District Court for the District of Delaware (Cherry v. Fulop, et al., Case No. 1:22-cv-00962). The complaints allege that certain officers and directors of Desktop Metal caused harm to the Company by violating Section 14(A) of the Exchange Act and SEC Rule 14a-9 and breaching their fiduciary duties by making false or misleading statements regarding EnvisionTEC's manufacturing and product compliance practice and procedures.

The Company believes that these complaints are all without merit and intends to defend against them vigorously.

Item 1A. Risk Factors

Summary of Risk Factors

Our business is subject to numerous risks. Below is a summary of the principal factors that could cause our actual results to differ materially from those expressed in forward-looking statements made by us or on our behalf. This summary does not address all of the risks that we face. Additional discussion of the risks summarized in this risk factor summary, and other risks that we face, can be found under the heading "Risk Factors" immediately following this section and should be carefully considered, together with other information in this Quarterly Report on Form 10-Q and our other filings with the SEC, before making an investment decision regarding our Class A common stock.

- We may experience significant delays in the design, production and launch of our additive manufacturing solutions, and we may be unable to successfully commercialize products on our planned timelines.

- If demand for our products does not grow as expected, or if market adoption of additive manufacturing does not continue to develop, or develops more slowly than expected, our revenues may stagnate or decline, and our business may be adversely affected.

- The additive manufacturing industry in which we operate is characterized by rapid technological change, which requires us to continue to develop new products and innovations to meet constantly evolving customer demands and which could adversely affect market adoption of our products.
- As part of our growth strategy, we intend to acquire or make investments in other businesses, patents, technologies, products or services. Our efforts to do so, or our failure to do so successfully could disrupt our business and have an adverse impact on our financial condition.
- We may experience difficulties in integrating the operations of ExOne, EnvisionTEC and other acquired companies into our business and in realizing the expected benefits of these acquisitions.
- We are an early-stage company with a history of losses. We have not been profitable historically and may not achieve or maintain profitability in the future.
- Future sales, or the perception of future sales, of our Class A common stock by us or our existing stockholders in the public market could cause the market price for our Class A common stock to decline.

Risk Factors

Our business is subject to numerous risks. You should carefully consider the risks and uncertainties described below and the other information in this Quarterly Report on Form 10-Q before making an investment decision regarding our Class A common stock. Our business, financial condition, results of operations, or prospects could be materially and adversely affected if any of these risks occurs, and as a result, the market price of our Class A common stock could decline, and you could lose all or part of your investment. This Quarterly Report on Form 10-Q also contains forward-looking statements that involve risks and uncertainties. See "Cautionary Note Regarding Forward-Looking Statements." Our actual results could differ materially and adversely from those anticipated in these forward-looking statements as a result of certain factors, including those set forth below.

Risks Related to Our Business and Industry

We may experience significant delays in the design, production and launch of our additive manufacturing solutions, and we may be unable to successfully commercialize products on our planned timelines.

Several of our announced additive manufacturing solutions are yet to be commercially released. There are often delays in the design, testing, manufacture and commercial release of new products, and any delay in the launch of our products could materially damage our brand, business, growth prospects, financial condition and operating results. Even if we successfully complete the design, testing and manufacture for one or all of our products under development, we may fail to develop a commercially successful product on the timeline we expect for a number of reasons, including:

- misalignment between the products and customer needs;
- lack of innovation of the product;
- failure of the product to perform in accordance with the customer's expectations or industry standards;
- ineffective distribution and marketing;
- delay in obtaining any required regulatory approvals;
- unexpected production costs; or
- release of competitive products.

Our success in the market for the products we develop will depend largely on our ability to prove our products' capabilities in a timely manner. Upon demonstration, our customers may not believe that our products and/or technology have the capabilities they

were designed to have or that we believe they have. Furthermore, even if we do successfully demonstrate our products' capabilities, potential customers may be more comfortable doing business with another larger and more established company or may take longer than expected to make the decision to order our products. Significant revenue from new product investments may not be achieved for a number of years, if at all. If the timing of our launch of new products and/or of our customers' acceptance of such products is different than our assumptions, our revenue and results of operations may be adversely affected.

We may experience significant delays or other obstacles in the design, production, launch and/or maintenance of produced parts offerings, and we may be unable to successfully commercialize said offerings.

We are building out produced parts offerings for customers, and produced parts is an existing offering of some of our recently-acquired businesses. These offerings present similar challenges and risks to those outlined herein with respect to the design, production, launch and profitability of new additive manufacturing solutions. We have a limited history operating in the direct manufacturing and produced parts businesses, and as a result we may face challenges in designing or delivering parts that meet customer specifications, both on time and cost-effectively. Additionally, our produced parts in the healthcare and dental industry may be subject to regulatory approvals and controls, which may delay the design, production or launch of products. In particular, we may fail to develop commercially successful produced parts offerings if we are unable to meet customer needs or industry standards, if we fail to meet our desired gross margins or customer price expectations, or if our marketing and distribution strategy proves ineffective. If we are unsuccessful in establishing such offerings, sales of our additive manufacturing solutions and our overall operating results could suffer.

Our business activities may be disrupted due to the ongoing impact of the COVID-19 pandemic.

We face various risks and uncertainties related to the ongoing impact of the COVID-19 pandemic, including the delta and omicron variants, recent resurgences, public health measures and related government-imposed restrictions. The COVID-19 pandemic has led to disruption and volatility in the global economy and capital markets, which increases the cost of capital and adversely impacts access to capital. Government-enforced travel bans and business closures around the world have significantly impacted our ability to sell, install and service our additive manufacturing systems at customers around the world. It has, and may continue to, disrupt our third-party contract manufacturers and supply chain. We currently anticipate customer payment delays for our products which could negatively impact our results of operations. We have also experienced some delays in installation of our products at customers' facilities, which has and could lead to postponed revenue recognition for those transactions. In addition, installation delays could prevent us from achieving anticipated consumables revenues due to systems being put into operation later, or at lower utilization, than expected. Furthermore, if significant portions of our workforce are unable to work effectively, including because of illness, quarantines, government actions, facility closures, remote working or other restrictions in connection with the COVID-19 pandemic, our operations will likely be adversely impacted.

If the COVID-19 pandemic continues for a prolonged duration, we or our customers may be unable to perform fully on our contracts, which will likely result in increases in costs and reduction in revenue. These cost increases may not be fully recoverable or adequately covered by insurance. The long-term effects of COVID-19 to the global economy and to us are difficult to assess or predict and may include a further decline in the market prices of our products, risks to employee health and safety, risks for the deployment of our products and services and reduced sales in geographic locations impacted. Any prolonged restrictive measures put in place in order to control COVID-19 or other adverse public health developments in any of our targeted markets may have a material and adverse effect on our business operations and results of operations.

We may not be able to realize the expected savings from future cost savings measures.

We implemented cost savings initiatives during 2022 to preserve capital, and intend to implement additional cost savings measures in the future. We expect to incur costs in connection with these cost savings initiatives. Our ability to achieve the anticipated cost savings and other benefits from these initiatives within the expected time frame is subject to many estimates and assumptions. There can be no assurance that the anticipated cost savings will be achieved, or that they will not be significantly and materially less than anticipated, or that the completion of such cost savings initiatives will be effectively accomplished. In addition, our ability to realize the anticipated cost savings are subject to significant business, economic and competitive uncertainties and contingencies, many of which are beyond our control, such as operating difficulties, supply chain disruptions, local regulations, employment laws or general economic or industry conditions. If we fail to realize the anticipated cost savings it could have a material negative impact on our results of operations and financial position.

Changes in our product mix may impact our gross margins and financial performance.

Our financial performance may be affected by the mix of products and services we sell during a given period. Our products are sold, and will continue to be sold, at different price points. Sales of certain of our products have, or are expected to have, higher gross margins than others. If our product mix shifts too far into lower gross margin products, and we are not able to sufficiently reduce the engineering, production and other costs associated with those products or substantially increase the sales of our higher gross margin products, our profitability could be reduced. Additionally, the introduction of new products or services may further heighten quarterly fluctuations in gross profit and gross profit margins due to manufacturing ramp-up and start-up costs. We may experience significant quarterly fluctuations in gross profit margins or operating income or loss due to the impact of the mix of products, channels or geographic areas in which we sell our products from period to period. Our financial performance also depends on the portion of our produced parts revenue supplied using additive manufacturing processes, which may enable higher gross margins and operational efficiencies as compared to conventional manufacturing technologies.

If we fail to meet our customers' price expectations, demand for our products and product lines could be negatively impacted and our business and results of operations could suffer.

Demand for our product lines is sensitive to price. We believe our competitive pricing has been an important factor in our results to date. Therefore, changes in our pricing strategies can have a significant impact on our business and ability to generate revenue. Many factors, including our production and personnel costs and our competitors' pricing and marketing strategies, can significantly impact our pricing strategies. If we fail to meet our customers' price expectations in any given period, demand for our products and product lines could be negatively impacted and our business and results of operations could suffer.

If demand for our products does not grow as expected, or if market adoption of additive manufacturing does not continue to develop, or develops more slowly than expected, our revenues may stagnate or decline, and our business may be adversely affected.

The industrial manufacturing market, which today is dominated by conventional manufacturing processes that do not involve 3D printing technology, is undergoing a shift towards additive manufacturing. We may not be able to develop effective strategies to raise awareness among potential customers of the benefits of additive manufacturing technologies or our products may not address the specific needs or provide the level of functionality or economics required by potential customers to encourage the continuation of this shift towards additive manufacturing. If additive manufacturing technology does not continue to gain broader market acceptance as an alternative to conventional manufacturing processes, or does so more slowly than anticipated, or if the marketplace adopts additive manufacturing technologies that differ from our technologies, we may not be able to increase or sustain the level of sales of our products, and our operating results would be adversely affected as a result.

Declines in the prices of our products and services, or in our volume of sales, together with our relatively inflexible cost structure, may adversely affect our financial results.

Our business is subject to price competition. Such price competition may adversely affect our results of operation, especially during periods of decreased demand. Decreased demand also adversely impacts the volume of our systems sales. If our business is not able to offset price reductions resulting from these pressures, or decreased volume of sales due to contractions in the market, by improved operating efficiencies and reduced expenditures, then our operating results will be adversely affected.

Certain of our operating costs are fixed and cannot readily be reduced, which diminishes the positive impact of our restructuring programs on our operating results. To the extent the demand for our products slows, or the additive manufacturing market contracts, we may be faced with excess manufacturing capacity and related costs that cannot readily be reduced, which will adversely impact our financial condition and results of operations.

Our business model is predicated, in part, on building a customer base that will generate a recurring stream of revenues through the sale of our consumables and service contracts. If that recurring stream of revenues does not develop as expected, or if our business model changes as the industry evolves, our operating results may be adversely affected.

Our business model is dependent, in part, on our ability to maintain and increase sales of our proprietary consumables and service contracts as they generate recurring revenues. Existing and future customers of our systems may not purchase our consumables or related service contracts at the rate we expect for certain product lines or at the same rate at which customers currently purchase those

consumables and services. In addition, our entry-level systems focused on low-volume production generally use a lower volume of consumables relative to our volume throughput systems focused on high-volume production. If our current and future customers purchase a lower volume of our consumable materials or service contracts, or if our entry-level systems represent an increasing percentage of our future installed customer base, resulting overall in lower purchases of consumables and service contracts on average than our current installed customer base or than we expect, our recurring revenue stream relative to our total revenues would be reduced and our operating results would be adversely affected.

Reservations for our Production System P-50 solution may not convert to purchase orders.

Prior to commencing shipments of our Production System P-50 in the first quarter of 2022, we accepted reservations for the product, most of which are accompanied by a financial deposit. Given the anticipated lead times between reservations and the date of delivery of the Production System P-50s, there is a risk that customers who have placed reservations may ultimately decide not to convert such reservations into purchase orders and take delivery of their reserved Production System P-50 due to potential changes in customer preferences, competitive developments or other factors. As a result, no assurance can be made that reservations will result in the purchase of our Production System P-50s, and any such failure to convert these reservations could harm our business, prospects, financial condition and operating results.

Defects in new products or in enhancements to our existing products that give rise to product returns or warranty or other claims could result in material expenses, diversion of management time and attention and damage to our reputation.

Our additive manufacturing solutions are complex and may contain undetected defects or errors when first introduced or as enhancements are released that, despite testing, are not discovered until after a machine has been used. This could result in delayed market acceptance of those products or claims from resellers, customers or others, which may result in litigation, increased end user warranty, support and repair or replacement costs, damage to our reputation and business, or significant costs and diversion of support and engineering personnel to correct the defect or error. We may from time to time become subject to warranty or product liability claims related to product quality issues that could lead us to incur significant expenses.

We attempt to include provisions in our agreements with customers that are designed to limit our exposure to potential liability for damages arising from defects or errors in our products. However, it is possible that these limitations may not be effective as a result of unfavorable judicial decisions or laws enacted in the future.

The sale and support of our products entails the risk of product liability claims. Any product liability claim brought against us, regardless of its merit, could result in material expense, diversion of management time and attention, damage to our business and reputation and brand, and cause us to fail to retain existing customers or to fail to attract new customers.

Our operations could suffer if we are unable to attract and retain key management or other key employees.

We believe our success has depended, and continues to depend, on the efforts and talents of our senior management and other key personnel, including, in particular, our Co-Founder, Chief Executive Officer, and Chairman, Ric Fulop. Our executive team is critical to the management of our business and operations, as well as to the development of our strategy. Members of our senior management team may resign at any time. The loss of the services of any members of our senior management team, especially Mr. Fulop, could delay or prevent the successful implementation of our strategy or our commercialization of new applications for our systems or other products, or could otherwise adversely affect our ability to manage our company effectively and carry out our business plan. There is no assurance that if any senior executive leaves in the future, we will be able to rapidly replace him or her and transition smoothly towards his or her successor, without any adverse impact on our operations.

To support the continued growth of our business, we must also effectively recruit, hire, integrate, develop, motivate and retain additional new employees. High demand exists for senior management and other key personnel (including scientific, technical, engineering, financial and sales personnel) in the additive manufacturing industry, and there can be no assurance that we will be able to retain our current key personnel. We experience intense competition for qualified personnel. While we intend to continue to provide competitive compensation packages to attract and retain key personnel, some of our competitors for these employees have greater resources and more experience, making it difficult for us to compete successfully for key personnel. Moreover, new employees may not become as productive as we expect since we may face challenges in adequately integrating them into our workforce and culture. If we cannot attract and retain sufficiently qualified technical employees for our research product development activities, as well as

experienced sales and marketing personnel, we may be unable to develop and commercialize new products or new applications for existing products. Furthermore, possible shortages of key personnel, including engineers, in the regions surrounding our Boston facility could require us to pay more to hire and retain key personnel, thereby increasing our costs. Since March 2020, we have had many employees working remotely to protect the health and safety of our employees, contractors, customers and visitors. We also shifted customer, industry and other stakeholder events to virtual-only experiences, and may similarly alter, postpone or cancel other events in the future. Given our limited history with remote operations, the long-term impacts are uncertain.

Departing employees' knowledge of our business and industry can be extremely difficult to replace and provides their future employers with a competitive advantage. Where applicable law permits, we generally enter into non-competition agreements with our employees. These agreements prohibit our employees from competing directly with us or working for our competitors or clients while they work for us, and in some cases, for a limited period after they cease working for us. We may be unable to enforce these agreements under the laws of the jurisdictions in which our employees work, and it may be difficult for us to restrict our competitors from benefiting from the expertise that our former employees or consultants developed while working for us. If we cannot demonstrate that our legally protectable interests will be harmed, we may be unable to prevent our competitors from benefiting from the expertise of our former employees or consultants and our ability to remain competitive may be diminished.

If we fail to grow our business as anticipated, our net sales, gross margin and operating margin will be adversely affected. If we grow as anticipated but fail to manage our growth and expand our operations accordingly, our business may be harmed and our results of operation may suffer.

Over the past several years, we have experienced rapid growth, and we are attempting to continue to grow our business substantially. To this end, we have made, and expect to continue to make, significant investments in our business, including investments in our infrastructure, technology, marketing and sales efforts. These investments include dedicated facilities expansion and increased staffing, both domestic and international. If our business does not generate the level of revenue required to support our investment, our net sales and profitability will be adversely affected.

Our ability to effectively manage our anticipated growth and expansion of our operations will also require us to enhance our operational, financial and management controls and infrastructure, human resources policies and reporting systems. These enhancements and improvements will require significant capital expenditures, investments in additional headcount and other operating expenditures and allocation of valuable management and employee resources. Our future financial performance and our ability to execute on our business plan will depend, in part, on our ability to effectively manage any future growth and expansion. There are no guarantees we will be able to do so in an efficient or timely manner, or at all.

We may experience significant delays or obstacles to realizing the success of our newly-launched Desktop Health business line.

In March 2021, we launched our Desktop Health business, which aims to leverage our proprietary additive manufacturing technologies and materials to grow the market for existing applications in the dental market and identify, develop and/or commercialize future solutions in the healthcare and dental markets for personalized patient care spanning dentistry, orthodontics, dermatology, orthopedics, cardiology, plastic surgery and printed regenerative tissues and grafts. This business operates in a highly competitive space which may make it difficult for us to implement business plans and expectations and identify and realize opportunities. In addition, this business and its technology, products, materials and applications may be subject to strict regulatory requirements in the United States and other countries. The regulatory approval or clearance process may be lengthy and costly, and regulatory requirements may impact the timing of, or our ability to, commercialize the regulated technology, products, materials and applications. The success of this business will also depend on our ability to attract, hire and retain qualified personnel, establish sales, marketing and distribution infrastructure, and establish and maintain supply and manufacturing relationships.

Our existing and planned global operations subject us to a variety of risks and uncertainties that could adversely affect our business and operating results. Our business is subject to risks associated with selling machines and other products in non-United States locations.

Our products and services are distributed in more than 65 countries around the world, and we derive a substantial percentage of our sales from these international markets. In 2021, we derived approximately 32% of our revenues from countries outside the United States. Accordingly, we face significant operational risks from doing business internationally.

Our operating results may be affected by volatility in currency exchange rates and our ability to effectively manage our currency transaction risks. We incur currency transaction risks if we were to enter into either a purchase or a sale transaction using a different currency from the currency in which we report revenues. In such cases we may suffer an exchange loss because we do not currently engage in currency swaps or other currency hedging strategies to address this risk. As we realize our strategy to expand internationally, our exposure to currency risks may increase. Given the volatility of exchange rates, we can give no assurance that we will be able to effectively manage our currency transaction risks or that any volatility in currency exchange rates will not have an adverse effect on our results of operations.

Other risks and uncertainties we face from our global operations include:

- difficulties in staffing and managing foreign operations;
- limited protection for the enforcement of contract and intellectual property rights in certain countries where we may sell our products or work with suppliers or other third parties;
- potentially longer sales and payment cycles and potentially greater difficulties in collecting accounts receivable;
- costs and difficulties of customizing products for foreign countries;
- challenges in providing solutions across a significant distance, in different languages and among different cultures;
- laws and business practices favoring local competition;
- being subject to a wide variety of complex foreign laws, treaties and regulations and adjusting to any unexpected changes in such laws, treaties and regulations;
- specific and significant regulations, including the European Union's General Data Protection Regulation, or GDPR, which imposes compliance obligations on companies who possess and use data of EU residents;
- uncertainty and resultant political, financial and market instability arising from the United Kingdom's exit from the European Union;
- compliance with U.S. laws affecting activities of U.S. companies abroad, including the U.S. Foreign Corrupt Practices Act;
- tariffs, trade barriers and other regulatory or contractual limitations on our ability to sell or develop our products in certain foreign markets;
- operating in countries with a higher incidence of corruption and fraudulent business practices;
- changes in regulatory requirements, including export controls, tariffs and embargoes, other trade restrictions, competition, corporate practices and data privacy concerns;
- potential adverse tax consequences arising from global operations;
- seasonal reductions in business activity in certain parts of the world, particularly during the summer months in Europe and at year end globally;
- rapid changes in government, economic and political policies and conditions; and
- political or civil unrest or instability, terrorism or epidemics and other similar outbreaks or events.

In addition, additive manufacturing has been identified by the U.S. government as an emerging technology and is currently being further evaluated for national security impacts. We expect additional regulatory changes to be implemented that will result in

increased and/or new export controls related to 3D printing technologies, components and related materials and software. These changes, if implemented, may result in our being required to obtain additional approvals and/or licenses to sell 3D printers in the global market.

Additionally, we have teams that are engaged in marketing, selling, and supporting our products internationally, and we must hire and train experienced personnel to staff and manage our foreign operations. To the extent that we experience difficulties in recruiting, training, managing and retaining international employees, particularly managers and other members of our international sales team, we may experience difficulties in sales productivity in international markets.

Our failure to effectively manage the risks and uncertainties associated with our global operations could limit the future growth of our business and adversely affect our business and operating results.

Global economic, political and social conditions and uncertainties in the markets that we serve may adversely impact our business.

Our performance depends on the financial health and strength of our customers, which in turn is dependent on the economic conditions of the markets in which we and our customers operate. A decline in the global economy, difficulties in the financial services sector and credit markets, continuing geopolitical uncertainties and other macroeconomic factors all affect the spending behavior of potential customers. The economic uncertainty in Europe, the United States, India, China and other countries may cause end-users to further delay or reduce technology purchases.

We also face risks from financial difficulties or other uncertainties experienced by our suppliers, distributors or other third parties on which we rely. If third parties are unable to supply us with required materials or components or otherwise assist us in operating our business, our business could be harmed.

For example, the possibility of an ongoing trade war between the United States and China may impact the cost of raw materials, finished products or components used in our products and our ability to sell our products in China. Other changes in U.S. social, political, regulatory and economic conditions or in laws and policies governing foreign trade, manufacturing, development and investment could also adversely affect our business. In addition, the United Kingdom's exit from the European Union on January 31, 2020 may result in the imposition of tariffs or other trade barriers that could have an adverse impact on our results of operation. Additionally, uncertainty surrounding this transition may have an effect on global economic conditions and the stability of global financial markets, which in turn could have a material adverse effect on our business, financial condition and results of operations. In extreme cases, we could experience interruptions in production due to the processing of customs formalities or reduced customer spending in the wake of weaker economic performance. If global economic conditions remain volatile for a prolonged period or if European economies experience further disruptions, our results of operations could be adversely affected.

In the future, some of our arrangements for additive manufacturing solutions may contain customer-specific provisions that may impact the period in which we recognize the related revenues under GAAP.

Some customers that purchase additive manufacturing solutions from us may require specific, customized factors relating to their intended use of the solution or the installation of the product in the customers' facilities. These specific, customized factors are occasionally required by the customers to be included in our commercial agreements relating to the purchases. As a result, our responsiveness to our customers' specific requirements has the potential to impact the period in which we recognize the revenue relating to that additive manufacturing system sale.

Similarly, some of our customers must build or prepare facilities to install a subset of our additive manufacturing solutions, and the completion of such projects can be unpredictable, which can impact the period in which we recognize the revenue relating to that additive manufacturing solution sale.

We rely on our information technology systems to manage numerous aspects of our business and a disruption of these systems could adversely affect our business.

We rely on our information technology systems to manage numerous aspects of our business, including to efficiently purchase products from our suppliers, provide procurement and logistic services, ship products to our customers, manage our accounting and financial functions, including our internal controls, and maintain our research and development data. Our information technology

systems are an essential component of our business and any disruption could significantly limit our ability to manage and operate our business efficiently. A failure of our information technology systems to perform properly could disrupt our supply chain, product development and customer experience, which may lead to increased overhead costs and decreased sales and have an adverse effect on our reputation and our financial condition. In addition, during the COVID-19 pandemic, a substantial portion of our employees have conducted work remotely, making us more dependent on potentially vulnerable communications systems and making us more vulnerable to cyberattacks.

Although we take steps and incur significant costs to secure our information technology systems, including our computer systems, intranet and internet sites, email and other telecommunications and data networks, our security measures may not be effective, and our systems may be vulnerable to damage or interruption. Disruption to our information technology systems could result from power outages, computer and telecommunications failures, computer viruses, cyber-attack or other security breaches, catastrophic events such as fires, floods, earthquakes, tornadoes, hurricanes, acts of war, terrorism and usage errors by our employees.

Our reputation and financial condition could be adversely affected if, as a result of a significant cyber-event or otherwise:

- our operations are disrupted or shut down;
- our confidential, proprietary information is stolen or disclosed;
- we incur costs or are required to pay fines in connection with stolen customer, employee or other confidential information;
- we must dedicate significant resources to system repairs or increase cyber security protection; or
- we otherwise incur significant litigation or other costs.

If our computer systems are damaged or cease to function properly, or, if we do not replace or upgrade certain systems, we may incur substantial costs to repair or replace them and may experience an interruption of our normal business activities or loss of critical data. Any such disruption could adversely affect our reputation and financial condition.

Additionally, some of the companies we acquire may not have the same level of information technology systems which may require that we invest significant resources to get those systems to the level of security we require.

We also rely on information technology systems maintained by third parties, including third-party cloud computing services and the computer systems of our suppliers for both our internal operations and our customer-facing infrastructure related to our additive manufacturing solutions. These systems are also vulnerable to the types of interruption and damage described above but we have less ability to take measures to protect against such disruptions or to resolve them if they were to occur. Information technology problems faced by third parties on which we rely could adversely impact our business and financial condition as well as negatively impact our brand reputation.

If we fail to implement or are delayed in the implementation of our new ERP system platform, we may not be able to effectively transact our business or produce our financial statements on a timely basis and without incurrence of additional costs, which would adversely affect our business, results of operations and cash flows.

We are currently implementing Oracle Enterprise Resource Planning, or ERP, to manage enterprise functions for our significant subsidiaries. This integration involves significant complexity, requiring us to move and reconfigure all of our current system processes, transactions, data and controls to a new platform. Due to this complexity and the scope and volume of changes involved in this implementation, we may experience delays and higher than planned resource needs in our migration efforts. Although we will conduct testing, assessments and validation to ensure that our internal financial and accounting controls will be effective post-implementation, we may nevertheless experience difficulties in transacting our business due to system challenges, delays or process deficiencies following the initial launch of the system, which could impair our ability to conduct our business or to produce accurate financial statements on a timely basis. If our ability to conduct our business or to produce accurate financial statements on a timely basis is impaired, our business, results of operations and cash flows would be adversely affected.

Our current levels of insurance may not be adequate for our potential liabilities.

We maintain insurance to cover our potential exposure for most claims and losses, including potential product and non-product related claims, lawsuits and administrative proceedings seeking damages or other remedies arising out of our commercial operations. However, our insurance coverage is subject to various exclusions, self-retentions and deductibles. We may be faced with types of liabilities that are not covered under our insurance policies, such as environmental contamination or terrorist attacks, or that exceed our policy limits. Even a partially uninsured claim of significant size, if successful, could have an adverse effect on our financial condition.

In addition, we may not be able to continue to obtain insurance coverage on commercially reasonable terms, or at all, our existing policies may be cancelled or otherwise terminated by the insurer, and/or the companies that we acquire may not be eligible for certain types or limits of insurance. Maintaining adequate insurance and successfully accessing insurance coverage that may be due for a claim can require a significant amount of our management's time, and we may be forced to spend a substantial amount of money in that process.

Due to our acquisition activity, the existing information technology systems and cyber controls of the acquired entities and integration efforts with respect thereto, as well as the state of the cyber insurance market generally, the costs for our cyber insurance increased significantly in 2021, and the cost of such insurance could continue to increase for future policy periods. Our cyber insurance coverage does not extend to all of our group companies and while we are working to implement better cyber controls and infrastructure for these entities, we may continue to be unable to secure cyber risk coverage for them for future periods. Moreover, the scope and limits of our cyber insurance coverage may not be sufficient or available to cover all expenses or other losses, including fines, or all types of claims that may arise in connection with cyberattacks, security compromises, and other related incidents.

Uncertainty and instability resulting from the conflict between Russia and Ukraine could negatively impact our business, financial condition and operations.

The ongoing war in Ukraine could negatively impact global and regional financial markets which could result in businesses postponing spending in response to tighter credit, higher unemployment, financial market volatility, negative financial news, and other factors. In addition, our suppliers and contractors may have staff, operations, materials or equipment located in the Ukraine or Russia which could impact our supply chain or services being provided to us. Moreover, we outsource some of our software development and design to third-party contractors that have employees and consultants located in Ukraine, Russia and/or Belarus. Poor relations between the United States and Russia, sanctions by the United States and the European Union against Russia, and any escalation of political tensions or economic instability in the area could have an adverse impact on our third-party contractors. In particular, Russia's invasion of Ukraine and the increased tensions among the United States, the North Atlantic Treaty Organization and Russia could increase the scope of armed conflict, cyberwarfare and economic instability that could disrupt or delay the operations of these resources in Russia, Belarus and/or Ukraine, disrupt or delay communication with such resources or the flow of funds to support their operations, or otherwise render our resources unavailable.

The additive manufacturing industry in which we operate is characterized by rapid technological change, which requires us to continue to develop new products and innovations to meet constantly evolving customer demands and which could adversely affect market adoption of our products.

Our revenues are derived from the sale of additive manufacturing systems, produced parts, and consumables and services. We have encountered and will continue to encounter challenges experienced by growing companies in a market subject to rapid innovation and technological change. While we intend to invest substantial resources to remain on the forefront of technological development, continuing advances in additive manufacturing technology, changes in customer requirements and preferences and the emergence of new standards, regulations and certifications could adversely affect adoption of our products either generally or for particular applications. Our ability to compete in the additive manufacturing market depends, in large part, on our success in developing and introducing new additive manufacturing systems and technology, in improving our existing products and technology and qualifying new materials which our systems can support. We believe that we must continuously enhance and expand the functionality and features of our products and technologies in order to remain competitive. However, we may not be able to:

- develop cost-effective new products and technologies that address the increasingly complex needs of prospective customers;

- enhance our existing products and technologies;
- respond to technological advances and emerging industry standards and certifications on a cost-effective and timely basis;
- adequately protect our intellectual property as we develop new products and technologies;
- identify the appropriate technology or product to which to devote our resources; or
- ensure the availability of cash resources to fund research and development.

Even if we successfully introduce new additive manufacturing products and technologies and enhance our existing products and technologies, it is possible that these will eventually supplant our existing products or that our competitors will develop new products and technologies that will replace our own. As a result, any of our products may be rendered obsolete or uneconomical by our or our competitors' technological advances, leading to a loss in market share, decline in revenue and adverse effects to our business and prospects.

The additive manufacturing industry is competitive. We expect to face increasing competition in many aspects of our business, which could cause our operating results to suffer.

The additive manufacturing industry in which we operate is fragmented and competitive. We compete for customers with a wide variety of producers of additive manufacturing and/or 3D printing equipment that creates 3D objects and end-use parts, as well as with providers of materials and services for this equipment. Some of our existing and potential competitors are researching, designing, developing and marketing other types of products and services that may render our existing or future products obsolete, uneconomical or less competitive. Existing and potential competitors may also have substantially greater financial, technical, marketing and sales, manufacturing, distribution and other resources than we do, including name recognition, as well as experience and expertise in intellectual property rights and operating within certain international markets, any of which may enable them to compete effectively against us. For example, a number of companies that have substantial resources have announced that they are beginning production of 3D printing systems, which will further enhance the competition we face.

Future competition may arise from the development of allied or related techniques for equipment, materials and services that are not encompassed by our patents, from the issuance of patents to other companies that may inhibit our ability to develop certain products and from improvements to existing technologies.

We intend to continue to follow a strategy of continuing product development and distribution network expansion to enhance our competitive position to the extent practicable. But we cannot assure you that we will be able to maintain our current position or continue to compete successfully against current and future sources of competition. If we do not keep pace with technological change and introduce new products and technologies, demand for our products may decline, and our operating results may suffer.

Because the additive manufacturing market is rapidly evolving, forecasts of market growth in this Quarterly Report on Form 10-Q may not be accurate.

Market opportunity estimates and growth forecasts included in this Quarterly Report on Form 10-Q are subject to significant uncertainty and are based on assumptions and estimates that may not prove to be accurate. The forecasts and estimates in this Quarterly Report on Form 10-Q relating to the expected size and growth of the markets for additive manufacturing technology and other markets in which we participate may prove to be inaccurate. Even if these markets experience the forecasted growth described in this Quarterly Report on Form 10-Q, we may not grow our business at similar rates, or at all. Our future growth is subject to many factors, including market adoption of our products, which is subject to many risks and uncertainties. Accordingly, the forecasts and estimates of market size and growth described in this Quarterly Report on Form 10-Q, including our estimates that the size of the total addressable market is expected to be more than $100 billion in 2030, should not be taken as indicative of our future growth. In addition, these forecasts do not consider the impact of the current global COVID-19 pandemic, and we cannot assure you that these forecasts will not be materially and adversely affected as a result.

Risks Related to Acquisitions

The failure to successfully integrate the businesses and operations of Desktop Metal and ExOne in the expected time frame may adversely affect the combined company's future results.

In November 2021, we acquired The ExOne Company, or ExOne, pursuant to an Agreement and Plan of Merger dated August 11, 2021, or the ExOne Acquisition. The success of the ExOne Acquisition will depend in part on our ability to realize the anticipated business opportunities from integrating the operations of ExOne with our business in an efficient and effective manner. It is possible that the integration process could result in the loss of key Desktop Metal or ExOne employees, the loss of customers, the disruption of our ongoing businesses, inconsistencies in standards, controls, procedures and policies, unexpected integration issues, higher than expected integration costs and an overall integration process that takes longer than originally anticipated. Specifically, our ability to address the following issues, among others, in integrating the operations of Desktop Metal and ExOne may impact realization of the anticipated benefits of the ExOne Acquisition:

- combining the companies' operations and corporate functions;
- combining the businesses of Desktop Metal and ExOne and meeting the capital requirements of the combined company, in a manner that permits the combined company to achieve any cost savings or other synergies anticipated to result from the ExOne Acquisition, the failure of which would result in the anticipated benefits of the ExOne Acquisition not being realized in the time frame currently anticipated or at all;
- integrating personnel from the two companies, especially in the COVID-19 environment which has required many Desktop Metal and ExOne employees to work remotely across several locations;
- integrating and unifying the offerings and services available to customers;
- identifying and eliminating redundant and underperforming functions, product lines, and assets;
- harmonizing the companies' operating practices, employee development and compensation programs, internal controls and other policies, procedures and processes;
- maintaining existing agreements with customers, suppliers, distributors and vendors, avoiding delays in entering into new agreements with prospective customers, suppliers, distributors and vendors, and leveraging relationships with such third parties for the benefit of the combined company;
- addressing possible differences in business backgrounds, corporate cultures and management philosophies;
- consolidating the companies' administrative and information technology infrastructure;
- coordinating distribution and marketing efforts;
- coordinating geographically dispersed organizations; and
- effecting actions that may be required in connection with obtaining regulatory or other governmental approvals.

In addition, at times the attention of certain management individuals may be focused on the integration of the businesses of the two companies and diverted from day-to-day business operations or other opportunities that may have been beneficial to us, which may disrupt our ongoing business.

Following the ExOne Acquisition, customers, suppliers, distributors, or other third parties may seek to modify or terminate contractual or other business relationships with us, which could have an adverse effect on our business and operations.

As a result of the ExOne Acquisition, the combined company may experience impacts on relationships with customers, suppliers and distributors that may harm our business and results of operations. Certain customers, suppliers or distributors may seek to

terminate or modify contractual obligations whether or not contractual rights are triggered as a result of the ExOne Acquisition. There can be no guarantee that customers, suppliers and distributors will remain with or continue to have a relationship with the combined company or do so on the same or similar contractual terms. If any customers, suppliers or distributors seek to terminate or modify contractual obligations or discontinue the relationship with the combined company, then our business and results of operations may be harmed. Furthermore, we will not have long-term arrangements with many of the significant suppliers to the combined company. If suppliers were to seek to terminate or modify an arrangement with us, then the combined company may be unable to procure necessary supplies from other suppliers in a timely and efficient manner and on acceptable terms, or at all.

Prior to the closing of the ExOne Acquisition, Desktop Metal and ExOne also each had contracts with vendors, landlords, licensors and other business partners which may contain consent requirements or limitations applicable to such contracts as result of the ExOne Acquisition. If these consents cannot be obtained, the combined company may suffer a loss of potential future revenue, incur costs and lose rights that may be material to our business.

The ExOne Acquisition may not be accretive, and may be dilutive, to our earnings per share, which may negatively affect the market price of our Class A common stock.

We currently anticipate that the ExOne Acquisition will be initially dilutive to our forecasted earnings per share on a standalone basis. This expectation is based on preliminary estimates, which may materially change. We may also have additional transaction-related costs, may fail to realize all of the benefits anticipated in the ExOne Acquisition or may be subject to other factors that affect preliminary estimates or our ability to realize operational efficiencies or other anticipated synergies. Any of these factors could cause a decrease in our earnings per share or decrease or delay the expected effect of the ExOne Acquisition and contribute to a decrease in the price of our Class A common stock.

Our future results following the ExOne Acquisition may be adversely impacted if we do not effectively manage our expanded operations.

As a result of the ExOne Acquisition, the size of our business is significantly larger than prior to the acquisition. Our ability to successfully manage this expanded business will depend, in part, upon management's ability to implement an effective integration of the two companies and its ability to manage a combined business with significantly larger size and scope with the associated increased costs and complexity. Our management may not be successful, and we may not realize the expected operating efficiencies, cost savings and other benefits that were anticipated from the ExOne Acquisition.

As part of our growth strategy, we intend to continue to acquire or make investments in other businesses, patents, technologies, products or services. Our efforts to do so, or our failure to do so successfully, could disrupt our business and have an adverse impact on our financial condition.

As part of our business strategy, we are acquiring and investing in other companies, patents, technologies, products and/or services. To the extent we seek to grow our business through acquisitions, we may not be able to successfully identify attractive acquisition opportunities or consummate any such acquisitions if we cannot reach an agreement on commercially favorable terms, if we lack sufficient resources to finance the transaction on our own and cannot obtain financing at a reasonable cost or if regulatory authorities prevent such transaction from being consummated. The identification of potential targets, negotiation with targets and due diligence may divert management's attention from their day-to-day responsibilities and require the incurrence of related costs. In addition, competition for acquisitions in the markets in which we operate during recent years has increased, and may continue to increase, which may result in an increase in the costs of acquisitions or cause us to refrain from making certain acquisitions. We may not be able to complete future acquisitions on favorable terms, if at all.

If we do complete future acquisitions, we cannot assure you that they will ultimately strengthen our competitive position or that they will be viewed positively by customers, financial markets or investors. Furthermore, future acquisitions could pose numerous additional risks to our operations, including:

- diversion of management's attention from their day-to-day responsibilities;
- unanticipated costs or liabilities associated with the acquisition;

- incurrence of acquisition-related costs, which would be recognized as a current period expense;
- problems integrating the purchased business, products or technologies;
- challenges in achieving strategic objectives, cost savings and other anticipated benefits;
- inability to maintain relationships with key customers, suppliers, vendors and other third parties on which the purchased business relies;
- the difficulty of incorporating acquired technology and rights into our platform and of maintaining quality and security standards consistent with our brand;
- difficulty in maintaining controls, procedures and policies during the transition and integration;
- challenges in integrating the new workforce and the potential loss of key employees, particularly those of the acquired business; and
- use of substantial portions of our available cash or the incurrence of debt to consummate the acquisition.

If we proceed with a particular acquisition, we may have to use cash, issue new equity securities with dilutive effects on existing shareholders, incur indebtedness, assume contingent liabilities or amortize assets or expenses in a manner that might have a material adverse effect on our financial condition and results of operations. Acquisitions will also require us to record certain acquisition-related costs and other items as current period expenses, which would have the effect of reducing our reported earnings in the period in which an acquisition is consummated. In addition, we could also face unknown liabilities or write-offs due to our acquisitions, which could result in a significant charge to our earnings in the period in which they occur. We will also be required to record goodwill or other long-lived asset impairment charges (if any) in the periods in which they occur, which could result in a significant charge to our earnings in any such period.

Achieving the expected returns and synergies from future acquisitions will depend, in part, upon our ability to integrate the products and services, technology, administrative functions and personnel of these businesses into our product lines in an efficient and effective manner. We cannot assure you that we will be able to do so, that our acquired businesses will perform at levels and on the timelines anticipated by our management or that we will be able to obtain these synergies. In addition, acquired technologies and intellectual property may be rendered obsolete or uneconomical by our own or our competitors' technological advances. Management resources may also be diverted from operating our existing businesses to certain acquisition integration challenges. If we are unable to successfully integrate acquired businesses, our anticipated revenues and profits may be lower. Our profit margins may also be lower, or diluted, following the acquisition of companies whose profit margins are less than those of our existing businesses.

We may experience difficulties in integrating the operations of EnvisionTEC and other acquired companies into our business and in realizing the expected benefits of these acquisitions.

Acquisitions involve numerous risks, any of which could harm our business and negatively affect our financial condition and results of operations. The success of the EnvisionTEC acquisition and other recent acquisitions will depend in part on our ability to realize the anticipated business opportunities from combining the operations of acquired companies with our business in an efficient and effective manner. Ongoing and expanded integration processes could take longer than anticipated and could result in the loss of key employees, the disruption of each company's ongoing businesses, tax costs or inefficiencies, or inconsistencies in standards, controls, information technology systems, procedures and policies, any of which could adversely affect our ability to maintain relationships with customers, employees or other third parties, or our ability to achieve the anticipated benefits of the acquisitions, and could harm our financial performance. If we are unable to successfully or timely integrate the operations of acquired companies with our business, we may incur unanticipated liabilities and be unable to realize the revenue growth, synergies and other anticipated benefits resulting from the acquisitions, and our business, results of operations and financial condition could be materially and adversely affected.

We have incurred significant costs in connection with the recent acquisitions. The substantial majority of these costs are non-recurring acquisition expenses. We may incur additional costs in the integration of acquired companies, and may not achieve cost synergies and other benefits sufficient to offset the incremental costs of these acquisitions.

Risks Related to Our Financial Position and Need for Additional Capital

We are an early-stage company with a history of losses. We have not been profitable historically and may not achieve or maintain profitability in the future.

We experienced net losses in each year from our inception, including net losses of $240.3 million and $34.0 million for the years ended December 31, 2021, and 2020, respectively, and $428.0 million for the nine months ended September 30, 2022. We believe we will continue to incur operating losses and negative cash flow in the near-term as we continue to invest significantly in our business, in particular across our research and development efforts and sales and marketing programs. These investments may not result in increased revenue or growth in our business or enable us to achieve profitability.

In addition, as a public company, we incur significant additional legal, accounting and other expenses. As we acquire and integrate companies, we will also incur additional legal, accounting and other expenses. These increased expenditures may make it harder for us to achieve and maintain future profitability. Revenue growth and growth in our customer base may not be sustainable, and we may not achieve sufficient revenue to achieve or maintain profitability. We may incur significant losses in the future for a number of reasons, including due to the other risks described in this Quarterly Report on Form 10-Q, and we may encounter unforeseen expenses, difficulties, complications and delays and other unknown events. As a result, our losses may be larger than anticipated, we may incur significant losses for the foreseeable future, and we may not achieve profitability, and even if we do, we may not be able to maintain or increase profitability. Furthermore, if our future growth and operating performance fail to meet investor or securities analyst expectations, or if we have future negative cash flow or losses resulting from our investment in acquiring customers or expanding our operations, this could have a material adverse effect on our business, financial condition and results of operations.

Our limited operating history and rapid growth makes evaluating our current business and future prospects difficult and may increase the risk of your investment.

Much of our growth has occurred in recent periods. Our limited operating history may make it difficult for you to evaluate our current business and our future prospects, as we continue to grow our business. Our ability to forecast our future operating results is subject to a number of uncertainties, including our ability to plan for and model future growth. We have encountered, and will continue to encounter, risks and uncertainties frequently experienced by growing companies in rapidly evolving industries, as we continue to grow our business. If our assumptions regarding these uncertainties, which we use to plan our business, are incorrect or change in reaction to changes in our markets, or if we do not address these risks successfully, our operating and financial results could differ materially from our expectations, our business could suffer, and the trading price of our stock may decline.

We may fail to meet our publicly announced guidance or other expectations about our business, which would cause our stock price to decline.

We provide guidance regarding our expected revenue and Adjusted EBITDA, and we may in the future provide guidance regarding other measures of financial and business performance.

It is difficult to predict our future revenues and appropriately budget for our expenses, and we have limited insight into trends that may emerge and affect our business. Correctly predicting future events is inherently an uncertain process, and our guidance may not ultimately be accurate. Our guidance is based on certain assumptions such as anticipated production and sales volumes, material costs and planned cost reductions. In addition, we have implemented, and in the foreseeable future expect continue to implement, a number of cost saving measures in order to contain costs from our acquisitions. Those measures may not have their intended effect, and we may not adequately be able to implement them. Even if the measures we implement lead to cost savings, those cost savings may not be sufficient or we may be unable to sustain the cost savings that we achieve. Our ability to achieve the anticipated cost savings and other benefits from these measures within the expected time frames is subject to many estimates and assumptions, and depends on many factors, some of which are beyond our control. If actual results differ from our guidance or from the expectations of securities

analysts or investors, or we adjust our guidance in future periods, whether as a result of our inability to successfully implement our cost saving measures or because of other factors, the market value of our common stock could decline significantly.

Our operating results and financial condition may fluctuate from period to period.

Our operating results and financial condition fluctuate from quarter-to-quarter and year-to-year and are likely to continue to vary due to a number of factors, many of which will not be within our control. Both our business and the additive manufacturing industry are changing and evolving rapidly, and our historical operating results may not be useful in predicting our future operating results. If our operating results do not meet the guidance that we provide to the marketplace or the expectations of securities analysts or investors, the market price of our Class A common stock will likely decline. Fluctuations in our operating results and financial condition may be due to a number of factors, including:

- the degree of market acceptance of our products and services;
- our ability to compete with competitors and new entrants into our markets;
- the mix of products and services that we sell during any period;
- the timing of our sales and deliveries of our products to customers;
- the geographic distribution of our sales;
- changes in our pricing policies or those of our competitors, including our response to price competition;
- changes in the amount that we spend to develop and manufacture new products or technologies;
- changes in the amounts that we spend to promote our products and services;
- changes in the cost of satisfying our warranty obligations and servicing our installed customer base;
- expenses and/or liabilities resulting from litigation;
- delays between our expenditures to develop and market new or enhanced solutions and the generation of revenue from those solutions;
- unforeseen liabilities or difficulties in integrating our acquisitions or newly acquired businesses;
- disruptions to our information technology systems or our third-party contract manufacturers;
- general economic and industry conditions that effect customer demand;
- seasonal reductions in business activity in certain parts of the world, particularly during the summer months in Europe;
- the impact of the COVID-19 pandemic on our customers, suppliers, manufacturers and operations; and
- changes in accounting rules and tax laws.

In addition, our revenues and operating results may fluctuate from quarter-to-quarter and year-to-year due to our sales cycle and seasonality among our customers. Generally, our additive manufacturing solutions are subject to the adoption and capital expenditure cycles of our customers. As a result, we typically conduct a larger portion of our business during the fourth quarter of our fiscal year relative to the other quarters. Our quarterly sales also have often reflected a pattern in which a disproportionate percentage of each quarter's total sales occurs towards the end of the quarter. This uneven sales pattern makes predicting revenue, earnings, cash flow from operations, adjusted EBITDA and working capital for each period difficult, increases the risk of unanticipated variations in our

quarterly results and financial condition, and places pressure on our inventory management and logistics systems. We face a number of uncertainties related to our ability to achieve our targets in a given quarter, including: we may be unable to obtain materials as a result of global supply chain issues, our customers may decline or be unable to take delivery of products during holidays, and we may not receive our expected level of purchase orders or payments. If these or other events were to occur, our results for a given quarter could be negatively impacted, and may vary materially and adversely from our stated expectations and the estimates or expectations of securities research analysts, investors and other market participants.

Additionally, for our more complex solutions, which may require customers to make additional facilities investment, potential customers may spend a substantial amount of time performing internal assessments prior to making a purchase decision. This may cause us to devote significant effort in advance of a potential sale without any guarantee of receiving any related revenues. As a result, revenues and operating results for future periods are difficult to predict with any significant degree of certainty, which could lead to adverse effects on our inventory levels and overall financial condition.

Due to the foregoing factors, and the other risks discussed in this Quarterly Report on Form 10-Q, you should not rely on quarter-over-quarter and year-over-year comparisons of our operating results as an indicator of our future performance.

We may require additional capital to support business growth, and this capital might not be available on acceptable terms, if at all.

We intend to continue to make investments to support our business growth and may require additional funds to respond to business challenges and opportunities, including the need to develop new features or enhance our products, improve our operating infrastructure or acquire complementary businesses and technologies. Accordingly, we may need to engage in equity or debt financings to secure additional funds if our existing sources of cash and any funds generated from operations do not provide us with sufficient capital. If we raise additional funds through future issuances of equity or convertible debt securities, our existing stockholders could suffer significant dilution, and any new equity securities we issue could have rights, preferences and privileges superior to those of holders of our Class A common stock. Any debt financing that we may secure in the future could involve restrictive covenants relating to our capital raising activities and other financial and operational matters, which may make it more difficult for us to obtain additional capital and to pursue business opportunities, including potential acquisitions. We may not be able to obtain additional financing on terms favorable to us, if at all. If we are unable to obtain adequate financing or financing on terms satisfactory to us when we require it, our ability to continue to support our business growth and to respond to business challenges and opportunities could be significantly impaired, and our business may be adversely affected.

Risks Related to Third Parties

We could be subject to personal injury, property damage, product liability, warranty and other claims involving allegedly defective products that we supply.

The products we supply are sometimes used in potentially hazardous or critical applications, such as the assembled parts of an aircraft, medical device or automobile, that could result in death, personal injury, property damage, loss of production, punitive damages and consequential damages. While we have not experienced any such claims to date, actual or claimed defects in the products we supply could result in our being named as a defendant in lawsuits asserting potentially large claims.

We attempt to include legal provisions in our agreements with customers that are designed to limit our exposure to potential liability for damages arising from defects or errors in our products. However, it is possible that these limitations may not be effective as a result of unfavorable judicial decisions or laws enacted in the future. Any such lawsuit, regardless of merit, could result in material expense, diversion of management time and efforts and damage to our reputation, and could cause us to fail to retain or attract customers, which could adversely affect our results of operations.

We depend on our network of resellers and our business could be adversely affected if they do not perform as expected.

We rely heavily on our global network of resellers to sell our products and to provide installation and support services to customers in their respective geographic regions. These resellers may not be as effective in selling our products or installing and supporting our customers as we expect. Further, our contracts with our resellers provide for termination for convenience, and if our contracts with a significant number of resellers, or with the most effective resellers, were to terminate or if they would otherwise fail or refuse to sell certain of our products, we may not be able to find replacements that are as qualified or as successful in a timely

manner, if at all. In addition, if our resellers do not perform as anticipated, or if we are unable to secure qualified and successful resellers, our sales will suffer, which would have an adverse effect on our revenues and operating results. Because we also depend upon our resellers to provide installation and support services for products, if our reseller relationship were terminated or limited to certain products, we may face disruption in providing support for our customers, which would adversely affect our reputation and our results of operations. Any failure to offer high-quality technical support services may adversely affect our relationships with our customers and adversely affect our financial results.

Additionally, a default by one or more resellers that have a significant receivables balance could have an adverse financial impact on our financial results. We have reviewed our policies that govern credit and collections and will continue to monitor them in light of current payment status and economic conditions. In addition, we try to reduce the credit exposures of our accounts receivable by instituting credit limits and having credit insurance. However, there can be no assurance that our efforts to identify potential credit risks will be successful. Our inability to timely identify resellers that are credit risks could result in defaults at a time when such resellers have high accounts receivable balances with us. Any such default would result in a significant charge against our earnings and adversely affect our results of operations and financial condition.

We could face liability if our additive manufacturing solutions are used by our customers to print dangerous objects.

Customers may use our additive manufacturing systems to print parts that could be used in a harmful way or could otherwise be dangerous. For example, there have been news reports that 3D printers were used to print guns or other weapons. We have little, if any, control over what objects our customers print using our products, and it may be difficult, if not impossible, for us to monitor and prevent customers from printing weapons with our products. While we have never printed weapons on any printers in our offices, there can be no assurance that we will not be held liable if someone were injured or killed by a weapon printed by a customer using one of our products.

We depend on a limited number of third-party contract manufacturers for a significant portion of our manufacturing needs. If these third-party manufacturers experience any delay, disruption or quality control problems in their operations, including due to the COVID-19 pandemic, we could lose market share and our brand may suffer.

We depend on third-party contract manufacturers for the production of several of our additive manufacturing systems. While there are several potential manufacturers for most of these products, several of our products are manufactured, assembled, tested and generally packaged by a limited number of third-party manufacturers. In most cases, we rely on these manufacturers to procure components and, in some cases, subcontract engineering work. Our reliance on a limited number of contract manufacturers involves a number of risks, including:

- unexpected increases in manufacturing and repair costs;
- inability to control the quality and reliability of finished products;
- inability to control delivery schedules;
- potential liability for expenses incurred by third-party contract manufacturers in reliance on our forecasts that later prove to be inaccurate;
- potential lack of adequate capacity to manufacture all or a part of the products we require; and
- potential labor unrest affecting the ability of the third-party manufacturers to produce our products.

If any of our third-party contract manufacturers experience a delay, disruption or quality control problems in their operations, including due to the COVID-19 pandemic, or if a primary third-party contract manufacturer does not renew its agreement with us, our operations could be significantly disrupted, and our product shipments could be delayed. Qualifying a new manufacturer and commencing volume production is expensive and time consuming. Ensuring that a contract manufacturer is qualified to manufacture our products to our standards is time consuming. In addition, there is no assurance that a contract manufacturer can scale its production of our products at the volumes and in the quality that we require. If a contract manufacturer is unable to do these things, we

may have to move production for the products to a new or existing third-party manufacturer, which would take significant effort and our business, results of operations and financial condition could be materially adversely affected.

As we contemplate moving manufacturing into different jurisdictions, we may be subject to additional significant challenges in ensuring that quality, processes, and costs, among other issues, are consistent with our expectations. For example, while we expect our third-party contract manufacturers to be responsible for penalties assessed on us because of excessive failures of the products, there is no assurance that we will be able to collect such reimbursements from these manufacturers, which causes us to take on additional risk for potential failures of our products.

In addition, because we use a limited number of third-party contract manufacturers, increases in the prices charged may have an adverse effect on our results of operations, as we may be unable to find a contract manufacturer who can supply us at a lower price. As a result, the loss of a limited source supplier could adversely affect our relationships with our customers and our results of operations and financial condition.

All of our products must satisfy safety and regulatory standards and some of our products must also receive government certifications. Our third-party contract manufacturers are primarily responsible for conducting the tests that support our applications for most regulatory approvals for our products. If our third-party contract manufacturers fail to timely and accurately conduct these tests, we may be unable to obtain the necessary domestic or foreign regulatory approvals or certifications to sell our products in certain jurisdictions. As a result, we would be unable to sell our products and our sales and profitability could be reduced, our relationships with our sales channel could be harmed and our reputation and brand would suffer.

If our suppliers become unavailable or inadequate, our customer relationships, results of operations and financial condition may be adversely affected.

We acquire certain of our materials, which are critical to the ongoing operation and future growth of our business, from several third parties. If we or one of our contract manufacturers has a supply chain disruption, or our relationship with any of our contract manufacturers or key suppliers terminates, we could experience delays. While most manufacturing equipment and materials for our products are available from multiple suppliers, certain of those items are only available from limited sources. Should any of these suppliers become unavailable or inadequate, or impose terms unacceptable to us, such as increased pricing terms, we could be required to spend a significant amount of time and expense to develop alternate sources of supply, and we may not be successful in doing so on terms acceptable to us, or at all. As a result, the loss of a limited source supplier could adversely affect our relationship with our customers as well as our results of operations and financial condition.

Our facilities and the facilities of our third-party contract manufacturers, suppliers, and customers, are vulnerable to disruption due to natural or other disasters, strikes and other events beyond our control.

A major earthquake, fire, tsunami, hurricane, cyclone or other disaster, such as a pandemic, major flood, seasonal storms, nuclear event or terrorist attack affecting our facilities or the areas in which they are located, or affecting those of our customers or third-party manufacturers or suppliers, could significantly disrupt our or their operations and delay or prevent product shipment or installation during the time required to repair, rebuild or replace our or their damaged manufacturing facilities. These delays could be lengthy and costly. If any of our facilities or those of our third-party contract manufacturers, suppliers or customers are negatively impacted by such a disaster, production, shipment and installation of our 3D printing machines could be delayed, which can impact the period in which we recognize the revenue related to that 3D printing machine sale. Additionally, customers may delay purchases of our products until operations return to normal. Even if we are able to respond quickly to a disaster, the continued effects of the disaster could create uncertainty in our business operations. In addition, concerns about terrorism, the effects of a terrorist attack, political turmoil, labor strikes, war or the outbreak of epidemic diseases (including the outbreak of COVID-19) could have a negative effect on our operations and sales.

Risks Related to Our Class A Common Stock

Our issuance of additional shares of Class A common stock or convertible securities may dilute your ownership of us and could adversely affect our stock price.

From time to time, we have issued, and we expect in the future to issue, additional shares of our Class A common stock or securities convertible into our Class A common stock pursuant to a variety of transactions, including acquisitions. Additional shares of our Class A common stock may also be issued upon exercise of outstanding stock options and warrants to purchase our Class A common stock. The issuance by us of additional shares of our Class A common stock or securities convertible into our Class A common stock would dilute your ownership of us and the sale of a significant amount of such shares in the public market could adversely affect prevailing market prices of our Class A common stock. Subject to the satisfaction of vesting conditions and the expiration of lockup agreements, shares issuable upon exercise of options will be available for resale immediately in the public market without restriction.

In the future, we expect to obtain financing or to further increase our capital resources by issuing additional shares of our capital stock or offering debt or other equity securities, including senior or subordinated notes, debt securities convertible into equity, or shares of preferred stock. Issuing additional shares of our capital stock, other equity securities, or securities convertible into equity may dilute the economic and voting rights of our existing stockholders, reduce the market price of our Class A common stock, or both. Debt securities convertible into equity could be subject to adjustments in the conversion ratio pursuant to which certain events may increase the number of equity securities issuable upon conversion. Preferred stock, if issued, could have a preference with respect to liquidating distributions or a preference with respect to dividend payments that could limit our ability to pay dividends to the holders of our Class A common stock. Our decision to issue securities in any future offering will depend on market conditions and other factors beyond our control, which may adversely affect the amount, timing or nature of our future offerings. As a result, holders of our Class A common stock bear the risk that our future offerings may reduce the market price of our Class A common stock and dilute their percentage ownership.

Future sales, or the perception of future sales, of our Class A common stock by us or our existing stockholders in the public market could cause the market price for our Class A common stock to decline.

The sale of substantial amounts of shares of our Class A common stock in the public market, or the perception that such sales could occur, could harm the prevailing market price of shares of our Class A common stock. These sales, or the possibility that these sales may occur, also might make it more difficult for us to sell equity securities in the future at a time and at a price that we deem appropriate. Certain shares of our common stock are freely tradable without restriction under the Securities Act, except for any shares of our Class A common stock that may be held or acquired by our directors, executive officers, and other affiliates, as that term is defined in the Securities Act, which are be restricted securities under the Securities Act. Restricted securities may not be sold in the public market unless the sale is registered under the Securities Act or an exemption from registration is available. Any such sales, including sales of a substantial number of shares or the perception in the market that the holders of a large number of shares intend to sell shares, could reduce the market price of our common stock. We may also issue shares of our common stock or securities convertible into our common stock from time to time in connection with financings, acquisitions, investments, or otherwise. Any such issuance could result in ownership dilution to you as a stockholder and cause the trading price of our common stock to decline.

Our directors, executive officers and stockholders affiliated with our directors and executive officers own a significant percentage of our Class A common stock and, if they choose to act together, will be able to exert significant control over matters subject to shareholder approval.

Our directors, executive officers, and stockholders affiliated with our directors and executive officers exert significant influence on us. As of December 31, 2021, these holders owned approximately 9.4% of our outstanding Class A common stock. As a result, these holders, acting together, have significant control over all matters that require approval of our stockholders, including the election of directors, amendments of our organizational documents, or approval of any merger, sale of assets, or other major corporate transactions. The interests of these holders may not always coincide with our corporate interests or the interests of other stockholders, and they may act in a manner with which you may not agree or that may not be in the best interests of our other stockholders.

Anti-takeover provisions in our governing documents and under Delaware law could make an acquisition of us more difficult, limit attempts by our stockholders to replace or remove our current management and limit the market price of our Class A common stock.

Our certificate of incorporation, bylaws, and Delaware law contain provisions that could have the effect of rendering more difficult, delaying, or preventing an acquisition deemed undesirable by our board of directors. Among other things, our certificate of incorporation and bylaws include the following provisions:

- a staggered board, which means that our board of directors is classified into three classes of directors with staggered three-year terms and directors are only able to be removed from office for cause;
- limitations on convening special stockholder meetings, which could make it difficult for our stockholders to adopt desired governance changes;
- a prohibition on stockholder action by written consent, which means that our stockholders will only be able to take action at a meeting of stockholders and will not be able to take action by written consent for any matter;
- a forum selection clause, which means certain litigation against us can only be brought in Delaware;
- the authorization of undesignated preferred stock, the terms of which may be established and shares of which may be issued without further action by our stockholders; and
- advance notice procedures, which apply for stockholders to nominate candidates for election as directors or to bring matters before an annual meeting of stockholders.

These provisions, alone or together, could delay or prevent hostile takeovers and changes in control or changes in our management. As a Delaware corporation, we are also subject to provisions of Delaware law, including Section 203 of the DGCL, which prevents interested stockholders, such as certain stockholders holding more than 15% of our outstanding Class A common stock, from engaging in certain business combinations unless (i) prior to the time such stockholder became an interested stockholder, our board of directors approved the transaction that resulted in such stockholder becoming an interested stockholder, (ii) upon consummation of the transaction that resulted in such stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of our Class A common stock, or (iii) following board approval, such business combination receives the approval of the holders of at least two-thirds of our outstanding Class A common stock not held by such interested stockholder at an annual or special meeting of stockholders.

Any provision of our certificate of incorporation, our bylaws or Delaware law that has the effect of delaying, preventing or deterring a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our Class A common stock and could also affect the price that some investors are willing to pay for our Class A common stock.

Our certificate of incorporation and bylaws provide that the Court of Chancery of the State of Delaware will be the sole and exclusive forum for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers, or employees.

Our certificate of incorporation and bylaws provide that, unless we consent in writing to the selection of an alternative forum, the (a) Court of Chancery of the State of Delaware (or, in the event that the Chancery Court does not have jurisdiction, the federal district court for the District of Delaware or other state courts of the State of Delaware) shall, to the fullest extent permitted by law, be the sole and exclusive forum for: (i) any derivative action, suit or proceeding brought on our behalf; (ii) any action, suit or proceeding asserting a claim of breach of fiduciary duty owed by any of our directors, officers, or stockholders to us or to our stockholders; (iii) any action, suit or proceeding asserting a claim arising pursuant to the DGCL, our certificate of incorporation or bylaws; or (iv) any action, suit or proceeding asserting a claim governed by the internal affairs doctrine; and (b) subject to the foregoing, the federal district courts of the United States of America shall be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act. Notwithstanding the foregoing, such forum selection provisions shall not apply to suits brought to enforce any liability or duty created by the Exchange Act or any other claim for which the federal courts of the United States have exclusive jurisdiction. The choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum

that it finds favorable for disputes with us or our directors, officers, or other employees, which may discourage such lawsuits against us and our directors, officers, and other employees. Alternatively, if a court were to find the choice of forum provision contained in our certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could harm our business, results of operations, and financial condition.

Additionally, Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder. As noted above, our certificate of incorporation and bylaws provide that the federal district courts of the United States of America shall have jurisdiction over any action arising under the Securities Act. Accordingly, there is uncertainty as to whether a court would enforce such provision. Our stockholders will not be deemed to have waived our compliance with the federal securities laws and the rules and regulations thereunder.

Risks Related to Our Indebtedness

Our indebtedness and liabilities could limit the cash flow available for our operations, expose us to risks that could adversely affect our business, financial condition and results of operations and impair our ability to satisfy our obligations under the 2027 Notes.

In May 2022, we issued $115.0 million principal amount of 6.0% Convertible Senior Notes due 2027. We may also incur additional indebtedness to meet future financing needs. Our indebtedness could have significant negative consequences for our security holders and our business, results of operations and financial condition by, among other things:

- increasing our vulnerability to adverse economic and industry conditions;
- limiting our ability to obtain additional financing;
- requiring the dedication of a substantial portion of our cash flow from operations to service our indebtedness, which will reduce the amount of cash available for other purposes;
- limiting our flexibility to plan for, or react to, changes in our business;
- diluting the interests of our existing stockholders as a result of issuing shares of our Class A common stock upon conversion of the 2027 Notes; and
- placing us at a possible competitive disadvantage with competitors that are less leveraged than we or have better access to capital.

Our business may not generate sufficient funds, and we may otherwise be unable to maintain sufficient cash reserves, to pay amounts due under our indebtedness, including the 2027 Notes, and our cash needs may increase in the future. In addition, any future indebtedness that we may incur may contain financial and other restrictive covenants that limit our ability to operate our business, raise capital or make payments under any existing indebtedness. If we fail to comply with these covenants or to make payments under any existing indebtedness when due, then we would be in default under that indebtedness, which could, in turn, result in that and any existing other indebtedness becoming immediately payable in full.

We may be unable to raise the funds necessary to repurchase the 2027 Notes for cash following a fundamental change, or to pay the cash amounts due upon conversion, and any other existing indebtedness may limit our ability to repurchase the 2027 Notes or pay cash upon their conversion.

Noteholders may require us to repurchase the 2027 Notes following a fundamental change at a cash repurchase price generally equal to the principal amount of the 2027 Notes to be repurchased, plus accrued and unpaid interest, if any. In addition, upon conversion, we will satisfy part or all of our conversion obligation in cash. We may not have enough available cash or be able to obtain financing at the time we are required to repurchase the 2027 Notes or pay the cash amounts due upon conversion. In addition, applicable law, regulatory authorities and the agreements governing any other indebtedness may restrict our ability to repurchase the 2027 Notes or pay the cash amounts due upon conversion. Our failure to repurchase the 2027 Notes or pay the cash amounts due upon conversion when required will constitute a default under the indenture. A default under the indenture or the fundamental change itself

could also lead to a default under agreements governing any other indebtedness, which may result in that other indebtedness becoming immediately payable in full. We may not have sufficient funds to satisfy all amounts due under any other indebtedness and the 2027 Notes.

Provisions in the indenture governing the 2027 Notes could delay or prevent an otherwise beneficial takeover of us.

Certain provisions in the 2027 Notes and the indenture governing the 2027 Notes could make a third-party attempt to acquire us more difficult or expensive. For example, if a takeover constitutes a fundamental change, then holders of the 2027 Notes will have the right to require us to repurchase their 2027 Notes for cash. In addition, if a takeover constitutes a make-whole fundamental change, then we may be required to temporarily increase the conversion rate. In either case, and in other cases, our obligations under the 2027 Notes and the indenture could increase the cost of acquiring us or otherwise discourage a third party from acquiring us or removing incumbent management, including in a transaction that holders of our 2027 Notes or holders of our Class A common stock may view as favorable.

Risks Related to Compliance Matters

Failure of our global operations to comply with anti-corruption laws and various trade restrictions, such as sanctions and export controls, could have an adverse effect on our business.

We operate in a number of countries throughout the world, including countries known to have a reputation for corruption. Doing business on a global basis requires us to comply with anti-corruption laws and regulations imposed by governments around the world with jurisdiction over our operations, including the U.S. Foreign Corrupt Practices Act and the U.K. Bribery Act 2010, as well as the laws of the countries where we do business. We are also subject to various trade restrictions, including trade and economic sanctions and export controls, imposed by governments around the world with jurisdiction over our operations. For example, in accordance with trade sanctions administered by the Office of Foreign Assets Control and the U.S. Department of Commerce, we are prohibited from engaging in transactions involving certain persons and certain designated countries or territories, including Russia, Belarus, Cuba, Iran, Syria, North Korea and the Crimea Region of Ukraine. In addition, our products are subject to export regulations that can involve significant compliance time and may add additional overhead cost to our products. In recent years the U.S. government has had a renewed focus on export matters. For example, the Export Control Reform Act of 2018 and regulatory guidance have imposed additional controls, and may result in the imposition of further additional controls, on the export of certain “emerging and foundational technologies.” Our current and future products may be subject to these heightened regulations, which could increase our compliance costs.

We are committed to doing business in accordance with applicable anti-corruption laws and regulations and with applicable trade restrictions. We are subject, however, to the risk that our affiliated entities or our and our affiliates’ respective officers, directors, employees and agents (including distributors of our products) may take action determined to be in violation of such laws and regulations. Any violation by any of these persons could result in substantial fines, sanctions, civil and/or criminal penalties, or curtailment of operations in certain jurisdictions, and might adversely affect our operating results. In addition, actual or alleged violations could damage our reputation and ability to do business.

We are subject to environmental, health and safety laws and regulations related to our operations and the use of our additive manufacturing systems, produced parts, and consumable materials, which could subject us to compliance costs and/or potential liability in the event of non-compliance.

We are subject to domestic and foreign environmental laws and regulations governing our operations, including, but not limited to, emissions into the air and water and the use, handling, disposal and remediation of hazardous substances. A certain risk of environmental liability is inherent in our production activities. These laws and regulations govern, among other things, the generation, use, storage, registration, handling and disposal of chemicals and waste materials, the presence of specified substances in electrical products, the emission and discharge of hazardous materials into the ground, air or water, the cleanup of contaminated sites, including any contamination that results from spills due to our failure to properly dispose of chemicals and other waste materials and the health and safety of our employees. Under these laws, regulations and requirements, we could also be subject to liability for improper disposal of chemicals and waste materials, including those resulting from the use of our systems and accompanying materials by end-users. Accidents or other incidents that occur at our facilities or involve our personnel or operations could result in claims for damages against us. In the event we are found to be financially responsible, as a result of environmental or other laws or by court order, for

environmental damages alleged to have been caused by us or occurring on our premises, we could be required to pay substantial monetary damages or undertake expensive remedial obligations. If our operations fail to comply with such laws or regulations, we may be subject to fines and other civil, administrative or criminal sanctions, including the revocation of permits and licenses necessary to continue our business activities. In addition, we may be required to pay damages or civil judgments in respect of third-party claims, including those relating to personal injury (including exposure to hazardous substances that we generate, use, store, handle, transport, manufacture or dispose of), property damage or contribution claims. Some environmental laws allow for strict, joint and several liabilities for remediation costs, regardless of fault. We may be identified as a potentially responsible party under such laws. The amount of any costs, including fines or damages payments that we might incur under such circumstances could substantially exceed any insurance we have to cover such losses. Any of these events, alone or in combination, could have a material adverse effect on our business, financial condition and results of operations and could adversely affect our reputation.

The export of our products internationally from our production facilities subjects us to environmental laws and regulations concerning the import and export of chemicals and hazardous substances such as the United States Toxic Substances Control Act and the Registration, Evaluation, Authorization and Restriction of Chemical Substances. These laws and regulations require the testing and registration of some chemicals that we ship along with, or that form a part of, our systems and other products. If we fail to comply with these or similar laws and regulations, we may be required to make significant expenditures to reformulate the chemicals that we use in our products and materials or incur costs to register such chemicals to gain and/or regain compliance. Additionally, we could be subject to significant fines or other civil and criminal penalties should we not achieve such compliance.

The SEC's recently proposed rules on climate change disclosures, if adopted, will increase our costs and expenditures. The cost of complying with other current and future environmental, health and safety laws applicable to our operations, or the liabilities arising from past releases of, or exposure to, hazardous substances, may result in future expenditures. Any of these developments, alone or in combination, could have an adverse effect on our business, financial condition and results of operations.

Aspects of our business are subject to privacy, data use and data security regulations, which could increase our costs.

We collect personally identifiable information from our employees, prospects, and our customers. Privacy and security laws and regulations may limit the use and disclosure of certain information and require us to adopt certain cybersecurity and data handling practices that may affect our ability to effectively market our services to current, past or prospective customers. We must comply with privacy laws in the United States, Europe and elsewhere, including GDPR in the European Union, which became effective May 25, 2018 and the retained version of the GDPR as it forms part of the law of England and Wales, Scotland and Northern Ireland, and the California Consumer Privacy Act of 2018, which was enacted on June 28, 2018 and became effective on January 1, 2020. These laws create new individual privacy rights and impose increased obligations, including disclosure obligations, on companies handling personal data. In many jurisdictions, consumers must be notified in the event of a data security breach, and such notification requirements continue to increase in scope and cost. Privacy and security laws and regulations may limit the use and disclosure of certain information and require us to adopt certain cybersecurity and data handling practices that may affect our ability to effectively market our services to current, past or prospective customers. While we have invested in, and intend to continue to invest in, resources to comply with these standards, we may not be successful in doing so, and any such failure could have an adverse effect on our business, results of operations and reputation.

As privacy, data use and data security laws are interpreted and applied, compliance costs may increase, particularly in the context of ensuring that adequate data protection and data transfer mechanisms are in place. In recent years, there has been increasing regulatory enforcement and litigation activity in this area in the United States, Germany and in various other countries in which we operate.

Compliance with regulations for medical devices and solutions is expensive and time-consuming, and failure to obtain or maintain approvals, clearances, or compliance could impact financial projections and/or subject us to penalties or liabilities.

Our Desktop Health products and services, and its healthcare provider customers and distributors, are and will be subject to extensive federal, state, local and foreign regulations, including, without limitation, regulations with respect to approvals and clearances for products, design, manufacturing and testing, labeling, marketing, sales, quality control, and privacy. Unless an exemption applies, we must obtain clearance or approval from the Food and Drug Administration (or comparable foreign regulatory body) before a medical device or solution can be marketed or sold; this process involves significant time, effort and expense. The healthcare market overall is highly regulated and subject to frequent and sudden change. Our failure to secure clearances or approvals

or comply with regulations could have an adverse impact on our business and reputation and subject us to lost research and development costs, withdrawal of clearance/approval, operating restrictions, liabilities, fines, penalties and/or litigation.

Risks Related to Intellectual Property

Third-party lawsuits and assertions alleging our infringement of patents, trade secrets or other intellectual property rights may have a significant adverse effect on our financial condition.

Third parties may own issued patents and pending patent applications that exist in fields relevant to additive manufacturing. Some of these third parties may assert that we are employing their proprietary technology without authorization. There may be third-party patents or patent applications with claims related to additive manufacturing. Because patent applications can take many years to issue, there may be currently pending patent applications which may later result in issued patents that our additive technologies may infringe. In addition, third parties may obtain patents in the future and claim that our technologies infringe upon these patents. Any third-party lawsuits or other assertion to which we are subject alleging our infringement of patents, trade secrets or other intellectual property rights may have a significant adverse effect on our financial condition.

We may incur substantial costs enforcing and defending our intellectual property rights.

We may incur substantial expense and costs in protecting, enforcing and defending our intellectual property rights against third parties. Intellectual property disputes may be costly and can be disruptive to our business operations by diverting attention and energies of management and key technical personnel and by increasing our costs of doing business. Third-party intellectual property claims asserted against us could subject us to significant liabilities, require us to enter into royalty and licensing arrangements on unfavorable terms, prevent us from assembling or licensing certain of our products, subject us to injunctions restricting our sale of products, cause severe disruptions to our operations or the marketplaces in which we compete or require us to satisfy indemnification commitments with our customers, including contractual provisions under various license arrangements. In addition, we may incur significant costs in acquiring the necessary third-party intellectual property rights for use in our products. Any of these could have an adverse effect on our business and financial condition.

If we are unable to adequately protect or enforce our intellectual property rights, such information may be used by others to compete against us, in particular in developing consumables that could be used with our printing systems in place of our proprietary consumables.

We have devoted substantial resources to the development of our technology and related intellectual property rights. Our success and future revenue growth will depend, in part, on our ability to protect our intellectual property. We rely on a combination of registered and unregistered intellectual property and protect our rights using patents, licenses, trademarks, trade secrets, confidentiality and assignment of invention agreements and other methods.

Despite our efforts to protect our proprietary rights, it is possible that competitors or other unauthorized third parties may obtain, copy, use or disclose our technologies, inventions, processes or improvements. We cannot assure you that any of our existing or future patents or other intellectual property rights will not be challenged, invalidated or circumvented, or will otherwise provide us with meaningful protection. Our pending patent applications may not be granted, and we may not be able to obtain foreign patents or pending applications corresponding to our U.S. patents. Even if foreign patents are granted, effective enforcement in foreign countries may not be available.

Our trade secrets, know-how and other unregistered proprietary rights are a key aspect of our intellectual property portfolio. While we take reasonable steps to protect our trade secrets and confidential information and enter into confidentiality and invention assignment agreements intended to protect such rights, such agreements can be difficult and costly to enforce or may not provide adequate remedies if violated, and we may not have entered into such agreements with all relevant parties. Such agreements may be breached, and trade secrets or confidential information may be willfully or unintentionally disclosed, including by employees who may leave our company and join our competitors, or our competitors or other parties may learn of the information in some other way. The disclosure to, or independent development by, a competitor of any of our trade secrets, know-how or other technology not protected by a patent or other intellectual property system could materially reduce or eliminate any competitive advantage that we may have over such competitor. This concern could manifest itself in particular with respect to our proprietary consumables that are used with our systems. Portions of our proprietary consumables may not be afforded patent protection. Chemical companies or other

producers of raw materials used in our consumables may be able to develop consumables that are compatible to a large extent with our products, whether independently or in contravention of our trade secret rights and related proprietary and contractual rights. If such consumables are made available to owners of our systems, and are purchased in place of our proprietary consumables, our revenues and profitability would be reduced, and we could be forced to reduce prices for our proprietary consumables.

If our patents and other intellectual property do not adequately protect our technology, our competitors may be able to offer products similar to ours. Our competitors may also be able to develop similar technology independently or design around our patents and other intellectual property. Any of the foregoing events would lead to increased competition and reduce our revenue or gross margin, which would adversely affect our operating results.

If we attempt enforcement of our intellectual property rights, we may be, and have been in the past, subject or party to claims, negotiations or complex, protracted litigation. Intellectual property disputes and litigation, regardless of merit, can be costly and disruptive to our business operations by diverting attention and energies of management and key technical personnel and by increasing our costs of doing business. Any of the foregoing could adversely affect our business and financial condition.

As part of any settlement or other compromise to avoid complex, protracted litigation, we may agree not to pursue future claims against a third party, including related to alleged infringement of our intellectual property rights. Part of any settlement or other compromise with another party may resolve a potentially costly dispute but may also have future repercussions on our ability to defend and protect our intellectual property rights, which in turn could adversely affect our business.

Our additive manufacturing software contains third-party open-source software components, and failure to comply with the terms of the underlying open-source software licenses could restrict our ability to sell our products.

Our additive manufacturing software contains components that are licensed under so-called “open source,” “free” or other similar licenses. Open source software is made available to the general public on an “as-is” basis under the terms of a non-negotiable license. We currently combine our proprietary software with open source software, but not in a manner that we believe requires the release of the source code of our proprietary software to the public. We do not plan to integrate our proprietary software with open source software in ways that would require the release of the source code of our proprietary software to the public; however, our use and distribution of open source software may entail greater risks than use of third-party commercial software. Open source licensors generally do not provide warranties or other contractual protections regarding infringement claims or the quality of the code. In addition, if we combine our proprietary software with open source software in a certain manner, we could, under certain open source licenses, be required to release to the public or remove the source code of our proprietary software. We may also face claims alleging noncompliance with open source license terms or infringement or misappropriation of proprietary software. These claims could result in litigation, require us to purchase a costly license or remove the software. In addition, if the license terms for open source software that we use change, we may be forced to re-engineer our solutions, incur additional costs or discontinue the sale of our offerings if re-engineering could not be accomplished on a timely basis. Although we monitor our use of open source software to avoid subjecting our offerings to unintended conditions, there is a risk that these licenses could be construed in a way that could impose unanticipated conditions or restrictions on our ability to commercialize our offerings. We cannot guarantee that we have incorporated open source software in our software in a manner that will not subject us to liability or in a manner that is consistent with our current policies and procedures.

General Risk Factors

Our Class A common stock price may be volatile or may decline regardless of our operating performance. You may lose some or all of your investment.

The trading price of our Class A common stock is likely to be volatile. The stock market recently has experienced extreme volatility. This volatility often has been unrelated or disproportionate to the operating performance of particular companies. You may not be able to resell your shares at an attractive price due to a number of factors such as those listed in this section and the following:

- the impact of the COVID-19 pandemic on our financial condition and the results of operations;
- our operating and financial performance and prospects;

- our quarterly or annual earnings or those of other companies in our industry compared to market expectations;
- conditions that impact demand for our products;
- future announcements concerning our business, our customers' businesses or our competitors' businesses;
- the public's reaction to our press releases, other public announcements and filings with the SEC;
- the size of our public float;
- coverage by or changes in financial estimates by securities analysts or failure to meet their expectations;
- market and industry perception of our success, or lack thereof, in pursuing our growth strategy;
- strategic actions by us or our competitors, such as acquisitions or restructurings;
- changes in laws or regulations which adversely affect our industry or us;
- changes in accounting standards, policies, guidance, interpretations or principles;
- changes in senior management or key personnel;
- issuances, exchanges or sales, or expected issuances, exchanges or sales of our capital stock;
- changes in our dividend policy;
- adverse resolution of new or pending litigation against us; and
- changes in general market, economic and political conditions in the United States and global economies or financial markets, including those resulting from natural disasters, terrorist attacks, acts of war and responses to such events.

These broad market and industry factors may materially reduce the market price of our Class A common stock, regardless of our operating performance. In addition, price volatility may be greater if the public float and trading volume of our Class A common stock is low. As a result, you may suffer a loss on your investment.

In the past, following periods of market volatility, stockholders have instituted securities class action litigation. If we were involved in securities litigation, it could have a substantial cost and divert resources and the attention of executive management from our business regardless of the outcome of such litigation.

If securities analysts do not publish research or reports about us, or if they issue unfavorable commentary about us or our industry or downgrade our Class A common stock, the price of our Class A common stock could decline.

The trading market for our Class A common stock depends, in part, on the research and reports that third-party securities analysts publish about us and the industries in which we operate. We may be unable or slow to attract research coverage and if one or more analysts cease coverage of us, the price and trading volume of our securities would likely be negatively impacted. If any of the analysts that may cover us change their recommendation regarding our Class A common stock adversely, or provide more favorable relative recommendations about our competitors, the price of our Class A common stock would likely decline. If any analyst that may cover us ceases covering us or fails to regularly publish reports on us, we could lose visibility in the financial markets, which could cause the price or trading volume of our Class A common stock to decline. Moreover, if one or more of the analysts who cover us downgrades our Class A common stock, or if our reporting results do not meet their expectations, the market price of our Class A common stock could decline.

The obligations associated with being a public company involve significant expenses and require significant resources and management attention, which may divert from our business operations.

We are subject to the reporting requirements of the Exchange Act and the Sarbanes-Oxley Act. The Exchange Act requires that we file annual, quarterly and current reports with respect to our business and financial condition. The Sarbanes-Oxley Act requires, among other things, that we establish and maintain effective internal control over financial reporting. Now that we have ceased to be an "emerging growth company" an attestation report on internal control over financial reporting is required to be issued by our independent registered public accounting firm. As a result, we will incur increased legal, accounting and other expenses that we did not previously incur. Our entire management team and many of our other employees will continue to devote substantial time to compliance and may not effectively or efficiently manage our transition into a public company.

In addition, the need to establish the corporate infrastructure demanded of a public company may also divert management's attention from implementing our business strategy, which could prevent us from improving our business, results of operations and financial condition. We have made, and will continue to make, changes to our internal control over financial reporting, including IT controls, and procedures for financial reporting and accounting systems to meet our reporting obligations as a public company. However, the measures we take may not be sufficient to satisfy our obligations as a public company. If we do not continue to develop and implement the right processes and tools to manage our changing enterprise and maintain our culture, our ability to compete successfully and achieve our business objectives could be impaired, which could negatively impact our business, financial condition and results of operations. In addition, we cannot predict or estimate the amount of additional costs we may incur to comply with these requirements. We anticipate that these costs will materially increase our general and administrative expenses.

These rules and regulations result in our incurring legal and financial compliance costs and will make some activities more time-consuming and costly. For example, we expect these rules and regulations to make it more difficult and more expensive for us to obtain director and officer liability insurance, and we may be required to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. As a result, it may be more difficult for us to attract and retain qualified people to serve on our board of directors, our board committees or as executive officers.

As a public reporting company, we will be subject to rules and regulations established from time to time by the SEC regarding our internal control over financial reporting. If we fail to establish and maintain effective internal control over financial reporting and disclosure controls and procedures, we may not be able to accurately report our financial results or report them in a timely manner.

We are subject to the rules and regulations established from time to time by the SEC and the NYSE. These rules and regulations require, among other things that we establish and periodically evaluate procedures with respect to our internal control over financial reporting. Reporting obligations as a public company are likely to place a considerable strain on our financial and management systems, processes and controls, as well as on our personnel.

In addition, as a public company, we are required to document and test our internal control over financial reporting pursuant to Section 404 of the Sarbanes-Oxley Act so that our management can certify as to the effectiveness of our internal control over financial reporting.

We have identified material weaknesses in our internal controls over financial reporting as of December 31, 2021. Our internal controls over financial reporting currently do not meet all of the standards contemplated by Section 404 of Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, and failure to achieve and maintain effective internal controls over financial reporting in accordance with Section 404 of the Sarbanes-Oxley Act could impair our ability to produce timely and accurate financial statements or comply with applicable regulations and have a material adverse effect on our business.

We are required to maintain internal control over financial reporting and to report any material weaknesses in these controls. The process of designing and implementing effective internal controls is a continuous effort that will require us to anticipate and react to changes in our business and the economic and regulatory environments and to expend significant resources to maintain a system of internal controls that is adequate to satisfy our reporting obligations as a public company. If we are unable to establish or maintain appropriate internal financial reporting controls and procedures, it could cause us to fail to meet our reporting obligations on a timely basis or result in material misstatements in our consolidated financial statements, which could harm our operating results. In addition, we will be required, pursuant to Section 404 of the Sarbanes-Oxley Act, to furnish a report by management on, among other things,

the effectiveness of our internal control over financial reporting. This assessment will need to include disclosure of any material weaknesses identified by our management in our internal control over financial reporting. The rules governing the standards that must be met for our management to assess our internal control over financial reporting are complex and require significant documentation, testing, and possible remediation. Testing and maintaining internal controls may divert management's attention from other matters that are important to our business. Our independent registered public accounting firm will be required to attest to the effectiveness of our internal control over financial reporting on an annual basis.

In addition to our results determined in accordance with GAAP, we believe certain non-GAAP measures may be useful in evaluating our operating performance. We present certain non-GAAP financial measures in this Quarterly Report on Form 10-Q and intend to continue to present certain non-GAAP financial measures in future filings with the SEC and other public statements. Any failure to accurately report and present our non-GAAP financial measures could cause investors to lose confidence in our reported financial and other information, which would likely have a negative effect on the trading price of our Class A common stock.

Matters impacting our internal controls may cause us to be unable to report our financial information on a timely basis and thereby subject us to adverse regulatory consequences, including sanctions by the SEC or violations of applicable NYSE listing rules, which may result in a breach of the covenants under existing or future financing arrangements. There also could be a negative reaction in the financial markets due to a loss of investor confidence in us and the reliability of our financial statements. Confidence in the reliability of our financial statements also could suffer if we or our independent registered public accounting firm continue to report a material weakness in our internal controls over financial reporting. This could materially adversely affect us and lead to a decline in the market price of our Class A common stock.

As of December 31, 2021, our management and auditors determined that material weaknesses existed in our internal control over financial reporting due to the fact that we had not completed an annual or quarterly close under a timeline that would be compatible with public company filing deadlines, and with our limited accounting department personnel, this may not be achievable. A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of our annual or interim consolidated financial statements will not be prevented or detected on a timely basis. While we have instituted plans to remediate the issue described above and continue to take remediation steps, including hiring additional personnel, including a vice president of accounting with public company experience, we continued to have a limited number of personnel with the level of GAAP accounting knowledge, specifically related to complex accounting transactions, commensurate with our financial reporting requirements.

Although we believe the hiring of additional accounting resources, implementation of additional reviews and processes requiring timely account reconciliations and analysis and implementation of processes and controls to better identify and manage segregation of duties will remediate the material weakness with respect to insufficient personnel, there can be no assurance that the material weakness will be remediated on a timely basis or at all, or that additional material weaknesses will not be identified in the future. If we are unable to remediate the material weakness, our ability to record, process, and report financial information accurately, and to prepare financial statements within the time periods specified by the rules and forms of the SEC, could be adversely affected which, in turn, to may adversely affect our reputation and business and the market price of our Class A common stock.

We are, and have been in the recent past, subject to litigation.

We are currently, and have been in the recent past, subject to litigation, and we could be subject to further litigation in the future. Although we vigorously pursue favorable outcomes, we can provide no assurance as to the outcome of any current or future lawsuits or allegations, and any such actions may result in judgments against us for significant damages. Resolution of any such matters can be prolonged and costly, and the ultimate results or judgments are uncertain due to the inherent uncertainty in litigation and other proceedings. In addition, the additive manufacturing industry has been, and may continue to be, litigious, particularly with respect to intellectual property claims. Moreover, our potential liabilities are subject to change over time due to new developments, changes in settlement strategy or the impact of evidentiary requirements. Regardless of the outcome, litigation has resulted in the past, and may result in the future, in significant legal expenses and require significant attention and resources of management. As a result, any present or future litigation that may be brought against us by any third party could result in losses, damages and expenses that have a significant adverse effect on our financial condition.

We do not intend to pay dividends on our Class A common stock for the foreseeable future.

We currently intend to retain all available funds and any future earnings to fund the development and growth of our business. As a result, we do not anticipate declaring or paying any cash dividends on our Class A common stock in the foreseeable future. Any decision to declare and pay dividends in the future will be made at the discretion of our board of directors and will depend on, among other things, our business prospects, results of operations, financial condition, cash requirements and availability, certain restrictions related to our indebtedness, industry trends and other factors that our board of directors may deem relevant. Any such decision will also be subject to compliance with contractual restrictions and covenants in the agreements governing our current and future indebtedness. In addition, we may incur additional indebtedness, the terms of which may further restrict or prevent us from paying dividends on our Class A common stock. As a result, you may have to sell some or all of your Class A common stock after price appreciation in order to generate cash flow from your investment, which you may not be able to do. Our inability or decision not to pay dividends, particularly when others in our industry have elected to do so, could also adversely affect the market price of our Class A common stock.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

Recent Sales of Unregistered Securities

All issuances of unregistered securities by us during the three months ended September 30, 2022, have been included previously in a Current Report on Form 8-K.

Issuer Purchases of Equity Securities

The following table sets forth purchases of our common stock for the three months ended September 30, 2022:

Period	Total number of shares purchased [1]	Average price paid per share	Total number of shares purchased as part of a publicly announced program	Approximate dollar value of shares that may yet be purchased under the program
July 1, 2022 through July 31, 2022	—	$ —	—	—
August 1, 2022 through August 31, 2022	10,642	$ 3.30	—	—
September 1, 2022 through September 30, 2022	4,346	$ 3.07	—	—
Total	14,988		—	

[1] All of the shares were withheld from employees in satisfaction of minimum tax withholding obligations associated with the issuance of shares of Class A common stock.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

We are reporting the following information in lieu of reporting on a Current Report on Form 8-K under Item 5.02 Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

On November 6, 2022, Arjun Aggarwal and Desktop Metal, Inc. (the “Company”) agreed Mr. Aggarwal will step down from his position as Executive Vice President, Corporate Development, after completing a transition period during which Mr. Aggarwal will serve as the Company’s Executive Vice President, Corporate Development until January 2, 2023 (the “Separation Date”). Mr.

Aggarwal's departure is not the result of any disagreement with the Company on any matter relating to the Company's operations, policies, or practices.

In connection with his transition and separation, on November 6, 2022, Mr. Aggarwal and the Company entered into a Transition and Separation Agreement (the "Separation Agreement") pursuant to which, in exchange for transition services, a release of claims in favor of the Company and its affiliates and a non-compete, the Company will (i) continue to pay Mr. Aggarwal's base salary for a period of 6 months from the Separation Date (the "Severance Period"), and (ii) cause the equity agreements between Mr. Aggarwal and the Company to be amended such that Mr. Aggarwal shall have 60 months from the Separation Date to exercise his vested options. The Separation Agreement also includes other customary provisions.

Item 6. Exhibits

(a) Exhibits

The exhibits listed in the Exhibit Index are filed as part of this Quarterly Report on Form 10-Q and are incorporated herein by reference.

EXHIBIT INDEX

Exhibit		Incorporated by Reference		
		Form	Exhibit	Filing Date
10.1†	Separation Agreement, dated as of August 22, 2022, by and between Desktop Metal, Inc. and Michael Jafar			*
10.2	Offer Letter, dated as of October 21, 2022, by and between Desktop Metal, Inc. and Jason Cole	8-K	10.1	10/26/2022
10.3	Separation Agreement, dated as of November 6, 2022, by and between Desktop Metal, Inc. and Arjun Aggarwal			*
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a)			*
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a)			*
32.1	Certification of Chief Executive Officer and Chief Financial Officer of Periodic Report Pursuant to 18 U.S.C. Section 1350			*
101.INS	Inline XBRL Instance Document			*
101.SCH	Inline XBRL Taxonomy Extension Schema Document			*
101.CAL	Inline XBRL Taxonomy Calculation Linkbase Document			*
101.DEF	Inline XBRL Taxonomy Definition Linkbase Document			*
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document			*
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document			*
104	Cover Page Interactive Data File (formatted as inline XBRL and contained in Exhibit 101)			*

* Filed with this Quarterly Report on Form 10-Q.

† Portions of this exhibit (indicated by asterisks) have been redacted in compliance with Regulation S-K Item 601(b)(10)(iv).

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) 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.

DESKTOP METAL, INC.

Date: November 9, 2022

By: /s/ Ric Fulop
Ric Fulop
Chief Executive Officer
(Principal Executive Officer)

Date: November 9, 2022

By: /s/ James Haley
James Haley
Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)

Exhibit 10.1

CERTAIN CONFIDENTIAL INFORMATION IN THIS DOCUMENT, MARKED BY [***], HAS BEEN OMITTED BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED

June 23, 2022

Re: Separation & Release Letter Agreement

Dear Michael Jafar:

For the reasons we have discussed, this letter will confirm your transition and separation from your employment with Desktop Metal, Inc. (hereinafter "Company"), along with specific terms and conditions relating to the offer of Severance Benefits (as defined below).

1. Transition from Employment.

During the period beginning today and ending on the Separation Date (as defined below) (the "Transition Period"), you shall continue to devote your full working time and best efforts to performing your usual job duties and such other duties as the Company may reasonably request, including but not limited to cooperating in the effective transition of your responsibilities. As part of your responsibilities during the Transition Period, you agree to create and provide to Thomas Nogueira, on or before the Separation Date, a transition memorandum detailing the matters on which you are currently working, including any active agreements, contact information for vendors, customers or other partners as relevant, a description of tasks to be done and any other information as may be requested by the Company to handle the matters you are working on following the Separation Date. During the Transition Period, you will continue to earn the same salary and have access to the same benefits as you currently enjoy.

Your employment with the Company shall terminate effective June 30, 2022 or such earlier date as the Company may terminate your employment for Cause (as defined below) (the "Separation Date"). For purposes of this Agreement, "Cause" shall mean: (i) your commission of any fraud, embezzlement, theft, or dishonesty, or any misappropriation of any amount of money or other assets or property of the Company; (ii) your material breach of any of the terms of this Agreement, which breach remains uncured (if curable) thirty days after written notice of such failure specifying in reasonable detail the nature of such failure or negligence is given to you by the Company; or (iii) your conviction of, or plea of nolo contendere to, a felony, gross misdemeanor, or any crime involving moral turpitude.

Regardless of whether you elect to sign this Separation and Release Letter Agreement (the "Agreement"), you will receive any and all outstanding wages due to you as of the Separation Date and such other amounts as may be due to you on the Separation Date per Company's written policies or as matter of law. All of the foregoing payments will be subject to applicable withholdings and deductions. You will also be entitled to reimbursement for any allowable business expenses incurred by you through the Separation Date for which you have not yet been reimbursed, in accordance with the Company's regular policies.

If you participate in the Company's health insurance plans, your enrollment as an active employee will end the last day of the month in which the Separation Date takes place. Provided that you are eligible, you may choose to continue your group health coverage at your expense, under the Consolidated Omnibus Budget Reconciliation Act of 1985, a federal law also known as "COBRA." COBRA generally provides for continued coverage for eligible individuals and dependents at the full premium rate for a defined period. All Company payments toward your premiums will end the last day of the month in which the Separation Date takes place, except that you will be eligible for continuing payment of your COBRA premiums as set forth in Section 2 below (subject to the conditions therein).

If you were a participant in the Company 401(k) Plan ("401(k) Plan"), you may be eligible to receive a distribution from your account under that plan in accordance with the terms of that plan. If applicable, you will receive additional information regarding your rights and options under the 401(k) Plan following the Separation Date.

With respect to any equity grants made to you from the Company as of the Separation Date: (i) if you have any vested stock options, they must be exercised within ninety (90) days of the Separation Date, (ii) if you hold shares of DM

stock from vested RSUs, you will retain those shares after the Separation Date, and (iii) all unvested options and RSUs expire as of the Separation Date and you will have no further rights in respect of said awards.

You are required to promptly return all Company property by the Separation Date. Company property includes, but is not limited to, office and building keys, card keys, credit cards, calling and telephone charge cards, personal computers, laptops, pagers, cellular telephones, notebooks, and all confidential information (in whatever form it may be stored), including but not limited to customer and product lists and information, equipment and supplies. In the event you discover any additional Company property in your possession following the Separation Date, you are required to return such property immediately.

While the Company has elected to waive any of your non-competition obligations, you are reminded that you have continuing obligations to the Company (for example, and without limitation, non-solicitation, non-disclosure and assignment of inventions) under certain agreements that you previously signed in connection with your employment, copies of which are attached (the "Ancillary Agreements"). A written waiver of your non-competition obligations is being provided to you along with this letter, and as such Company shall have no obligations to compensate you therefor.

Finally, the Severance Benefits mentioned below are conditioned upon your execution of this Agreement, which includes a full release of any claims you may have against the Company. **Except as otherwise provided herein, please keep the terms of this Agreement confidential**. If you wish to accept this offer, please sign this Agreement in the space provided below and return it to me within the time frame specified herein.

The terms of the Severance Benefits offer are as follows:

2. **Severance Benefits**. Provided you (i) sign, return and do not revoke this Agreement as described in Section 13, (ii) sign and return the ratification set forth below (the "Ratification") on or within five (5) days after the Separation Date (if required) and do not revoke it as described in Section 13, and (ii) comply with the terms and conditions as set forth in this Agreement:

(a) The Company will pay you the Severance Amount (as set forth on Exhibit A attached hereto), subject to applicable deductions and withholdings, in installments on the Company's regularly scheduled pay dates, consistent in amount with pay dates prior to the Separation Date, beginning with the first pay date following the Effective Date until the Severance Amount has been paid.

(b) If you elect and are eligible for COBRA medical and/or dental coverage, the Company will pay the applicable COBRA premiums for a period of twelve (12) months following the last day of the month in which the Separation Date falls (the "COBRA Payments"), provided that (i) the COBRA Payments shall be made directly to the insurer, and (ii) if you elect any COBRA benefits above and beyond the equivalent medical and dental coverage you have through the Company as of the Separation Date, you will be responsible for the additional costs associated therewith.

The Severance Amount and the COBRA Payments are referred to herein as the "Severance Benefits."

3. **Full Release of Claims**.

(a) In consideration for the Severance Benefits and other mutual commitments, undertakings and agreements stated in this Agreement, the receipt of which you hereby acknowledge as good, valuable and adequate consideration, you and your representatives, agents, estate, heirs, successors and assigns ("Releasor"), absolutely and unconditionally hereby forever release, remise, discharge, indemnify and hold harmless Company and/or any of its parents, subsidiaries or affiliates, predecessors, successors or assigns, and its and their respective current and/or former partners, trustees,

investors, members, shareholders/stockholders, directors, officers, managers, employees, attorneys and/or agents, all both individually and in their official capacities ("Releasees"), from any and all actions or causes of action, suits, claims, complaints, liabilities, agreements, promises, contracts, torts, debts, damages, controversies, judgments, rights and demands, whether existing or contingent, known or unknown, including: (i) any and all claims arising out of or in connection with your employment, change in employment status, and/or termination of employment with the Company; (ii) any and all claims arising out of or in connection with any relationship between you and the Company; (iii) any and all claims based on any federal, state or local law, constitution or regulation regarding either securities, employment, employment benefits, wrongful termination, or employment discrimination and/or retaliation including, without limitation, those laws or regulations concerning discrimination on the basis of race, color, creed, religion, age, sex, sexual harassment, sexual orientation, marital status, pregnancy or familial status, physical or mental disability or handicap, military discharge, national origin, ancestry, veteran status or any military service or application for military service, including without limitation those claims falling under all Age Discrimination in Employment Act ("ADEA"), as amended, 29 U.S.C. § 621, et seq.; the Title VII of the Civil Rights Act of 1964, as amended by the Civil Rights Act of 1991, 42 U.S.C. § 2000 et seq.; the Equal Pay Act, as amended, 29 U.S.C. § 206(d); the Civil Rights Act of 1866, 42 U.S.C. § 1981; the Family and Medical Leave Act of 1993, 29 U.S.C. § 2601 et seq.; the Americans with Disabilities Act of 1990, 42 U.S.C. § 12101 et seq.; the False Claims Act , 31 U.S.C. § 3729 et seq.; the Employee Retirement Income Security Act, as amended, 29 U.S.C. § 1001 et seq.; the Worker Adjustment and Retraining Notification Act, as amended, 29 U.S.C. § 2101 et seq. the Fair Labor Standards Act, 29 U.S.C. § 215 et seq., the Sarbanes-Oxley Act of 2002; discrimination and harassment claims under California's Fair Employment and Housing Act; claims under the Illinois Human Rights Act, as amended, or the Illinois Constitution; claims under the Massachusetts Wage Act and the Massachusetts Fair Employment Practices Act; claims under the Michigan Elliott-Larsen Civil Rights Act (ELCRA), Michigan Persons with Disabilities Civil Rights Act (PWDCRA), Payment of Wages and Fringe Benefits Act (WFBA), Michigan Whistleblowers' Protection Act (WPA), Bullard-Plawecki Employee Right to Know Act, the Michigan Occupational Safety and Health Act (MIOSHA), the Michigan Social Security Number Privacy Act, Michigan Internet Privacy Protection Act, and Michigan Sales Representatives Commission Act; claims under the Ohio Civil Rights Act, Ohio's equal pay statute, the Ohio wage payment anti-retaliation statute, Ohio Whistleblower's Protection Act, and Ohio Workers' Compensation anti-retaliation statute; claims under the Pennsylvania Human Relations Act, wrongful discharge, discrimination, retaliation, or other violation of the Pennsylvania Whistleblower Law; claims under the Texas Labor Code (specifically including the Texas Payday Law, the Texas Anti-Retaliation Act, Chapter 21 of the Texas Labor Code, and the Texas Whistleblower Act), all including any amendments and their respective implementing regulations, and any other federal, state, local, or foreign law (statutory, regulatory, or otherwise) that may be legally waived and released; however, the identification of specific statutes is for purposes of example only, and the omission of any specific statute or law shall not limit the scope of this general release in any manner; and (iv) any claim based in contract, whether oral or written, express or implied; any tort; or any other claim under common law (the "Released Claims").

(b) This release is intended by you to be all encompassing and to act as a full and total release of any claims, whether specifically enumerated herein or not, that you may have or have had up to the Separation Date, except for those that may not be released as a matter of law. You acknowledge and agree that the release and discharge set forth above is a general release and is intended to be as broad as the law allows. Releasor expressly waives and assumes the risk of any and all claims for damages which exist as of this date, but of which the Releasor does not know or suspect to exist.

(c) Further, you represent that you have not filed, and agree, to the extent permitted by law, that you will not file, any complaints, lawsuits, or claims with any federal, state or local court or agency, or state or local commission, against Company or any of the Releasees, related in any way to your employment or termination from employment with Company. Nothing herein shall be construed to prohibit you from participating in any investigation or proceeding before any state or federal agency to the extent permitted by law. Notwithstanding the enforceability of any portion of this provision, you are prohibited by the terms of this Agreement from receiving or collecting any damages or other monetary compensation as a result of your participation in any such investigation or proceeding.

(d) You represent that as of the Separation Date you have not been subjected to any unlawful action on the part of the Releasees including but not limited to retaliation or other form of adverse action by the Releasees for any action taken by you as an employee or resulting from your exercise or attempt to exercise any statutory rights recognized under federal, state, or local law.

(e) **THE RELEASORS SPECIFICALLY WAIVE THE PROTECTIONS OF CALIFORNIA CIVIL CODE SECTION 1542, WHICH STATES: "A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS THAT THE CREDITOR OR RELEASING PARTY DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE AND THAT, IF KNOWN BY HIM OR HER, WOULD HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR OR RELEASED PARTY."**

4. **Waiver of Rights and Claims Under the Age Discrimination in Employment Act of 1967.** As you are 40 years of age or older, you are being informed that you have or might have specific rights and/or claims under the Age Discrimination in Employment Act of 1967 ("ADEA"). You hereby irrevocably and unconditionally fully and forever waive, release, and discharge the Released Parties from any and all claims arising under the ADEA and its implementing regulations, whether known or unknown, from the beginning of time through the date of your execution of this Agreement. A copy of the Company's Disclosure Under Title 29 U.S. Code Section 626(f)(1)(H) is attached as Exhibit B. By signing this Agreement, you acknowledge and agree that:

(a) you have read this Agreement in its entirety and understand all of its terms;

(b) you have been advised herein to consult with an attorney before executing this Agreement and have consulted with such counsel as you believed necessary prior to signing this Agreement;

(c) you knowingly, freely and voluntarily asset to all of this Agreement's terms and conditions, including, without limitation, the waiver, release and covenants contained in it;

(d) you understand that the release contained in this Section 3 does not apply to rights and claims that may arise after you sign this Agreement;

(e) you are signing this Agreement, including the waivers and releases contained herein, in exchange for the Severance Benefits, which you are not otherwise entitled to receive;

(f) When Company presented you with this Agreement, you were informed that you have 45 days to review this Agreement and consider its terms before signing it (although you may sign it sooner if desired) and that following your execution hereof, you have 7 days to revoke the Agreement before it is effective (see Section 13); and

(d) The 45-day review period will not be affected or extended by any revisions, whether material or immaterial, that might be made to this Agreement.

5. **Confidentiality.** Except as prohibited by law, you agree that you will keep the terms and conditions of this Agreement and the particulars of any claim(s) you may have against Company in strict confidence. Specifically, the amount of any Severance Benefits shall not be published, displayed, discussed, disclosed or revealed in any way by you or anyone on your behalf without the written permission of Company or as required by court order, except that you may discuss this Agreement with your attorney, spouse and financial advisor. Prior to disclosing these terms to any of the above-referenced individuals, you agree to inform them of their obligations not to disclose the terms further. Included in this confidentiality obligation, neither you nor anyone on your behalf, shall author, originate or issue a statement to any press or media, or confirm or deny any statement or question by press or media relating to the matters released herein. A breach of this confidentiality provision shall be considered a material breach of this Agreement.

6. **Non-Disparagement**. You acknowledge that the Company's reputation and goodwill in the marketplace is of utmost importance and value to the Company. Accordingly, you agree that you will not disparage, defame, denigrate and/or malign Company or any of their respective employees or products in any form or manner. Specifically, except to the extent such a covenant is prohibited by law, you shall not make any statement, verbally or in writing, take any action or do anything to harm, reduce or prejudice that reputation or goodwill.

7. **Full and Final Settlement.** The Severance Benefits shall be complete, final and unconditional payment, settlement, accord and/or satisfaction with respect to all obligations and liabilities of the Releasees to you and with respect to all claims, causes of action and damages, whatsoever and without limit, that could be asserted by you against the Releasees regarding your employment with, change in employment status, and/or termination of employment from, Company, including, without limitation, all claims for back wages, salary, vacation pay, sick pay, draws, incentive pay, bonuses, stock and stock options, equity, commissions, severance pay, any and all other forms of compensation or benefits, attorneys' fees, or other costs or sums.

8. **Breach and Remedies; Indemnification**. In the event that you breach the provisions of this Agreement, you recognize that the remedy at law (i.e., damages) for such breach will be inadequate and that Company shall be entitled to injunctive relief, in addition to any other remedy it may have. You further agree to indemnify and hold the Company harmless from and against any and all loss, cost, damage, or expense, including, but not limited to, reasonable attorneys' fees, incurred by the Company arising out of any action at law or equity, or any other proceeding, they find necessary to enforce any of the terms, covenants or conditions of this Agreement or due to a breach of this Agreement by you.

9. **General Provisions**. This Agreement supersedes and replaces all remaining obligations, if any, contained in any other agreement, promise, or offer, whether oral or written with Company, except as otherwise provided herein. Your obligations under the Ancillary Agreements survive except as provided hereinabove. Any waiver of any provision of this Agreement shall not constitute a waiver of any other provision of this Agreement unless expressly so indicated in writing signed by an authorized Company representative. You shall not assign this Agreement. Company may assign this Agreement, and the benefits of this Agreement shall inure to its successors or assigns.

10. **Interpretation, Severability.** Every provision of this Agreement is intended to be severable. In the event a court or agency of competent jurisdiction determines that any term or provision contained in this Agreement is illegal, invalid, or unenforceable, such provisions shall be construed by the appropriate judicial body so as to enforce such provision to the maximum extent permitted by applicable law. Further, such illegality, invalidity, or unenforceability shall not affect the other terms and conditions of this Agreement, which shall continue in full force and effect.

11. **Governing Law.** This Agreement and any claims arising out of this Agreement (or any other claims arising out of the relationship between the parties) shall be governed by and construed in accordance with the laws of the State of Massachusetts and shall in all respects be interpreted, enforced and governed under the internal and domestic laws of such State without giving effect to the principles of conflicts of laws of such State. Any claims or legal actions by one party against the other shall be commenced and maintained exclusively in any state or federal court located in such State, and you hereby submit to the jurisdiction and venue of any such court.

12. **Advice of Counsel**. You have the right to seek independent advice from an attorney of your own selection regarding this Agreement. You acknowledge that you have entered into this Agreement knowingly and voluntarily and with full knowledge and understanding of the provisions of this Agreement after being given the opportunity to consult with counsel. You further represent that in entering into this Agreement, you are not relying on any statements or representations made by any of the Company's directors, officers, employees or agents which are not expressly set forth herein, and that you are relying only upon your own judgment and any advice provided by your attorney.

13. Period of Consideration & Revocation Period; Ratification. You have 45 days from the Separation Date in which to consider and accept this Agreement. **This offer will expire at 11:59pm on August 14, 2022.** You may revoke this Agreement during the period of seven (7) days following its execution by you and this Agreement shall not become effective or enforceable, nor will you be eligible to receive any installments of the Severance Benefits until the later of (i) the date the revocation period has expired without exercise or (ii) seven days after the date on which you have signed and returned the Ratification (if applicable) (the "Effective Date"). To revoke this Agreement, you must deliver a letter stating that you are revoking the Agreement to Company addressed to Amy Buntel, Desktop Metal, Inc., 63 3rd Ave., Burlington, MA 01803 (e-mail) within the time prescribed in this Section 13. You agree that any changes to this Agreement, whether material or not, will not re-start the 45-day period described in this paragraph.

If you have already signed this Agreement and the revocation period for said signature has passed prior to the Separation Date, then you will not be eligible to receive any installment of the Severance Benefits unless and until you sign and return the Ratification set forth below on or within five (5) days of the Separation Date, and the revocation period for such Ratification has passed.

Sincerely,
/s/ Amy E. Buntel
Amy E. Buntel
Director – Human Resources

Employee Signatures Next Page

CERTAIN CONFIDENTIAL INFORMATION IN THIS DOCUMENT, MARKED BY [***], HAS BEEN OMITTED BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED

I, Michael Jafar, REPRESENT THAT I HAVE COMPLETELY READ THE FOREGOING AGREEMENT, FULLY UNDERSTAND THE TERMS AND CONDITIONS OF SUCH AGREEMENT AND I AM VOLUNTARILY EXECUTING THE SAME. IN ENTERING INTO THIS AGREEMENT, I DO NOT RELY ON ANY REPRESENTATION, PROMISE OR INDUCEMENT MADE BY THE RELEASEES WITH THE EXCEPTION OF THE CONSIDERATION DESCRIBED IN THIS DOCUMENT.

IF YOU DO CHOOSE NOT TO USE THE ENTIRE 45-DAY CONSIDERATION PERIOD, PLEASE CAREFULLY REVIEW THIS ACKNOWLEDGMENT PRIOR TO SIGNING. I acknowledge that I was informed and understand that I have 45 days within which to consider the Separation & Release Letter Agreement, have been advised of my right to consult with an attorney regarding such Agreement and have considered carefully every provision of the Agreement, and that after having engaged in those actions, I prefer to and have requested that I enter into the Agreement prior to the expiration of the 45-day period. I understand that I have seven (7) days from the date I execute this Agreement to revoke my acceptance of it and shall provide timely notice to Amy Buntel, in writing of my intention to revoke the agreement should I choose to exercise said right of revocation, as described in Section 13 of the Agreement.

Signature: /s/ Michael Jafar Date: August 22, 2022

RATIFICATION

The following ratification must be signed if prior to the Separation Date, Employee signed above AND the revocation period for said signature passed. If required, it must be signed on or within 5 days of the Separation Date. By his/her signature below, the undersigned acknowledges that he/she has seven (7) days from the date he/she executes this Ratification to revoke his/her acceptance of it, and that he/she shall be required to provide timely notice to Amy Buntel in writing in order to exercise said right of revocation, as described in Section 13 of the Agreement. The undersigned hereby ratifies and agrees to the terms of this Agreement as of the date set forth below, including without limitation Section 3 (Release of Claims) and Section 4 (Waiver of Rights and Claims Under the ADEA).

Signature: /s/ Michael Jafar Date: August 22, 2022

CERTAIN CONFIDENTIAL INFORMATION IN THIS DOCUMENT, MARKED BY [***], HAS BEEN OMITTED BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED

EXHIBIT A

Employee Name: Michael Jafar

Severance Amount (Section 1): $207,500 plus Employee will be paid an additional cash payment equal to the cash value of 16,556 shares of Desktop Metal calculated at the closing stock price on June 30, 2022.

CERTAIN CONFIDENTIAL INFORMATION IN THIS DOCUMENT, MARKED BY [***], HAS BEEN OMITTED BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED

EXHIBIT B

DISCLOSURE UNDER TITLE 29 U.S. CODE SECTION 626(f)(1)(H)

Confidentiality Provision: The information contained in this document is private and confidential. You may not disclose this information to anyone except your professional advisors.

1. The organizational/decisional unit(s)/department(s) that have been selected for the termination program are: Desktop Health.
2. Employees who were selected for layoff in June 2022 are identified and are eligible to participate in the termination program.
3. You and all others receiving this disclosure will have forty-five (45) days to review the terms and conditions of the severance package and to decide whether to accept the package, and seven (7) days to revoke the release of claims under the Age Discrimination in Employment Act, as amended.
4. The following is a listing of the ages and job titles of the Desktop Health employees who were and were not selected for termination and the offer of consideration for signing a waiver: [***]

Exhibit 10.3

TRANSITION AND SEPARATION AGREEMENT

This Transition and Separation Agreement (the "Agreement") is made as of November 6, 2022 (the "Effective Date") by and between Arjun Aggarwal and Desktop Metal, Inc., a Delaware corporation (the "Company").

WHEREAS, Executive currently serves as Executive Vice President, Corporate Development of the Company;

WHEREAS, the parties have agreed that at the conclusion of the Transition Term Executive shall no longer serve as Executive Vice President, Corporate Development; and

WHEREAS, the Company desires to provide for an orderly transition of Executive's duties and responsibilities and Executive desires to assist the Company in realizing an orderly transition.

NOW, **THEREFORE**, in exchange for the good and valuable consideration set forth herein, the adequacy of which is specifically acknowledged, Executive and the Company (collectively referred to as the "parties" or individually as a "party") hereby agree as follows:

1. Transition Term.

(a) Effective as of the Termination Date, Executive shall cease to serve as the Executive Vice President, Corporate Development and shall cease to serve in any other officer or director capacity with the Company or any of its subsidiaries. From the Effective Date through January 2, 2023 (the "Transition Term") Executive shall continue as a full-time (except as provided below), at-will non-officer employee of the Company and shall provide such duties and responsibilities as may be reasonably requested by the Company, including assisting with the transition of the Corporate Development activities to new leadership (the "Services"). During the Transition Term, Executive will perform the Services in substantially the same manner and with substantially the same effort, time commitment and level of care as Executive has historically performed duties for the Company prior to the Effective Date and, in all instances, in compliance with all applicable laws and Company policies.

(b) During the Transition Term, the Company shall continue to pay Executive a salary at an annual rate of $350,000, pro-rated for any partial period of service and less all amounts required or authorized to be withheld by law, including all applicable federal, state and local withholding taxes, payable in accordance with the Company's standard payroll policies (the "Current Salary"). During the Transition Term, Executive shall continue to be eligible to participate in the same medical, dental and health and welfare benefit plans that Executive participated in on the Effective Date, subject to the terms and conditions of such plans. Executive shall not be eligible for any bonus payment for the Company's 2022 bonus. During the Transition Term you will continue to vest in any previously granted equity.

(c) During the Transition Term, Executive will comply in full with Executive's obligations under this Agreement and Executive's obligations under the Executive's Invention and Non-Disclosure Agreement and Non-Competition and Non-Solicitation Agreement with the Company (collectively, the "Restrictive Covenant Agreements"). The parties hereby agree that

for good and valuable consideration the obligations set forth herein in the Restrictive Covenant Agreement shall be in force for a period of 12 months from the Termination Date.

(d) If the Company terminates Executive's employment prior to the last day of the Transition Term without Cause (as defined herein), and subject to (i) Executive's continued compliance with the Restrictive Covenant Agreements and (ii) Executive executing the Release within seven (7) days following the Termination Date and such Release becoming effective on the Subsequent Release Effective Date, the Company shall pay to Executive any unpaid portion of the Current Salary that would have been paid to Executive had Executive remained continuously employed by the Company through the last day of the Transition Term and the Executive shall be entitled to the Severance, COBRA and the extension of exercise period set forth in Section 4 of this Agreement.

For purposes of this Agreement, "Cause" shall mean your violation of a Company policy or rule; your breach, attempted breach, or violation of any non-competition or non-solicitation agreement you have with the Company; your failure to materially perform job duties and responsibilities reasonably expected of your position; your arrest for, conviction of, or plea of guilty, nolo contendere, or no contest to any felony or a misdemeanor involving moral turpitude, deceit, dishonesty, or fraud; your dishonest statements or acts with respect to or affecting the Company; your gross negligence, willful misconduct or insubordination; or other conduct by you that could be harmful to the business, interests or reputation of the Company.

2. At-Will Employment. Executive acknowledges and agrees that Executive's employment with the Company shall terminate effective as of January 2, 2023, unless earlier terminated in accordance with the terms of this Agreement (the actual date of Executive's termination of employment, the "Termination Date"). Notwithstanding the foregoing, Executive's employment with the Company will at all times remain terminable by either Executive or the Company at will, and nothing in this Agreement confers upon Executive any right to continue to serve as an employee or other service provider of the Company or interferes with or restricts the rights of the Company to discharge or terminate the services of Executive at any time for any or no reason, with or without Cause, subject to the provisions of Section 4. Effective as of the Termination Date, Executive shall cease to hold any position (whether as an officer, director, manager, employee, trustee, fiduciary, or otherwise) with, and shall cease to exercise or convey any authority (actual, apparent, or otherwise) on behalf of, the Company.

3. Post Transition Term Payments and Benefits. If Executive remains continuously employed by the Company through the Transition Term, and provided that Executive complies with the terms of this Agreement at all times, and subject to (i) Executive's continued compliance with the Restrictive Covenant Agreements and (ii) Executive executing the General Waiver and Release of Claims in the form attached hereto as Exhibit A (the "Release") within seven (7) following the Termination Date and such Release becoming effective upon expiration of any applicable revocation period set forth in the attached Exhibit A (such effective date being the "Subsequent Release Effective Date"), as a material inducement for Executive to enter into this Agreement, Executive shall be entitled to receive the benefits set forth in Section 4.

4. COBRA, Severance and Extension of Exercise Period.

(i) The Company will pay Executive severance equal to 6 months of Executive's base salary rate, less applicable taxes, garnishments and any other withholding required by law or authorized by Executive. The severance will be paid semi-monthly in 12 equal installments.

(ii) The COBRA Benefits through June 30, 2023. Notwithstanding the foregoing, if at any time the Company determines that it cannot provide the foregoing benefit without potentially violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act) or incurring an excise tax, the Company may alter the manner in which medical, dental and/or vision insurance coverage is provided to Executive after the Termination Date to the extent it does not increase the after-tax cost or materially diminish the level of such coverage for Executive.

Upon Executive's termination of employment for any reason, the Company shall pay to Executive (i) Executive's earned but unpaid base salary through the Termination Date and (ii) any other amounts or benefits, if any, under the Company's employee benefit plans, programs or arrangements to which Executive may be entitled pursuant to the terms of such plans, programs or arrangements or applicable law, payable in accordance with the terms of such plans, programs or arrangements or as otherwise required by applicable law. Except as expressly set forth herein, all other rights and benefits of Executive will terminate on the Termination Date. In addition, the benefits provided in Section 4(i) are intended to be paid in lieu of any severance payments or benefits Executive may otherwise be entitled to receive under the offer letter or any other plan, program, policy or agreement with the Company or any of its affiliates (collectively, "Other Arrangements"). Therefore, Executive shall not be entitled to receive any severance payments or severance benefits (including any accelerated vesting of equity awards) pursuant to any Other Arrangements.

(iii) Provided Executive is employed by the Company on through the Transition Term the stock option agreements between the Company and Executive are hereby amended such that, notwithstanding anything to the contrary contained in such agreements, the last day on which such employee shall be entitled to exercise options that are vested pursuant to such agreements shall be the earlier of 60 months from the Termination Date (as defined herein) and the Final Exercise Date, as defined in such employee's stock option agreements, subject to earlier termination in the event of a corporate transaction pursuant to the terms of the applicable equity plan.

5. General Release and Waiver.

(a) *Release of Claims.* In consideration for the execution and delivery of this Agreement, and the undertakings provided for herein, none of which is otherwise required, and as a material inducement for the Company to enter into this Agreement, Executive agrees that, other than with respect to the Retained Claims (as defined in Section 5(b) below), the foregoing consideration represents settlement in full of all outstanding obligations owed to Executive by the Company, any of their direct or indirect subsidiaries and affiliates, and any of their current and former officers, directors, equity holders, managers, employees, agents, investors, attorneys, shareholders, administrators, affiliates, benefit plans, plan administrators, insurers, trustees, divisions, and subsidiaries and predecessor and successor corporations and assigns (collectively,

the "Releasees"). Executive, on Executive's own behalf and on behalf of any of Executive's affiliated companies or entities and any of their respective heirs, family members, executors, agents, and assigns, other than with respect to the Retained Claims, hereby and forever releases the Releasees from, and agrees not to sue concerning, or in any manner to institute, prosecute, or pursue, any claim, complaint, charge, duty, obligation, or cause of action relating to any matters of any kind, whether presently known or unknown, suspected or unsuspected, that Executive may possess against any of the Releasees arising from any omissions, acts, facts, or damages that have occurred up to and through the date Executive signs this Agreement, including, without limitation:

(i) any and all claims relating to or arising from Executive's employment or service relationship with the Company or any of its direct or indirect subsidiaries or affiliates and the termination of that relationship;

(ii) any and all claims relating to, or arising from, Executive's right to purchase, or actual purchase of any shares of stock or other equity interests of the Company or any of its affiliates, including, without limitation, any claims for fraud, misrepresentation, breach of fiduciary duty, breach of duty under applicable state corporate law, and securities fraud under any state or federal law;

(iii) any and all claims for wrongful discharge of employment; termination in violation of public policy; discrimination; harassment; retaliation; breach of contract, both express and implied; breach of covenant of good faith and fair dealing, both express and implied; promissory estoppel; negligent or intentional infliction of emotional distress; fraud; negligent or intentional misrepresentation; negligent or intentional interference with contract or prospective economic advantage; unfair business practices; defamation; libel; slander; negligence; personal injury; assault; battery; invasion of privacy; false imprisonment; conversion; and disability benefits;

(iv) any and all claims for violation of any federal, state, or municipal statute, including, but not limited to, Title VII of the Civil Rights Act of 1964; the Civil Rights Act of 1991; the Rehabilitation Act of 1973; the Americans with Disabilities Act of 1990; the Equal Pay Act; the Fair Credit Reporting Act; the Age Discrimination in Employment Act of 1967; the Older Workers Benefit Protection Act; the Employee Retirement Income Security Act of 1974; the Worker Adjustment and Retraining Notification Act; the Family and Medical Leave Act; the Sarbanes-Oxley Act of 2002;

(v) any and all claims for violation of the federal or any state constitution;

(vi) any and all claims arising out of any other laws and regulations relating to employment or employment discrimination;

(vii) any claim for any loss, cost, damage, or expense arising out of any dispute over the non-withholding or other tax treatment of any of the proceeds received by Executive as a result of this release;

(viii) any and all claims arising out of the wage and hour and wage payments laws and regulations of the state or states in which Executive has provided service to the Company or any of its affiliates (including without limitation the Massachusetts Payment of Wages Law); and

(ix) any and all claims for attorneys' fees and costs.

(b) *Retained Claims.* Executive agrees that the release set forth in this Section 5 shall be and remain in effect in all respects as a complete general release as to the matters released. Notwithstanding the foregoing, for the avoidance of doubt, nothing herein will be deemed to release any rights or remedies in connection with Executive's ownership of vested equity securities of the Company or Executive's right to indemnification by the Company or any of its affiliates pursuant to contract or applicable law (collectively, the "Retained Claims"). This release also does not release claims that cannot be released as a matter of law, including, but not limited to, Executive's right to file a charge with or participate in a charge by the Equal Employment Opportunity Commission, or any other local, state, or federal administrative body or government agency that is authorized to enforce or administer laws related to employment, against the Company (with the understanding that Executive's release of claims herein bars Executive from recovering such monetary relief from the Company or any Releasee), claims for unemployment compensation or any state disability insurance benefits pursuant to the terms of applicable state law, claims to continued participation in certain of the Company's group benefit plans pursuant to the terms and conditions of COBRA, and claims to any benefit entitlements vested as the date of separation of Executive's employment, pursuant to written terms of any employee benefit plan of the Company or its affiliates and Executive's right under applicable law.

(c) *Waiver.* Executive understands and acknowledges that Executive is waiving and releasing any rights Executive may have under the Age Discrimination in Employment Act of 1967 ("ADEA"), and that this waiver and release is knowing and voluntary. Executive understands and agrees that this waiver and release does not apply to any rights or claims that may arise under the ADEA after the effective date of this release, as set forth in Section 5(d). Executive understands and acknowledges that the consideration given for this waiver and release is in addition to anything of value to which Executive was already entitled. Executive further understands and acknowledges that Executive has been advised by this writing that: (a) Executive should consult with an attorney prior to executing this release; (b) Executive has 21 days within which to consider this release, and the parties agree that such time period to review this release shall not be extended upon any material or immaterial changes to this Agreement; (c) Executive has 7 days following Executive's execution of this release to revoke this release pursuant to written notice to the Secretary of the Company; (d) this release shall not be effective until after the revocation period has expired; and (e) nothing in this release prevents or precludes Executive from challenging or seeking a determination in good faith of the validity of this waiver under the ADEA, nor does it impose any condition precedent, penalties, or costs for doing so, unless specifically authorized by federal law. In the event Executive signs this Agreement and returns it to the Company in less than the 21 day period identified above, Executive hereby acknowledges that Executive has freely and voluntarily chosen to waive the time period allotted for considering this release.

(d) *Effective Date.* Each party has seven days after that party signs this Agreement to revoke it and this release will become effective on the eighth day after Executive signs this Agreement, so long as it has been signed by the parties and has not been revoked by either party before that date.

(e) *Voluntary Execution of Release.* Executive understands and agrees that

Executive executed this release voluntarily, without any duress or undue influence on the part or behalf of the Company or any third party, with the full intent of releasing all of Executive's claims against the Company and any of the other Releasees. Executive acknowledges that: (a) Executive has read this release; (b) Executive has not relied upon any representations or statements made by the Company that are not specifically set forth in this release; (c) Executive has been represented in the preparation, negotiation, and execution of this release by legal counsel of Executive's own choice or has elected not to retain legal counsel; (d) Executive understands the terms and consequences of this release and of the releases it contains; and (e) Executive is fully aware of the legal and binding effect of this release.

6. Return of Company Property. On the Termination Date or such earlier date as requested by the Company, Executive shall return any property of the Company or its affiliates (including, without limitation, proprietary information or intellectual property) that is within Executive's custody or control.

7. Non-Disparagement. The Executive agrees, from and after the date of this Agreement, to refrain from Disparaging (as defined below) the Company and its affiliates, including any of its services, technologies or practices, or any of its directors, officers, agents, representatives or stockholders, either orally or in writing. Nothing in this paragraph shall preclude Executive from making truthful statements that are reasonably necessary to comply with applicable law, regulation or legal process, or to defend or enforce a party's rights under this Agreement. The Company agrees and shall use best efforts to cause its respective officers and directors to refrain from Disparaging Executive. For purposes of this Agreement, "Disparaging" means making remarks, comments or statements, whether written or oral, that impugn the character, integrity, reputation or abilities of the Person being disparaged.

8. Continuing Obligations. The Company and Executive agree that the Restrictive Covenant Agreements shall remain in full force and effect after the Termination Date in accordance with the terms of such agreements as modified herein.

9. Taxes. The Company shall be entitled to (and intends to) withhold from any amounts payable under this Agreement any federal, state, local or foreign withholding or other taxes or charges. To the extent any taxes may be due on the payments to Executive provided in this Agreement beyond any withheld by the Company, Executive agrees to pay them himself. Executive further agrees to provide any and all information pertaining to Executive upon request as reasonably necessary for the Company and its affiliates to comply with applicable tax laws.

10. General Provisions.

(a) *Successors and Assigns*. The rights of the Company under this Agreement may, without the consent of Executive, be assigned by the Company in its sole and unfettered discretion, to any person, firm, corporation or other business entity which at any time, whether by purchase, merger or otherwise, directly or indirectly, acquires all or substantially all of the assets or business of the Company. The Company will require any successor (whether direct or indirect, by purchase, merger or otherwise) to all or substantially all of the business or assets of the Company expressly to assume and to agree to perform this Agreement in the same manner and to the same extent that the Company would be required to perform it if no such succession had taken

place. The failure of any such successor to so assume this Agreement shall constitute a material breach of this Agreement by the Company. As used in this Section 10(a), the "Company" shall mean the Company as hereinbefore defined and any successor to its business and/or assets as aforesaid which assumes and agrees to perform this Agreement by operation of law or otherwise. Executive shall not be entitled to assign any of Executive's rights or obligations under this Agreement. This Agreement shall inure to the benefit of and be enforceable by Executive's personal or legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees.

(b) *Severability.* In the event any provision of this Agreement is found to be unenforceable by a court of competent jurisdiction, such provision shall be deemed modified to the extent necessary to allow enforceability of the provision as so limited, it being intended that the parties shall receive the benefit contemplated herein to the fullest extent permitted by law. If a deemed modification is not satisfactory in the judgment of such court, the unenforceable provision shall be deemed deleted, and the validity and enforceability of the remaining provisions shall not be affected thereby.

(c) *Interpretation; Construction*. The headings set forth in this Agreement are for convenience only and shall not be used in interpreting this Agreement. This Agreement has been drafted by legal counsel representing the Company, but Executive has participated in the negotiation of its terms. Furthermore, Executive acknowledges that Executive has had an opportunity to review and revise the Agreement and, therefore, the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of this Agreement. Either party's failure to enforce any provision of this Agreement shall not in any way be construed as a waiver of any such provision, or prevent that party thereafter from enforcing each and every other provision of this Agreement.

(d) *Governing Law.* This Agreement shall be governed, construed, interpreted and enforced in accordance with its express terms, and otherwise in accordance with the substantive laws of the Commonwealth of Massachusetts without reference to the principles of conflicts of law of the Commonwealth of Massachusetts or any other jurisdiction, and where applicable, the laws of the United States.

(e) *Notices.* Any notice required or permitted by this Agreement shall be in writing and shall be delivered as follows with notice deemed given as indicated: (i) by personal delivery when delivered personally; (ii) by overnight courier upon written verification of receipt; (iii) by telecopy or facsimile transmission upon acknowledgment of receipt of electronic transmission; or (iv) by certified or registered mail, return receipt requested, upon verification of receipt. Notice shall be sent to Executive at the address set forth below and to the Company at its principal place of business, or such other address as either party may specify in writing.

(f) *Survival*. Sections 7 ("Non-Disparagement"), 8 ("Continuing Obligations") and 10 ("General Provisions") of this Agreement shall survive the expiration or termination of this Agreement.

(g) *Entire Agreement*. The terms of this Agreement are intended by the parties to be the final expression of their agreement with respect to the employment of Executive by the

Company and supersede all prior understandings and agreements, whether written or oral, other than as set forth in Section 8 of this Agreement. This Agreement may be amended or modified only with the written consent of Executive and an authorized representative of the Company. No oral waiver, amendment or modification will be effective under any circumstances whatsoever.

(h) *Whistleblower Protections; Trade Secrets*. Nothing in this Agreement, the Restrictive Covenant Agreements or any other prior agreement between Executive and the Company (together, the "Subject Documents") prevents Executive from reporting possible violations of law or regulation to any governmental agency or entity in accordance with the provisions of and rules promulgated under Section 21F of the Securities Exchange Act of 1934 or Section 806 of the Sarbanes-Oxley Act of 2002, or any other whistleblower protection provisions of state or federal law or regulation (including the right to receive an award for information provided to any such government agencies). Furthermore, in accordance with 18 U.S.C. § 1833, notwithstanding anything to the contrary in any Subject Document: (a) Executive shall not be in breach of any Subject Document, and shall not be held criminally or civilly liable under any federal or state trade secret law (i) for the disclosure of a trade secret that is made in confidence to a federal, state, or local government official or to an attorney solely for the purpose of reporting or investigating a suspected violation of law, or (ii) for the disclosure of a trade secret that is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal; and (b) if Executive files a lawsuit for retaliation by the Company for reporting a suspected violation of law, Executive may disclose the trade secret to Executive's attorney, and may use the trade secret information in the court proceeding, if Executive files any document containing the trade secret under seal, and does not disclose the trade secret, except pursuant to court order.

(i) *Code Section 409A.*

(i) The intent of the parties is that the payments and benefits under this Agreement comply with or be exempt from Section 409A of the Internal Revenue Code of 1986, as amended, and the regulations and guidance promulgated thereunder (collectively, "Section 409A") and, accordingly, to the maximum extent permitted, this Agreement shall be interpreted to be in compliance therewith.

(ii) If Executive is deemed by the Company at the time of Executive's "separation from service" within the meaning of Section 409A to be a "specified employee" for purposes of Section 409A, to the extent delayed commencement of any portion of the benefits to which Executive is entitled under this Agreement is required in order to avoid a prohibited distribution under Section 409A, such portion of Executive's benefits shall not be provided to Executive prior to the earlier of (i) the expiration of the six-month period measured from the date of Executive's separation from service with the Company or (ii) the date of Executive's death. Upon the first business day following the expiration of the applicable period, all payments deferred pursuant to the preceding sentence shall be paid in a lump sum to Executive (or Executive's estate or beneficiaries), and any remaining payments due to Executive under this Agreement shall be paid as otherwise provided herein.

(iii) Executive's right to receive any installment payments under this Agreement shall be treated as a right to receive a series of separate payments and, accordingly, each such installment payment shall at all times be considered a separate and distinct payment as permitted

under Section 409A. Except as otherwise permitted under Section 409A, no payment hereunder shall be accelerated or deferred unless such acceleration or deferral would not result in additional tax or interest pursuant to Section 409A.

(iv) To the extent that any reimbursements under this Agreement are subject to Section 409A, any such reimbursements payable to Executive shall be paid to Executive no later than December 31 of the year following the year in which the expense was incurred; provided, that Executive submits Executive's reimbursement request promptly following the date the expense is incurred, the amount of expenses reimbursed in one year and the amount of in-kind benefits provided in one year shall not affect the amount eligible for reimbursement or in-kind benefits to be provided in any subsequent year, other than medical expenses referred to in Section 105(b) of the Code, and Executive's right to reimbursement or in-kind benefits under this Agreement will not be subject to liquidation or exchange for another benefit.

(j) *Consultation with Legal and Financial Advisors.* By executing this Agreement, Executive acknowledges that this Agreement confers significant legal rights, and may also involve the waiver of rights under other agreements; that the Company has encouraged Executive to consult with Executive's personal legal and financial advisors; and that Executive has had adequate time to consult with Executive's advisors before executing this Agreement.

(k) *Counterparts.* This Agreement may be executed in multiple counterparts, each of which shall be deemed an original but all of which together shall constitute one and the same instrument.

(*Signature Page Follows*)

IN WITNESS WHEREOF, and intending to be legally bound, the parties have executed the foregoing on the dates shown below.

DESKTOP METAL, INC.

/s/ Ric Fulop
Ric Fulop
Chief Executive Officer

Date: November 6, 2022

EXECUTIVE

/s/ Arjun Aggarwal
Arjun Aggarwal

Date: November 6, 2022

Exhibit A

GENERAL WAIVER AND RELEASE OF CLAIMS

Reference is made to the Transition and Separation Agreement, dated as of _____, 2022 (the "Agreement"), to which this General Waiver and Release of Claims (the "Release") is attached. Capitalized terms used but not defined in this Release will have the meanings given to them in the Agreement.

1. *Release of Claims.* Executive agrees that, other than with respect to the Retained Claims (as defined in Section 5(b) below), the consideration described in Section 4 of the Agreement represents settlement in full of all outstanding obligations owed to Executive by the Company, any of their direct or indirect subsidiaries and affiliates, and any of their current and former officers, directors, equity holders, managers, employees, agents, investors, attorneys, shareholders, administrators, affiliates, benefit plans, plan administrators, insurers, trustees, divisions, and subsidiaries and predecessor and successor corporations and assigns (collectively, the "Releasees"). Executive, on Executive's own behalf and on behalf of any of Executive's affiliated companies or entities and any of their respective heirs, family members, executors, agents, and assigns, other than with respect to the Retained Claims, hereby and forever releases the Releasees from, and agrees not to sue concerning, or in any manner to institute, prosecute, or pursue, any claim, complaint, charge, duty, obligation, or cause of action relating to any matters of any kind, whether presently known or unknown, suspected or unsuspected, that Executive may possess against any of the Releasees arising from any omissions, acts, facts, or damages that have occurred up to and through the date Executive signs this Release, including, without limitation:

(i) any and all claims relating to or arising from Executive's employment or service relationship with the Company or any of its direct or indirect subsidiaries or affiliates and the termination of that relationship;

(ii) any and all claims relating to, or arising from, Executive's right to purchase, or actual purchase of any shares of stock or other equity interests of the Company or any of its affiliates, including, without limitation, any claims for fraud, misrepresentation, breach of fiduciary duty, breach of duty under applicable state corporate law, and securities fraud under any state or federal law;

(iii) any and all claims for wrongful discharge of employment; termination in violation of public policy; discrimination; harassment; retaliation; breach of contract, both express and implied; breach of covenant of good faith and fair dealing, both express and implied; promissory estoppel; negligent or intentional infliction of emotional distress; fraud; negligent or intentional misrepresentation; negligent or intentional interference with contract or prospective economic advantage; unfair business practices; defamation; libel; slander; negligence; personal injury; assault; battery; invasion of privacy; false imprisonment; conversion; and disability benefits;

(iv) any and all claims for violation of any federal, state, or municipal statute, including, but not limited to, Title VII of the Civil Rights Act of 1964; the Civil Rights Act of 1991; the Rehabilitation Act of 1973; the Americans with Disabilities Act of 1990; the Equal Pay Act; the Fair Credit Reporting Act; the Age Discrimination in Employment Act of 1967; the Older Workers Benefit Protection Act; the Employee Retirement Income Security Act of 1974; the Worker Adjustment and Retraining Notification Act; the Family and Medical Leave Act; the Sarbanes-Oxley Act of 2002;

(v) any and all claims for violation of the federal or any state constitution;

(vi) any and all claims arising out of any other laws and regulations relating to employment or employment discrimination;

(vii) any claim for any loss, cost, damage, or expense arising out of any dispute over the non-

withholding or other tax treatment of any of the proceeds received by Executive as a result of this release;

(viii) any and all claims arising out of the wage and hour and wage payments laws and regulations of the state or states in which Executive has provided service to the Company or any of its affiliates (including without limitation the Massachusetts Payment of Wages Law); and

(ix) any and all claims for attorneys' fees and costs.

2. *Retained Claims.* Executive agrees that this Release shall be and remain in effect in all respects as a complete general release as to the matters released. Notwithstanding the foregoing, for the avoidance of doubt, nothing herein will be deemed to release any rights or remedies in connection with Executive's ownership of vested equity securities of the Company or Executive's right to indemnification by the Company or any of its affiliates pursuant to contract or applicable law (collectively, the "Retained Claims"). This Release also does not release claims that cannot be released as a matter of law, including, but not limited to, Executive's right to file a charge with or participate in a charge by the Equal Employment Opportunity Commission, or any other local, state, or federal administrative body or government agency that is authorized to enforce or administer laws related to employment, against the Company (with the understanding that Executive's release of claims herein bars Executive from recovering such monetary relief from the Company or any Releasee), claims for unemployment compensation or any state disability insurance benefits pursuant to the terms of applicable state law, claims to continued participation in certain of the Company's group benefit plans pursuant to the terms and conditions of COBRA, and claims to any benefit entitlements vested as the date of separation of Executive's employment, pursuant to written terms of any employee benefit plan of the Company or its affiliates and Executive's right under applicable law.

3. *Waiver.* Executive understands and acknowledges that Executive is waiving and releasing any rights Executive may have under the Age Discrimination in Employment Act of 1967 ("ADEA"), and that this waiver and release is knowing and voluntary. Executive understands and agrees that this waiver and release does not apply to any rights or claims that may arise under the ADEA after the effective date of this release, as set forth in Section 4. Executive understands and acknowledges that the consideration given for this waiver and release is in addition to anything of value to which Executive was already entitled. Executive further understands and acknowledges that Executive has been advised by this writing that: (a) Executive should consult with an attorney prior to executing this Release; (b) Executive has 7 days within which to consider this Release, and the parties agree that such time period to review this Release shall not be extended upon any material or immaterial changes to this Agreement; (c) Executive has 7 days following Executive's execution of this Release to revoke this Release pursuant to written notice to the Secretary of the Company; (d) this Release shall not be effective until after the revocation period has expired; and (e) nothing in this Release prevents or precludes Executive from challenging or seeking a determination in good faith of the validity of this waiver under the ADEA, nor does it impose any condition precedent, penalties, or costs for doing so, unless specifically authorized by federal law. In the event Executive signs this Release and returns it to the Company in less than the 7 day period identified above, Executive hereby acknowledges that Executive has freely and voluntarily chosen to waive the time period allotted for considering this Release.

4. *Effective Date.* Each party has seven days after that party signs this Release to revoke it and this Release will become effective on the eighth day after Executive signs it, so long as it has been signed by the parties and has not been revoked by either party before that date.

5. *Voluntary Execution of Release.* Executive understands and agrees that Executive executed this Release voluntarily, without any duress or undue influence on the part or behalf of the Company or any third party, with the full intent of releasing all of Executive's claims against the Company and any of the other Releasees. Executive acknowledges that: (a) Executive has read this Release; (b) Executive has not relied upon

any representations or statements made by the Company that are not specifically set forth in this Release; (c) Executive has been represented in the preparation, negotiation, and execution of this Release by legal counsel of Executive's own choice or has elected not to retain legal counsel; (d) Executive understands the terms and consequences of this Release and of the releases it contains; and (e) Executive is fully aware of the legal and binding effect of this Release.

6. *Amendment, Governing Law and Notice*. This Release is final and binding and may only be amended in a writing signed by Executive and a duly authorized officer of the Company. Sections 10(d) and (e) of the Agreement will apply to this Release *mutatis mutandis*.

7. *General Release*. For the avoidance of doubt, this Release does not replace or in any way limit the general release and waiver in Section 5 of the Agreement.

Executed: _____

_____
Arjun Aggarwal

Exhibit 31.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO RULE 13a-14(a) of RULE 15d-14(a)
OF THE SECURITIES EXCHANGE ACT OF 1934

I, Ric Fulop, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Desktop Metal, Inc. for the quarter ended September 30, 2022;

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 the 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; and

5. The registrant's other certifying officer(s) 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:

   (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 9, 2022

/s/ Ric Fulop
Ric Fulop
Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER
PURSUANT TO RULE 13a-14(a) OR RULE 15d-14(a)
OF THE SECURITIES EXCHANGE ACT OF 1934

I, James Haley, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Desktop Metal, Inc. for the quarter ended September 30, 2022;

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 the 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; and

5. The registrant's other certifying officer(s) 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:

   (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 9, 2022

/s/ James Haley
James Haley
Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)

Exhibit 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Desktop Metal, Inc. (the "Company") on Form 10-Q for the quarter ended September 30, 2022 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), Ric Fulop, the Chief Executive Officer of the Company, and James Haley, the Chief Financial Officer of the Company, each hereby certifies pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of his knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

November 9, 2022	/s/ Ric Fulop Ric Fulop	Chief Executive Officer (Principal Executive Officer)
November 9, 2022	/s/ James Haley James Haley	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)

A signed original of this written statement required by 18 U.S.C. Section 1350 has been provided to Desktop Metal, Inc. and will be retained by Desktop Metal, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.