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UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended June 30, 2022

or

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

For the transition period from to

Commission file number 001-38791

LUMINAR TECHNOLOGIES, INC.

(Exact name of registrant as specified in its charter)

Delaware	**83-1804317**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
2603 Discovery Drive Suite 100 Orlando Florida	**32826**
(Address of Principal Executive Offices)	(Zip Code)

(407) 900-5259

Registrant's telephone number, including area code

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, par value of $0.0001 per share	**LAZR**	**The Nasdaq Stock Market LLC**

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 and posted pursuant to Rule 405 of Regulation S-T (§232.405 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 Act). Yes ▯ No ☒

As of July 29, 2022, the registrant had 260,793,186 shares of Class A common stock and 97,088,670 shares of Class B common stock, par value $0.0001 per share, outstanding.

LUMINAR TECHNOLOGIES, INC. AND SUBSIDIARIES

FORM 10-Q

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CAUTIONARY NOTE REGARDING FORWARD LOOKING STATEMENTS

This Quarterly Report on Form 10-Q (this “Form 10-Q”) includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, which involve substantial risks and uncertainties. These statements reflect the current views of management with respect to future events and our financial performance. In some cases, you can identify these statements by forward-looking words such as “outlook,” “believes,” “expects,” “future,” “potential,” “continues,” “may,” “will,” “should,” “could,” “seeks,” “approximately,” “predicts,” “intends,” “plans,” “estimates,” “anticipates” or the negative version of these words or other comparable words or phrases, but the absence of these words does not mean that a statement is not forward-looking. These forward-looking statements, which are subject to risks, uncertainties and assumptions about us, may include projections of our future financial performance, our anticipated growth strategies, product plans, future growth, market opportunities, strategic initiatives, industry positioning, customer acquisition and retention, revenue growth and anticipated trends in our business.

These statements are only predictions based on our current expectations and projections about future events. These statements involve known and unknown risks, uncertainties and other important factors that could cause our actual results, level of activity, performance or achievements to differ materially from the results, level of activity, performance or achievements expressed or implied by the forward-looking statements, including, our history of losses and our expectation that we will continue to incur significant expenses, including substantial R&D costs, and continuing losses for the foreseeable future as well as our limited operating history which makes it difficult to evaluate our future prospects and the risks and challenges we may encounter; our strategic initiatives which may prove more costly than we currently anticipate and potential failure to increase our revenue to offset these initiatives; whether our lidar products are selected for inclusion in autonomous driving or ADAS systems by automotive OEMs or their suppliers, and whether we will be de-selected by any customers; the lengthy period of time from a major commercial win to implementation and the risks of cancellation or postponement of the contract or unsuccessful implementation; potential inaccuracies in our forward looking estimates of certain metrics and our future cost of goods sold (COGS) and bill of materials (BOM) and total addressable market; the discontinuation, lack of success of our customers in developing and commercializing products using our solutions or loss of business with respect to a particular vehicle model or technology package and whether end automotive consumers will demand and be willing to pay for such features; our inability to reduce and control the cost of the inputs on which we rely, which could negatively impact the adoption of our products and our profitability; the effect of continued pricing pressures, competition from other lidar manufacturers, automotive original equipment manufacturers (“OEMs”) cost reduction initiatives and the ability of automotive OEMs to re-source or cancel vehicle or technology programs which may result in lower than anticipated margins, or losses, which may adversely affect our business; general economic uncertainty and the effect of general economic conditions generally, including inflation, recession risks and rising interest rates, and on our industry in particular, including the level of demand and financial performance of the autonomous vehicle industry and market adoption of lidar as well as developments in alternative technology and the increasingly competitive environment in which we operate; our ability to manage our growth and expand our business operations effectively, including into international markets, such as China, which exposes us to operational, financial and regulatory risks; adverse impacts due to limited availability and quality of materials, supplies, and capital equipment, or dependency on third-party service providers whether we will be able to successfully transition our engineering designs into high volume manufacturing, including our ability to transition to an outsourced manufacturing business model and whether we and our outsourcing partners and suppliers can successfully operate complex machinery; whether we can successfully select, execute or integrate our acquisitions; whether the complexity of our products results in undetected defects and reliability issues which could reduce market adoption of our new products, limit our ability to manufacture, damage our reputation and expose us to product liability, warranty and other claims; our ability to maintain and adequately manage our inventory; our ability to remediate the material weakness in our internal controls over financial reporting; our ability to protect and enforce our intellectual property rights; changes in personnel and availability of qualified personnel and dependence on Austin Russell, our Founder, President and Chief Executive Officer; the amount and timing of future sales and whether the average selling prices of our products could decrease rapidly over the life of the product as well as our dependence on a few key customers, who are often large corporations with substantial negotiating power; the effects of the ongoing coronavirus (COVID-19) pandemic or other infectious diseases, health epidemics, pandemics and natural disasters on Luminar’s business; interruption or failure of our information technology and communications systems and cybersecurity risks to our operational systems, security systems, infrastructure, integrated software in our lidar solutions; and those other factors discussed in Part 1, Item 1A, of our Annual Report on Form 10-K for the fiscal year ended December 31, 2021 under the heading “Risk Factors” and Part II, Item 1A, of this Quarterly Report under the heading “Risk Factors” which we encourage you to carefully read. Given these risks, uncertainties and other factors, you should not place undue reliance on these forward-looking statements. Although we believe the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, level of activity, performance or achievements. We undertake no obligation to update any forward-looking statements made in this Form 10-Q to reflect events or circumstances after the date of this Form 10-Q or to reflect new information or the occurrence of unanticipated events, except as required by law.

In addition, statements that “we believe” and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this Quarterly Report on Form 10-Q, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain, and investors are cautioned not to unduly rely upon these statements.

WEBSITE AND SOCIAL MEDIA DISCLOSURE

We use our website (https://www.luminartech.com/) and various social media channels as a means of disclosing information about the Company and its products to its customers, investors and the public (e.g., @luminartech on Twitter, Luminartech on YouTube, and Luminar Technologies on LinkedIn). The information on our website (or any webpages referenced in this Quarterly Report on Form 10-Q) or posted on social media channels is not part of this or any other report that the Company files with, or furnishes to, the SEC. The information we post through these channels may be deemed material. Accordingly, investors should monitor these channels, in addition to following our press releases, SEC filings and public conference calls and webcasts.

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements.

LUMINAR TECHNOLOGIES, INC. AND SUBSIDIARIES

Condensed Consolidated Balance Sheets
(In thousands)

	June 30, 2022	December 31, 2021
	(Unaudited)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 76,717	$ 329,977
Restricted cash	980	725
Marketable securities (including $4,721 and $12,200 with a related party as of June 30, 2022 and December 31, 2021, respectively, see Note 16)	528,548	462,141
Accounts receivable	9,279	13,013
Inventory	9,349	10,342
Prepaid expenses and other current assets	46,178	29,195
Total current assets	671,051	845,393
Property and equipment, net	19,946	11,009
Operating lease right-of-use assets	17,447	9,145
Intangible assets, net	23,458	2,424
Goodwill	18,465	3,110
Other non-current assets	25,230	12,455
Total assets	$ 775,597	$ 883,536
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 20,119	$ 14,419
Accrued and other current liabilities	31,504	19,844
Operating lease liabilities	6,217	4,735
Total current liabilities	57,840	38,998
Warrant liabilities	4,351	31,230
Convertible senior notes	610,575	608,957
Operating lease liabilities, non-current	12,464	5,768
Other non-current liabilities	1,806	598
Total liabilities	687,036	685,551
Commitments and contingencies (Note 14)		
Stockholders' equity:		
Class A common stock	28	27
Class B common stock	10	10
Additional paid-in capital	1,413,064	1,257,214
Accumulated other comprehensive loss	(6,005)	(908)
Treasury stock	(312,477)	(235,871)
Accumulated deficit	(1,006,059)	(822,487)
Total stockholders' equity	88,561	197,985
Total liabilities and stockholders' equity	$ 775,597	$ 883,536

See accompanying notes to the unaudited condensed consolidated financial statements.

LUMINAR TECHNOLOGIES, INC. AND SUBSIDIARIES

Condensed Consolidated Statements of Operations and Comprehensive Loss
(Unaudited, in thousands, except share and per share data)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Revenue:				
Products	$ 1,798	$ 1,977	$ 3,339	$ 4,910
Services	8,134	4,332	13,448	6,712
Total revenue	9,932	6,309	16,787	11,622
Cost of sales:				
Products	16,987	3,720	28,805	9,029
Services	11,105	4,133	15,941	6,463
Total cost of sales	28,092	7,853	44,746	15,492
Gross loss	(18,160)	(1,544)	(27,959)	(3,870)
Operating expenses:				
Research and development	40,941	19,913	74,050	33,923
Sales and marketing	7,189	3,507	16,587	6,142
General and administrative	38,150	19,237	68,175	29,510
Total operating expenses	86,280	42,657	158,812	69,575
Loss from operations	(104,440)	(44,201)	(186,771)	(73,445)
Other income (expense), net:				
Change in fair value of warrant liabilities	11,733	6,928	7,876	(39,721)
Interest expense and other	(3,148)	(288)	(6,428)	(488)
Interest income and other	603	731	2,142	901
Total other income (expense), net	9,188	7,371	3,590	(39,308)
Loss before provision for (benefit from) income taxes	(95,252)	(36,830)	(183,181)	(112,753)
Provision for (benefit from) income taxes	(13)	—	391	—
Net loss	$ (95,239)	$ (36,830)	$ (183,572)	$ (112,753)
Net loss per share:				
Basic and diluted	$ (0.27)	$ (0.11)	$ (0.52)	$ (0.33)
Shares used in computing net loss per share:				
Basic and diluted	352,054,529	340,255,023	350,378,494	336,641,349
Comprehensive Loss:				
Net loss	$ (95,239)	$ (36,830)	$ (183,572)	$ (112,753)
Net unrealized losses on available-for-sale debt securities	(1,449)	16	(5,097)	(27)
Comprehensive loss	$ (96,688)	$ (36,814)	$ (188,669)	$ (112,780)

See accompanying notes to the unaudited condensed consolidated financial statements.

LUMINAR TECHNOLOGIES, INC. AND SUBSIDIARIES
Condensed Consolidated Statements of Stockholders' Equity
(Unaudited, in thousands, except share data)

	Class A Common Stock		Class B Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss)	Treasury Stock	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount	Shares	Amount					
Balance as of March 31, 2021	234,575,992	$ 23	105,118,203	$ 11	$ 1,227,559	$ (9)	$ —	$ (660,424)	$ 567,160
Issuance of Class A common stock upon exercise of Public and Private Warrants	—	—	—	—	—	—	—	—	—
Issuance of Class A common stock upon exercise of stock options and vesting of restricted stock units	1,907,695	1	—	—	2,884	—	—	—	2,885
Share-based compensation	—	—	—	—	13,915	—	—	—	13,915
Payments of employee taxes related to vested restricted stock units	—	—	—	—	(140)	—	—	—	(140)
Cash received from Gores on settlement of recapitalization of escrow	—	—	—	—	10	—	—	—	10
Other comprehensive loss	—	—	—	—	—	16	—	—	16
Net loss	—	—	—	—	—	—	—	(36,830)	(36,830)
Balance as of June 30, 2021	236,483,687	$ 24	105,118,203	$ 11	$ 1,244,228	$ 7	$ —	$ (697,254)	$ 547,016
Balance as of March 31, 2022	269,978,536	$ 27	97,088,670	$ 10	$ 1,314,742	$ (4,556)	$ (275,519)	$ (910,820)	$ 123,884
Shares repurchased	—	—	—	—	—	—	(36,958)	—	(36,958)
Issuance of Class A common stock upon exercise of Private Warrants	4,387	—	—	—	314	—	—	—	314
Issuance of Class A common stock upon exercise of stock options and vesting of restricted stock units	2,068,339	—	—	—	659	—	—	—	659
Retirement of unvested restricted common stock	(2,793)	—	—	—	—	—	—	—	—
Vendor stock-in-lieu of cash program	7,612,315	1	—	—	29,144	—	—	—	29,145
Acquisition of Freedom Photonics LLC	2,176,205	—	—	—	30,510	—	—	—	30,510
Acquisition of Solfice assets	374,193	—	—	—	3,361	—	—	—	3,361
Share-based compensation	—	—	—	—	35,542	—	—	—	35,542
Payments of employee taxes related to stock-based awards	—	—	—	—	(1,208)	—	—	—	(1,208)
Other comprehensive loss	—	—	—	—	—	(1,449)	—	—	(1,449)
Net loss	—	—	—	—	—	—	—	(95,239)	(95,239)
Balance as of June 30, 2022	282,211,182	$ 28	97,088,670	$ 10	$ 1,413,064	$ (6,005)	$ (312,477)	$ (1,006,059)	$ 88,561

See accompanying notes to the unaudited condensed consolidated financial statements.

LUMINAR TECHNOLOGIES, INC. AND SUBSIDIARIES
Condensed Consolidated Statements of Stockholders' Equity
(Unaudited, in thousands, except share data)

	Class A Common Stock		Class B Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss)	Treasury Stock	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount	Shares	Amount					
Balance as of December 31, 2020	218,818,037	$ 22	105,118,203	$ 11	$ 733,175	$ 34	$ —	$ (584,501)	$ 148,741
Issuance of Class A common stock upon exercise of Public and Private Warrants	15,574,037	2	—	—	492,219	—	—	—	492,221
Issuance of Class A common stock upon exercise of stock options and vesting of restricted stock units	2,091,613	—	—	—	3,206	—	—	—	3,206
Share-based compensation	—	—	—	—	15,758	—	—	—	15,758
Payments of employee taxes related to vested restricted stock units	—	—	—	—	(140)	—	—	—	(140)
Cash received from Gores on settlement of recapitalization of escrow	—	—	—	—	10	—	—	—	10
Other comprehensive income	—	—	—	—	—	(27)	—	—	(27)
Net loss	—	—	—	—	—	—	—	(112,753)	(112,753)
Balance as of Balance as of June 30, 2021	236,483,687	$ 24	105,118,203	$ 11	$ 1,244,228	$ 7	$ —	$ (697,254)	$ 547,016
Balance as of December 31, 2021	266,076,525	$ 27	97,088,670	$ 10	$ 1,257,214	$ (908)	$ (235,871)	$ (822,487)	$ 197,985
Shares repurchased	—	—	—	—	—	—	(76,606)	—	(76,606)
Issuance of Class A common stock upon exercise of Private Warrants	405,752	—	—	—	19,003	—	—	—	19,003
Issuance of Class A common stock upon exercise of stock options and vesting of restricted stock units	4,185,398	—	—	—	1,744	—	—	—	1,744
Retirement of unvested restricted common stock	(43,556)	—	—	—	—	—	—	—	—
Vendor stock-in-lieu of cash program	9,036,665	1	—	—	43,757	—	—	—	43,758
Acquisition of Freedom Photonics LLC	2,176,205	—	—	—	30,510	—	—	—	30,510
Acquisition of Solfice assets	374,193	—	—	—	3,361	—	—	—	3,361
Share-based compensation	—	—	—	—	59,199	—	—	—	59,199
Payments of employee taxes related to stock-based awards	—	—	—	—	(1,724)	—	—	—	(1,724)
Other comprehensive loss	—	—	—	—	—	(5,097)	—	—	(5,097)
Net loss	—	—	—	—	—	—	—	(183,572)	(183,572)
Balance as of June 30, 2022	282,211,182	$ 28	97,088,670	$ 10	$ 1,413,064	$ (6,005)	$ (312,477)	$ (1,006,059)	$ 88,561

See accompanying notes to the unaudited condensed consolidated financial statements.

LUMINAR TECHNOLOGIES, INC. AND SUBSIDIARIES
Condensed Consolidated Statements of Cash Flows
(Unaudited, in thousands)

	Six Months Ended June 30, 2022	Six Months Ended June 30, 2021
Cash flows from operating activities:		
Net loss	$ (183,572)	$ (112,753)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	2,544	1,332
Noncash lease expense related to operating lease right-of-use assets	2,139	1,748
Amortization of premium on marketable securities	919	602
Change in fair value of warrants	(7,876)	39,721
Vendor stock-in-lieu of cash program	19,916	—
Amortization of debt discount and issuance costs	1,618	—
Impairment of inventories	4,778	1,453
Share-based compensation	65,323	16,367
Product warranty and other	171	572
Changes in operating assets and liabilities:		
Accounts receivable	7,038	3,527
Inventories	(2,814)	(2,640)
Prepaid expenses and other current assets	(2,417)	(8,469)
Other non-current assets	(532)	(1,490)
Accounts payable	7,392	854
Accrued and other current liabilities	1,106	2,652
Other non-current liabilities	(931)	(1,659)
Net cash used in operating activities	(85,198)	(58,183)
Cash flows from investing activities:		
Acquisition of Freedom Photonics	(2,759)	—
Acquisition of Solfice assets	(2,001)	—
Purchases of marketable securities	(270,440)	(376,289)
Proceeds from maturities of marketable securities	147,053	169,619
Proceeds from sales of marketable securities	50,315	36,937
Purchases of property and equipment	(7,491)	(2,710)
Advances for capital projects and equipment	(1,673)	—
Net cash used in investing activities	(86,996)	(172,443)
Cash flows from financing activities:		
Proceeds from exercise of warrants	—	153,927
Proceeds from exercise of stock options	1,791	2,812
Payments of employee taxes related to stock-based awards	(1,724)	(140)
Repurchase of common stock and redemption of warrants	(80,878)	(2)
Other financing activities	—	(276)
Net cash provided by (used in) financing activities	(80,811)	156,321
Net decrease in cash, cash equivalents and restricted cash	(253,005)	(74,305)
Beginning cash, cash equivalents and restricted cash	330,702	209,719
Ending cash, cash equivalents and restricted cash	$ 77,697	$ 135,414
Supplemental disclosures of cash flow information:		
Cash paid for interest	$ 3,863	$ 37
Supplemental disclosures of noncash investing and financing activities:		
Issuance of Class A common stock upon exercise of warrants	$ 19,003	$ 338,293
Operating lease right-of-use assets obtained in exchange for lease obligations upon adoption of ASC 842	—	10,849
Operating lease right-of-use assets obtained in exchange for lease obligations	9,993	2,876
Purchases of property and equipment recorded in accounts payable and accrued liabilities	2,630	222
Vendor stock-in-lieu of cash program—advances for capital projects and equipment	10,293	—
Receivable from stock option exercises	—	394

See accompanying notes to the unaudited condensed consolidated financial statements.

Note 1. Organization and Description of Business

Luminar Technologies, Inc. and its wholly-owned subsidiaries (the "Company" or "Luminar") was originally incorporated in Delaware on August 28, 2018 under the name Gores Metropoulos, Inc ("Gores"). The Company was formed for the purpose of effecting a merger, capital stock exchange, asset acquisition, stock purchase, reorganization or similar business combination with one or more businesses. On December 2, 2020 (the "Closing Date"), the Company (at such time named Gores Metropoulos, Inc.) consummated the business combination (the "Business Combination") pursuant to the Agreement and Plan of Merger (the "Merger Agreement"), dated August 24, 2020 with the pre-Business Combination Luminar Technologies, Inc. ("Legacy Luminar"). Legacy Luminar was incorporated in Delaware on March 31, 2015. In connection with the consummation of the Business Combination, the Company changed its name from Gores Metropoulos, Inc. to Luminar Technologies, Inc. The Company's common stock is listed on the NASDAQ under the symbol "LAZR." The Company's public warrants to purchase shares of Class A common stock were listed on the NASDAQ under the symbol "LAZRW," until they were delisted on March 5, 2021 upon exercise and redemption.

Unless the context otherwise requires, the "Company" refers to the combined company and its subsidiaries following the Business Combination, "Gores" refers to the Company prior to the Business Combination and "Legacy Luminar" refers to Luminar Technologies, Inc., prior to the Business Combination. Refer to Reverse Merger with Gores in Note 3 to the financial statements of the Company's Annual Report on Form 10-K for the year ended December 31, 2021 for additional information relating to the Business Combination.

The Company is a developer of advanced sensor technologies and software for the autonomous vehicle industry, encompassing Laser Imaging, Detection and Ranging (lidar) technology. The Company manufactures and distributes commercial lidar sensors and certain components for the autonomous vehicle industry. The Company is headquartered in Orlando, Florida and has various facilities located in the United States and internationally in Munich, Germany.

Note 2. Basis of Presentation and Summary of Significant Accounting Policies

Basis of Presentation and Consolidation

The accompanying condensed consolidated financial statements have been prepared in accordance with generally accepted accounting principles in the United States ("GAAP") and applicable rules and regulations of the Securities and Exchange Commission ("SEC") regarding interim financial reporting. Certain information and note disclosures normally included in financial statements prepared in accordance with GAAP have been condensed or omitted pursuant to such rules and regulations. Therefore, these condensed consolidated financial statements should be read in conjunction with the consolidated financial statements and notes included in the Company's Annual Report on Form 10-K for the year ended December 31, 2021. In the opinion of management, the condensed consolidated financial statements reflect all adjustments, which are normal and recurring in nature, necessary for fair financial statement presentation. All intercompany transactions and balances have been eliminated in consolidation.

Use of Estimates

The preparation of condensed consolidated financial statements in conformity with GAAP requires management to make judgments, estimates and assumptions that affect the reported amounts of assets, liabilities, equity, revenues and expenses, and related disclosures. The significant estimates made by management include inventory reserves, valuation allowance for deferred tax assets, valuation of warrants, forecasted costs associated with non-recurring engineering ("NRE") services, product warranty reserves, stock-based compensation expense and other loss contingencies. Management periodically evaluates such estimates and they are adjusted prospectively based upon such periodic evaluation. Actual results could differ from those estimates.

Segment Information

The Company has determined its operating segments using the same indicators which are used to evaluate its performance internally. The Company has two business activities which are its operating segments:

(i) "Autonomy Solutions" for automotive applications, which includes manufacturing and distribution of lidar sensors that measure distance using laser light to generate a 3D map, non-recurring engineering services related to the Company's lidar products, and development of software products that enable autonomy capabilities. In June 2022, the Company acquired assets from Solfice Research, Inc. ("Solfice"), which have been included in the Autonomy Solutions segment.

(ii) "Advanced Technologies and Services ("ATS")" which includes development of application-specific integrated circuits, pixel-based sensors, advanced lasers, as well as designing, testing and providing consulting services for non-standard integrated circuits. In the second quarter of 2022, the Components segment was renamed as ATS. In August 2021 and in April 2022, the Company acquired Optogration, Inc. ("Optogration") and Freedom Photonics LLC ("Freedom Photonics"), respectively, which have been included in the ATS segment.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to significant concentrations of credit risk, consist primarily of cash and cash equivalents, marketable investments and accounts receivable. A significant portion of the Company's cash and cash equivalents is held at high-quality domestic financial institutions. Deposits held with the financial institutions may, at times, exceed the amount of insurance provided on such deposits. Cash held by the Company in foreign entities as of June 30, 2022 and December 31, 2021 was not material.

The Company's revenue is derived from customers located in the United States and international markets.Two customers accounted for 17% and 13% of the Company's accounts receivable at June 30, 2022. Two customers accounted for 39% and 31% of the Company's accounts receivable at December 31, 2021.

Significant Accounting Policies

The Company's significant accounting policies are disclosed in its Annual Report on Form 10-K for the year ended December 31, 2021. There has been no material change to the Company's significant accounting policies during the six months ended June 30, 2022, except as noted below related to revenue recognition from long-term contracts as part of Freedom Photonics acquisition.

Consistent with the revenue recognition for NRE services, for Freedom Photonics long-term contracts, the Company recognizes revenue over time using an input method based on contract cost incurred to date compared to total estimated contracts (cost-to-cost). Contract costs are incurred over a period of time, which can be several years, and the estimation of these costs requires management's judgment. The Company reviews the estimate at completion on significant contracts on a periodic basis and for others, no less than annually or when a change in circumstances warrant a modification to a previous estimate. Due to the nature of the work required to be performed on many of the Company's performance obligations, the estimation of total revenue and cost at completion is complex, subject to many variables and requires significant judgment by management on a contract by contract basis. Changes in estimates of transaction price, revenue, cost of sales and the related impact to operating profit are recognized on a cumulative catch-up basis, which recognizes the cumulative effect of the profit changes on current and prior periods in the current period.

Recently Adopted Accounting Pronouncements

In October 2021, the Financial Accounting Standards Board ("FASB") issued Accounting Standard Update ("ASU") No. No. 2021-08 ("ASU 2021-08"), *Business Combinations (Topic 805): Accounting for Contract Assets and Contract Liabilities from Contracts with Customers*. ASU 2021-08 requires an acquirer to recognize and measure contract assets and contract liabilities acquired in a business combination in accordance with Topic 606. At the acquisition date, it requires an acquirer to account for the related revenue contracts in accordance with Topic 606 as if it had originated the contracts, which should generally result in an acquirer recognizing and measuring the acquired contract assets and contract liabilities consistent with how they were recognized and measured in the acquiree's financial statements. The Company elected to early adopt ASU 2021-08 as of January 1, 2022. The adoption of ASU 2021-08 did not have a material impact on the Company's consolidated financial position, operating results or cash flows.

Note 3. Business Combination

Freedom Photonics Acquisition

On April 13, 2022 (the "Acquisition Date"), the Company completed its acquisition of Freedom Photonics, a designer and manufacturer of high-performance lasers and related photonic products. The Freedom Photonics acquisition is expected to help the Company secure intellectual property and the supply of a key enabling component as part of the Company's vertical integration strategy.

Pursuant to the terms of the Merger Agreement between the Company and Freedom Photonics, the Company acquired all of the issued and outstanding units of capital of Freedom Photonics for an aggregate purchase price of approximately $34.2 million payable primarily in Class A common stock of the Company. In conjunction with the acquisition, the Company issued share-based compensation awards to certain employees and selling shareholders of Freedom Photonics, which may result in future stock-based compensation expense, subject to achievement of certain service and performance conditions. The results of operations related to Freedom Photonics are included in the Company's consolidated statements of operations beginning from the Acquisition Date. As part of the transaction, the Company incurred $1.4 million of acquisition-related costs, which were expensed and included in general and administrative expenses in the periods in which the costs were incurred.

Recording of Assets Acquired and Liabilities Assumed

Preliminary estimates of fair values included in the consolidated financial statements are expected to be finalized within a year following the Acquisition Date. These are related to certain working capital adjustments and finalization of the estimates relating to deferred tax balances which will occur after the filing of the current tax returns. After the measurement period, any subsequent adjustments will be reflected in the consolidated statements of operations.

The following table summarizes the preliminary purchase price allocation to assets acquired and liabilities assumed, including identification of measurement period adjustments (in thousands):

	Preliminary Recorded Value
Cash and cash equivalents	$ 1,063
Accounts receivable	3,235
Contract asset	1,913
Inventories, net	127
Prepaid expenses and other current assets	70
Property and equipment	1,353
Operating lease right-of-use assets	449
Other non-current assets	22
Intangible assets (1)	15,600
Goodwill (2)	15,520
Total assets acquired	39,352
Current Liabilities	(4,036)
Non-current liabilities	(1,135)
Total liabilities assumed	(5,171)
Net assets acquired	$ 34,181

(1) Tradename was measured using the relief-from-royalty method. The remaining identifiable intangible assets were measured using the income approach. Significant inputs used as part of the valuation of intangible assets include revenue forecasts, present value factors, expected product margins and costs to complete the IPR&D.

(2) Goodwill is the excess of the consideration transferred over the net assets recognized and represents the expected future economic benefits as a result of other assets acquired that could not be individually identified and separately recognized. Goodwill is not amortized. The factors that made up the goodwill recognized included assembled workforce and component cost savings. The entire amount of goodwill is expected to be deductible for tax purposes and is allocated to the ATS segment, which is also deemed the reporting unit.

Identifiable intangible assets recognized (in thousands):

	Useful Life	Preliminary Recorded Value
Customer backlog	≤ 2 years	$ 650
Customer relationships	4 years	2,950
Developed technology	8 years	4,000
In-process research and development (IPR&D) (1)		7,500
Tradename	4 years	500
Total intangible assets		$ 15,600

(1) IPR&D intangibles are treated as indefinite-lived until the completion or abandonment of the associated R&D project, at which time the appropriate useful lives will be determined.

Supplemental Unaudited Pro Forma Information

The following unaudited pro forma financial information summarizes the combined results of operations for the Company and Freedom Photonics as if the companies were combined as of the beginning of fiscal year 2021. The unaudited pro forma information includes adjustments to amortization and depreciation for intangible assets and property and equipment acquired, the purchase accounting effect on transaction costs, and stock-based compensation costs.

The table below reflects the impact of adjustments to the unaudited pro forma results for the three and six months ended June 30, 2022 and 2021 that are directly attributable to the acquisition (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
	(Unaudited)			
(Decrease) / increase to expenses as a result of transaction costs	$ (417)	$ —	$ (2,582)	$ 2,795
(Decrease) / increase to expenses as a result of stock-based compensation expense	525	4,271	4,159	11,277

Nonrecurring pro forma adjustments include:

- Transaction costs of $2.8 million are assumed to have occurred on January 1, 2021, and are recognized as if incurred in the first quarter of 2021;
- Employee compensation in connection with the retention awards, incentive plan awards, sign-on bonuses, and deferred shares are assumed to have started on January 1, 2021, and recognized as incurred based on their respective periods.

The unaudited pro forma information presented below is for informational purposes only and is not necessarily indicative of our consolidated results of operations of the combined business had the acquisition actually occurred at the beginning of fiscal year 2021 or the results of our future operations of the combined businesses (in thousands).

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
	(Unaudited)			
Revenue	$ 10,481	$ 11,385	$ 22,511	$ 21,534
Net loss	(95,470)	(40,823)	(185,410)	(126,631)

Solfice Assets Acquisition

On June 15, 2022, the Company completed its acquisition from Solfice of certain assets that are expected to advance Luminar's software development capabilities. The transaction was determined to be an asset acquisition under ASC 805, Business Combinations, with substantially all of the fair value attributable to acquired technology.

Note 4. Revenue

The Company's revenue is comprised of sales of lidar sensors hardware, components and NRE services.

Disaggregation of Revenues

The Company disaggregates its revenue from contracts with customers by (1) geographic region based on customer's billed to location, and (2) type of good or service and timing of transfer of goods or services to customers (point-in-time or over time), as it believes it best depicts how the nature, amount, timing and uncertainty of its revenue and cash flows are affected by economic factors. Total revenue based on the disaggregation criteria described above, as well as revenue by segment, are as follows (in thousands):

	Three Months Ended June 30,			
	2022		2021	
	Revenue	% of Revenue	Revenue	% of Revenue
Revenue by primary geographical market:				
North America	$ 8,716	88 %	$ 4,061	65 %
Asia Pacific	932	9 %	154	2 %
Europe and Middle East	284	3 %	2,094	33 %
Total	$ 9,932	100 %	$ 6,309	100 %
Revenue by timing of recognition:				
Recognized at a point in time	$ 1,798	18 %	$ 1,988	32 %
Recognized over time	8,134	82 %	4,321	68 %
Total	$ 9,932	100 %	$ 6,309	100 %
Revenue by segment:				
Autonomy Solutions	$ 4,179	42 %	$ 5,822	92 %
ATS	5,753	58 %	487	8 %
Total	$ 9,932	100 %	$ 6,309	100 %

	Six Months Ended June 30,			
	2022		2021	
	Revenue	% of Revenue	Revenue	% of Revenue
Revenue by primary geographical market:				
North America	$ 13,684	81 %	$ 6,600	57 %
Asia Pacific	2,792	17 %	475	4 %
Europe and Middle East	311	2 %	4,547	39 %
Total	$ 16,787	100 %	$ 11,622	100 %
Revenue by timing of recognition:				
Recognized at a point in time	$ 3,339	20 %	$ 4,041	35 %
Recognized over time	13,448	80 %	7,581	65 %
Total	$ 16,787	100 %	$ 11,622	100 %
Revenue by segment:				
Autonomy Solutions	$ 10,077	60 %	$ 10,158	87 %
ATS	6,710	40 %	1,464	13 %
Total	$ 16,787	100 %	$ 11,622	100 %

Volvo Stock Purchase Warrant

In March 2020, the Company issued a stock purchase warrant ("Volvo Warrants") to Volvo Car Technology Fund AB ("VCTF") in connection with an engineering services contract. The Volvo Warrants entitle VCTF to purchase up to 4,089,280 shares of Class A common stock, at a price of $3.1769 per share from the Company and were determined to be an equity classified award to VCTF. The Volvo Warrants vest and become exercisable in two tranches based on satisfaction of certain commercial milestones, upon reaching commercial production and delivering of production units. The grant date fair value of warrants, aggregating $2.9 million, represents consideration payable to VCTF and will be recognized as reduction in revenue consistent with the revenue recognition pattern when these warrants become probable of vesting. The Company’s management determined that the vesting of the first of the two tranches of Volvo Warrants was probable as of December 31, 2021. As such, the Company had recognized a reduction in revenue in the amount of $1.0 million related to the said first tranche of the Volvo Warrants in the year ended December 31, 2021. The second tranche will be expensed upon achievement of sales of a certain number of the Company’s sensors to Volvo for use in their commercial vehicles. This threshold had not been achieved as of the end of the second quarter of 2022.

Contract assets and liabilities

Contract assets primarily represent revenues recognized for performance obligations that have been satisfied but for which amounts have not been billed. The Company’s contract assets as of June 30, 2022 and December 31, 2021 were $18.3 million and $9.9 million, respectively. Contract liabilities consist of deferred revenue and customer advanced payments. Deferred revenue includes billings in excess of revenue recognized related to product sales and other services revenue and is recognized as revenue when the Company performs under the contract. Customer advanced payments represent required customer payments in advance of product shipments according to customer’s payment term. Customer advance payments are recognized in revenue as or when control of the performance obligation is transferred to the customer. The Company’s contract liabilities were $3.7 million and $0.9 million as of June 30, 2022 and December 31, 2021, and were included in accrued and other current liabilities in the condensed consolidated balance sheets.

The significant changes in contract assets balances consisted of the following (in thousands):

	June 30, 2022	December 31, 2021
Beginning balance	$ 9,907	$ —
Amounts billed that were included in the contract assets beginning balance	(1,602)	
Revenue recognized for performance obligations that have been satisfied but for which amounts have not been billed	9,992	9,907
Ending balance	$ 18,297	$ 9,907

The opening and closing balances of contract liabilities were as follows (in thousands):

	June 30, 2022	December 31, 2021
Contract liabilities, current	$ 3,665	$ 898
Contract liabilities, non-current	33	—
Ending balance	$ 3,698	$ 898

The significant changes in contract liabilities balances consisted of the following (in thousands):

	June 30, 2022	December 31, 2021
Beginning balance	$ 898	$ 2,284
Revenue recognized that was included in the contract liabilities beginning balance	(397)	(1,792)
Net increase due to cash received and not recognized as revenue and billings in excess of revenue recognized during the period	3,197	406
Ending balance	$ 3,698	$ 898

Note 5. Investments

Debt Securities

The Company’s investments in debt securities consisted of the following as of June 30, 2022 and December 31, 2021 (in thousands):

	June 30, 2022			
	Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
U.S. treasury securities	$ 241,313	$ —	$ (3,556)	$ 237,757
U.S. agency and government sponsored securities	4,997	—	(116)	4,881
Commercial paper	82,168	—	(156)	82,012
Corporate bonds	147,720	—	(1,838)	145,882
Asset-backed securities	31,734	—	(339)	31,395
Total debt securities	$ 507,932	$ —	$ (6,005)	$ 501,927
Included in cash and cash equivalents	$ 7,499	$ —	$ (1)	$ 7,498
Included in marketable securities	500,433	—	(6,004)	494,429

	December 31, 2021			
	Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
U.S. treasury securities	$ 161,938	$ 1	$ (474)	$ 161,465
U.S. agency and government sponsored securities	4,995	—	(25)	4,970
Commercial paper	40,788	—	(4)	40,784
Corporate bonds	165,522	13	(345)	165,190
Asset-backed securities	46,540	—	(74)	46,466
Total debt securities	$ 419,783	$ 14	$ (922)	$ 418,875
Included in cash and cash equivalents	$ 950	$ —	$ —	$ 950
Included in marketable securities	418,833	14	(922)	417,925

The following table presents the gross unrealized losses and the fair value for those debt securities that were in an unrealized loss position for less than 12 months as of June 30, 2022 and December 31, 2021 (in thousands):

	June 30, 2022		December 31, 2021	
	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value
U.S. treasury securities	$ (3,556)	$ 237,757	$ (474)	$ 146,454
U.S. agency and government sponsored securities	(116)	4,881	(25)	4,970
Commercial paper	(156)	82,012	(4)	30,285
Corporate bonds	(1,838)	145,882	(345)	145,522
Asset-backed securities	(339)	31,395	(74)	45,251
Total	$ (6,005)	$ 501,927	$ (922)	$ 372,482

Equity Investments

The Company’s equity investments consisted of the following as of June 30, 2022 and December 31, 2021 (in thousands):

	Condensed Consolidated Balance Sheets Location		June 30, 2022		December 31, 2021
Money market funds[(1)]	Cash and cash equivalents	$	28,107	$	25,654
Marketable equity investments[(1)]	Marketable securities		34,119	$	44,216
Non-marketable equity investment measured using the measurement alternative[(2)]	Other non-current assets	$	10,002	$	10,002
Total		$	72,228	$	79,872

(1) Investments with readily determinable fair values.
(2) Investment in privately held company without readily determinable fair value.

In December 2021, the Company made an investment in 1,495 Class A Preferred Units of Robotic Research OpCo, LLC (“Robotic Research”) for consideration of $10.0 million, which was settled by issuing 618,924 shares of Class A common stock of the Company. The Company’s investment in Robotic Research represents less than 5% of Robotic Research’s capitalization. The Company neither has a significant influence over Robotic Research nor does its investment amount to a controlling financial interest in Robotic Research. As such, the Company measured the investment in Robotic Research at cost as provided under the guidance for measurement of equity investment using the measurement alternative.

Total realized and unrealized gains and losses associated with the Company’s marketable equity investments were not material in the three and six months ended June 30, 2022 and 2021.

Note 6. Financial Statement Components

Cash and Cash Equivalents

Cash and cash equivalents consisted of the following (in thousands):

		June 30, 2022		December 31, 2021
Cash	$	41,112	$	303,373
Money market funds		28,107		25,654
Commercial paper		7,498		950
Total cash and cash equivalents	$	76,717	$	329,977

Inventories, net

Inventories consisted of the following (in thousands):

		June 30, 2022		December 31, 2021
Raw materials	$	2,900	$	5,866
Work-in-process		6,181		1,171
Finished goods		268		3,305
Total inventories, net	$	9,349	$	10,342

The Company’s inventory write-down (primarily due to obsolescence, lower of cost or market assessment, and other adjustments) was $3.4 million and $4.8 million for the three and six months ended June 30, 2022, respectively and $1.2 million and $1.5 million for the three and six months ended June 30, 2021, respectively.

Prepaid Expenses and Other Current Assets

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

	June 30, 2022	December 31, 2021
Prepaid expenses	$ 13,692	$ 14,651
Contract assets	18,297	9,907
Advance payments to vendors	11,188	1,810
Other receivables	3,001	2,827
Total prepaid expenses and other current assets	$ 46,178	$ 29,195

Property and Equipment

Property and equipment consisted of the following (in thousands):

	June 30, 2022	December 31, 2021
Machinery and equipment	$ 10,000	$ 7,694
Computer hardware and software	2,515	2,854
Leasehold improvements	885	869
Vehicles, including demonstration fleet	2,473	2,421
Furniture and fixtures	850	272
Construction in progress	11,124	3,677
Total property and equipment	27,847	17,787
Accumulated depreciation and amortization	(7,901)	(6,778)
Total property and equipment, net	$ 19,946	$ 11,009

Property and equipment capitalized under finance lease (capital lease prior to adoption of ASC 842) were not material. Construction in progress increased due to increased capital expenditure related to tooling and other capital projects to enable us to achieve series production readiness.

Depreciation and amortization expense associated with property and equipment was $0.9 million and $1.7 million for the three and six months ended June 30, 2022, respectively, and $0.7 million and $1.3 million for the three and six months ended June 30, 2021, respectively.

Intangible Assets

The following table summarizes the activity in the Company's intangible assets (in thousands):

	June 30, 2022	December 31, 2021
Beginning of the period	$ 2,424	$ —
Additions	21,890	2,650
Amortization	(856)	(226)
End of the period	$ 23,458	$ 2,424

The components of intangible assets were as follows (in thousands):

	June 30, 2022				December 31, 2021			
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted Average Remaining Period (Years)	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted Average Remaining Period (Years)
Customer relationships	$ 3,730	$ (256)	$ 3,474	4.4	$ 780	$ (33)	$ 747	9.6
Customer backlog	650	(98)	552	1.4	—	—	—	—
Tradename	620	(151)	469	3.8	120	(120)	—	—
Assembled workforce	130	(130)	—	—	—	—	—	—
Developed technology	11,910	(447)	11,463	8.0	1,750	(73)	1,677	9.6
IPR&D	7,500	—	7,500	—	—	—	—	—
Total intangible assets	$ 24,540	$ (1,082)	$ 23,458	7.0	$ 2,650	$ (226)	$ 2,424	9.6

Amortization expense related to intangible assets was $0.8 million and $0.9 million for the three and six months ended June 30, 2022. There was no amortization expense related to intangible assets for the three and six months ended June 30, 2021.

As of June 30, 2022, the expected future amortization expense for intangible assets was as follows (in thousands):

Period	Expected Future Amortization Expense
2022 (remaining six months)	$ 1,381
2023	2,730
2024	2,373
2025	2,373
2026	1,726
Thereafter	5,375
IPR&D	7,500
Total	$ 23,458

Goodwill

The following table outlines changes to the carrying amount of goodwill by the Company's reportable segments (in thousands):

	Autonomy Solutions	ATS	Total
Balance as of December 31, 2021	$ 687	$ 2,423	$ 3,110
Adjustment to goodwill related to Optogration acquisition in 2021	—	(165)	(165)
Acquired goodwill related to Freedom Photonics in 2022	—	15,520	15,520
Balance as of June 30, 2022	$ 687	$ 17,778	$ 18,465

Other Non-Current Assets

Other non-current assets consisted of the following (in thousands):

	June 30, 2022	December 31, 2021
Security deposits	$ 2,333	$ 1,187
Non-marketable equity investment	10,002	10,002
Advance payment for capital projects	11,966	—
Other non-current assets	929	1,266
Total other non-current assets	$ 25,230	$ 12,455

Accrued and Other Current Liabilities

Accrued and other current liabilities consisted of the following (in thousands):

	June 30, 2022	December 31, 2021
Accrued compensation and benefits	$ 16,180	$ 9,899
Accrued expenses	7,267	6,727
Warranty reserves	549	1,798
Contract liabilities	3,665	898
Accrued interest payable	327	316
Contract losses	3,492	115
Other	24	91
Total accrued and other current liabilities	$ 31,504	$ 19,844

Note 7. Convertible Senior Notes and Capped Call Transactions

In December 2021, the Company issued $625.0 million aggregate principal amount of 1.25% Convertible Senior Notes due 2026 in a private placement, which included $75.0 million aggregate principal amount of such notes pursuant to the exercise in full of the option granted to the initial purchasers to purchase additional notes (collectively, the "Convertible Senior Notes"). The interest on the Convertible Senior Notes is payable semi-annually in arrears on June 15 and December 15 of each year, beginning on June 15, 2022. The Convertible Notes will mature on December 15, 2026, unless earlier repurchased or redeemed by the Company or converted pursuant to their terms.

The total net proceeds from the debt offering, after deducting fees paid to the initial purchasers paid by the Company was approximately $609.4 million.

Each $1,000 principal amount of the Convertible Senior Notes is initially convertible into 50.0475 shares of the Company's Class A common stock, par value $0.0001, which is equivalent to an initial conversion price of approximately $19.98 per share. The conversion rate is subject to adjustment upon the occurrence of certain specified events prior to the maturity date but will not be adjusted for any accrued and unpaid interest. In addition, following certain corporate events that occur prior to the maturity date or if the Company delivers a notice of redemption in respect of some or all of the Convertible Senior Notes, the Company will, under certain circumstances, increase the conversion rate of the Convertible Senior Notes for a holder who elects to convert its Convertible Senior Notes in connection with such a corporate event or convert its Convertible Senior Notes called for redemption during the related redemption period, as the case may be. The Convertible Senior Notes are redeemable, in whole or in part (subject to certain limitations), at the Company's option at any time, and from time to time, on or after December 20, 2024, and on or before the 40th scheduled trading day immediately before the maturity date, at a cash redemption price equal to the principal amount of the Convertible Senior Notes to be redeemed, plus accrued and unpaid interest, if any, to, but excluding, the redemption date, but only if certain liquidity conditions are satisfied and the last reported sale price per share of the Class A common stock exceeds 130% of the conversion price on (1) 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 (2) the trading day immediately before the date the Company sends such notice. If the Company undergoes a fundamental change (as defined in the indenture governing the Convertible Senior Notes) prior to the maturity date, holders may require the Company to repurchase for cash all or any portion of their Convertible Senior Notes in principal amounts of $1,000 or a multiple thereof at a fundamental change repurchase price equal to 100% of the principal amount of the Convertible Senior Notes to be repurchased, plus accrued and unpaid interest to, but excluding, the fundamental change repurchase date.

Holders of the Convertible Senior Notes may convert their Convertible Senior Notes at their option at any time prior to the close of business on the business day immediately preceding December 15, 2026, in multiples of $1,000 principal amount, only under the following circumstances: (1) during any calendar quarter (and only during such calendar quarter) commencing after the calendar quarter ending on March 31, 2022, if the last reported sale price per share of the Class A common stock exceeds 130% of the conversion price for each of at least 20 trading days, whether or not consecutive, during the 30 consecutive trading days ending on, and including, the last trading day of the immediately preceding calendar quarter; (2) 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 Convertible Senior 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 Class A common stock on such trading day and the conversion rate on such trading day; (3) upon the occurrence of specified corporate events or distributions on the Class A common stock; and (4) if the Notes are called for redemption. On or after June 15, 2026, holders may convert all or any portion of their Convertible Senior Notes at any time prior to the close of business on the second scheduled trading day immediately preceding the maturity date, regardless of the foregoing circumstances. Upon conversion, the Company will pay or deliver, as the case may be, cash, shares of its Class A common stock or a combination of cash and shares of its Class A common stock, at the Company’s election. As of June 30, 2022, the conditions allowing holders of the Convertible Senior Notes to convert were not met.

It is the Company’s current intent to settle the principal amount of its outstanding Convertible Senior Notes in cash and any excess in shares of the Company’s Class A common stock.

The Convertible Senior Notes are senior unsecured obligations and will rank equal in right of payment with the Company’s future senior unsecured indebtedness; senior in right of payment to the Company’s future indebtedness that is expressly subordinated to the Convertible Senior Notes; effectively subordinated to the Company’s existing and future secured indebtedness, to the extent of the value of the collateral securing that indebtedness; and structurally subordinated to all existing and future indebtedness and other liabilities, including trade payables, and (to the extent the Company is not a holder thereof) preferred equity, if any, of the Company’s subsidiaries.

The Company has classified the Convertible Senior Notes as a non-current liability under the guidance in ASC 470-20, as amended by ASU 2020-06. Debt discount and issuance costs aggregating approximately $16.2 million were initially recorded as a reduction to the principal amount of the Convertible Senior Notes and is being amortized as interest expense on a straight line basis over the contractual terms of the notes. The Company estimates that the difference between amortizing the debt discounts and the issuance costs using the straight line method as compared to using effective interest rate method is immaterial.

The net carrying amount of the Convertible Senior Notes was as follows (in thousands):

	June 30, 2022	December 31, 2021
Principal	$ 625,000	$ 625,000
Unamortized debt discount and issuance costs	(14,425)	(16,043)
Net carrying amount	$ 610,575	$ 608,957

The following table sets forth the interest expense recognized related to the Convertible Senior Notes (in thousands):

	Three Months Ended June 30, 2022	Six Months Ended June 30, 2022
Contractual interest expense	$ 1,948	$ 3,874
Amortization of debt discount and issuance costs	809	1,618
Total interest expense	$ 2,757	$ 5,492

The remaining term over which the debt discount and issuance costs will be amortized is4.47 years. Interest expense of $1.9 million and $3.9 million is reflected as a component of interest (expense) income, net in the accompanying condensed consolidated statement of operations for the three and six months ended June 30, 2022.

In connection with the offering of the Convertible Senior Notes, the Company entered into privately negotiated capped call option transactions with certain counterparties (the “Capped Calls”). The Capped Calls each have an initial strike price of approximately $19.98 per share, subject to certain adjustments, which corresponds to the initial conversion price of the Convertible Senior Notes. The Capped Calls have initial cap prices of $30.16 per share, subject to certain adjustment events. The Capped Calls are generally intended to reduce the potential dilution to the Class A common stock upon any conversion of the Convertible Senior Notes and/or offset any cash payments the Company is required to make in excess of the principal amount of converted Convertible Senior Notes, as the case may be, with such reduction and/or offset subject to a cap based on the cap price. The Capped Calls expire on April 6, 2027, subject to earlier exercise. The Capped Calls are subject to either adjustment or termination upon the occurrence of specified extraordinary events affecting the Company, including a merger event, a tender offer, and a nationalization, insolvency or delisting involving the Company. In addition, the Capped Calls are subject to certain specified additional disruption events that may give rise to a termination of the Capped Calls, including changes in law, failure to deliver, and hedging disruptions. The Capped Calls are recorded in stockholders’ equity and are not accounted for as derivatives. The net cost of $73.4 million incurred to purchase the Capped Calls was recorded as a reduction to additional paid-in capital in the accompanying consolidated balance sheet.

Note 8. Fair Value Measurements

As of June 30, 2022, the Company carried cash equivalents, marketable investments and Private Warrants. The Company had previously carried Public Warrants which were exercised and redeemed in March 2021.

Fair value is based on the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Fair value is estimated by applying the following hierarchy, which prioritizes the inputs used to measure fair value into three levels and bases the categorization within the hierarchy upon the lowest level of input that is available and significant to the fair value measurement:

Level 1 — Observable inputs, which include unadjusted quoted prices in active markets for identical assets or liabilities.

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

Level 3 — Unobservable inputs that are supported by little or no market activity and that are based on management’s assumptions, including fair value measurements determined by using pricing models, discounted cash flow methodologies or similar techniques.

The Company determined the fair value of its Level 1 financial instruments, which are traded in active markets, using quoted market prices for identical instruments.

Marketable investments classified within Level 2 of the fair value hierarchy are valued based on other observable inputs, including broker or dealer quotations, alternative pricing sources or U.S. Government Treasury yield of appropriate term. When quoted prices in active markets for identical assets or liabilities are not available, the Company relies on non-binding quotes from its investment managers, which are based on proprietary valuation models of independent pricing services. These models generally use inputs such as observable market data, quoted market prices for similar instruments, historical pricing trends of a security as relative to its peers. To validate the fair value determination provided by its investment managers, the Company reviews the pricing movement in the context of overall market trends and trading information from its investment managers. The Company performs routine procedures such as comparing prices obtained from independent source to ensure that appropriate fair values are recorded.

Given that the transfer of Private Warrants to anyone outside of a small group of individuals constituting the sponsors of Gores Metropoulos, Inc. would result in the Private Warrants having substantially the same terms as the Public Warrants, management determined that the fair value of each Private Warrant is the same as that of a Public Warrant, with an insignificant adjustment for short-term marketability restrictions, as of December 31, 2021. As of June 30, 2022, management determined the fair value of the Private Warrants using observable inputs in the Black-Scholes valuation model, which used the remaining term of warrants of 3.43 years, volatility of 84.2% and a risk-free rate of 2.99%. Accordingly, the Private Warrants are classified as Level 3 financial instruments.

The following table presents changes in Level 3 liabilities relating to Private Warrants measured at fair value (in thousands):

	Private Warrants
Balance as of December 31, 2021	$ 31,230
Change in fair value prior to exercises	4,713
Reduction in liability due to exercises	(19,003)
Change in fair value of outstanding warrants	(12,589)
Balance as of June 30, 2022	$ 4,351

The Company's financial assets and liabilities subject to fair value measurements on a recurring basis and the level of inputs used for such measurements were as follows (in thousands):

	Fair Value (in thousands) Measured as of June 30, 2022 Using:			
	Level 1	Level 2	Level 3	Total
Assets:				
Cash equivalents:				
Money market funds	$ 28,107	$ —	$ —	$ 28,107
Commercial paper	—	7,498	—	7,498
Total cash equivalents	$ 28,107	$ 7,498	$ —	$ 35,605
Marketable investments:				
U.S. treasury securities	$ 237,757	$ —	$ —	$ 237,757
U.S. agency and government sponsored securities	—	4,881	—	4,881
Commercial paper	—	74,514	—	74,514
Corporate bonds	—	145,882	—	145,882
Asset-backed securities	—	31,395	—	31,395
Equity investments	34,119	—	—	34,119
Total marketable investments	$ 271,876	$ 256,672	$ —	$ 528,548
Liabilities:				
Private Warrants	$ —	$ —	$ 4,351	$ 4,351
Total warrant liabilities	$ —	$ —	$ 4,351	$ 4,351

	Fair Value (in thousands) Measured as of December 31, 2021 Using:			
	Level 1	Level 2	Level 3	Total
Assets:				
Cash equivalents:				
Money market funds	$ 25,654	$ —	$ —	$ 25,654
Commercial paper	—	950	—	950
Total cash equivalents	$ 25,654	$ 950	$ —	$ 26,604
Marketable investments:				
U.S. treasury securities	$ 161,465	$ —	$ —	$ 161,465
U.S. agency and government sponsored securities	—	4,970	—	4,970
Commercial paper	—	39,834	—	39,834
Corporate bonds	—	165,190	—	165,190
Asset-backed securities	—	46,466	—	46,466
Marketable equity investments	44,216	—	—	44,216
Total marketable investments	$ 205,681	$ 256,460	$ —	$ 462,141
Liabilities:				
Private Warrants	—	—	31,230	31,230
Total warrant liabilities	$ —	$ —	$ 31,230	$ 31,230

As of June 30, 2022 and December 31, 2021, the estimated fair value of the Company's outstanding Convertible Senior Notes was $353.8 million and $669.4 million, respectively. The fair value was determined based on the quoted price of the Convertible Senior Notes in an inactive market on the last trading day of the reporting period and have been classified as Level 2 in the fair value hierarchy. See Note 7 for further information on the Company's Convertible Senior Notes.

The Company's other financial instruments' fair value, including accounts receivable, accounts payable and other current liabilities, approximate its carrying value due to the relatively short maturity of those instruments. The carrying amounts of the Company's finance leases approximate their fair value, which is the present value of expected future cash payments based on assumptions about current interest rates and the creditworthiness of the Company.

Note 9. Earnings (Loss) Per Share

Basic earnings (loss) per share is computed by dividing net income (loss) by the weighted average number of shares of common stock outstanding during the period. Diluted earnings per share is computed by dividing net income by the weighted average number of shares of common stock during the period plus, common stock equivalents, as calculated under the treasury stock method, outstanding during the period. If the Company reports a net loss, the computation of diluted loss per share excludes the effect of dilutive common stock equivalents, as their effect would be antidilutive. The Company computes earnings (loss) per share using the two-class method for its Class A and Class B common stock. Earnings (loss) per share is same for both Class A and Class B common stock since they are entitled to the same liquidation and dividend rights.

The following table sets forth the computation of basic and diluted loss per share for the three and six months ended June 30, 2022 and 2021 (in thousands, except for share and per share amounts):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Numerator:				
Net loss	$ (95,239)	$ (36,830)	$ (183,572)	$ (112,753)
Denominator:				
Weighted average common shares outstanding—Basic	352,054,529	340,255,023	350,378,494	336,641,349
Weighted average common shares outstanding—Diluted	352,054,529	340,255,023	350,378,494	336,641,349
Net loss per share attributable to common shareholders—Basic and Diluted	$ (0.27)	$ (0.11)	$ (0.52)	$ (0.33)

The following table presents the potential shares of Common Stock outstanding that were excluded from the computation of diluted net loss per share of common stock as of the periods presented because including them would have been antidilutive:

	June 30, 2022
Warrants	5,757,549
Stock-based awards—Equity classified	41,876,648
Stock-based awards—Liability classified	12,563,535
Vendor stock-in-lieu of cash program	969,224
Convertible Senior Notes	31,279,716
Earn-out shares	8,606,717
Total	101,053,389

The Company uses the if converted method for calculating the dilutive effect of the Convertible Senior Notes using the initial conversion price of $19.981 per share. The closing price of Class A common stock as of June 30, 2022 was less than the initial conversion price.

Note 10. Stockholders' Equity

Class A and Class B Common Stock

The Company's Board of Directors has authorized two classes of common stock, Class A and Class B. As of June 30, 2022, the Company had authorized 715,000,000 and 121,000,000 shares of Class A and Class B common stock with a par value of $0.0001 per share for each class. As of June 30, 2022, the Company had 282,211,653 shares issued and 260,348,203 shares outstanding of Class A common stock, and 97,088,670 shares issued and outstanding of Class B common stock. Holders of the Class A and Class B common stock have identical rights, except that holders of the Class A common stock are entitled to one vote per share and the holder of the Class B common stock is entitled to ten votes per share.

Public and Private Warrants

As of December 31, 2021, the Company had no Public Warrants and 3,077,021 Private Warrants outstanding.

In January 2022 and April 2022, 1,389,529 and 19,223 Private Warrants were exercised on a cashless basis and the Company issued 401,365 and 4,387 shares of Class A common stock pursuant to the exercises. The Company had 1,668,269

Private Warrants outstanding as of June 30, 2022. These Private Warrants are set to expire on December 2, 2025.Each Private Warrant allows the holder to purchase one share of Class A common stock at $11.50 per share.

Stock-in-lieu of Cash Program

The Company has entered into arrangements with certain vendors and other third parties wherein the Company at its discretion may elect to compensate the respective vendors / third parties for services provided in either cash or by issuing shares of the Company's Class A common stock ("Stock-in-lieu of Cash Program"). During the three and six months ended June 30, 2022, the Company issued 7,612,315 and 8,286,665 shares of Class A common stock as part of the Stock-in-lieu of Cash Program. The Company considers the shares issuable under the Stock-in-lieu of Cash Program as liability classified awards when the arrangement with the vendors requires the Company to issue a variable number of shares to settle amounts owed. As of June 30, 2022, the Company had a total of $27.6 million in prepaid expenses and other current and non-current assets related to its Stock-in-lieu of Cash Program.

In November 2021, the Company entered into an agreement with Daimler North America Corporation ("Daimler") wherein Daimler will be providing certain data and other services. To compensate Daimler for these services, the Company agreed to issue 1.5 million shares of Class A common stock to Daimler. These shares vest over a period of two years. The Company recorded costs related to these shares as research and development expense of $1.9 million and $3.9 million during the three and six months ended June 30, 2022. During the six months ended June 30, 2022, the Company issued 750,000 shares of Class A common stock related to this arrangement. The unamortized cost relating to the shares issued to Daimler under this agreement was recorded as $7.2 million in prepaid expenses and other current assets as of June 30, 2022.

The Company's vendor Stock-in-lieu of Cash Program activity for the six months ended June 30, 2022 was as follows:

	Shares	Weighted Average Grant Date Fair Value per Share
Unvested shares as of December 31, 2021	1,500,000	$ 15.72
Granted	8,286,665	10.05
Vested	(4,926,990)	11.06
Unvested shares as of June 30, 2022	4,859,675	10.60

Note 11. Stock-based Compensation

Prior to becoming a publicly traded entity, the Company issued incentive stock options, non-qualified stock options, and restricted stock to employees and non-employee consultants under its 2015 Stock Plan (the "2015 Plan"). Since the closing of the Business Combination, the Company has not issued any new stock-based awards under the 2015 Plan.

In December 2020, the Company's Board adopted and the Company's stockholders approved the 2020 Equity Incentive Plan (the "2020 Plan"). The 2020 Plan became effective upon the closing of the Business Combination. Under the 2020 Plan, the Company was originally authorized to issue a maximum number of 36,588,278 shares of Class A common stock.

In June 2022, the Company's stockholders approved an amendment and restatement of the Company's 2020 Plan (the "Amended 2020 Plan") to increase the number of shares of Class A common stock authorized for issuance by 36,000,000 additional shares and added an evergreen provision under which the number of shares of Class A common stock available for issuance under the Amended 2020 Plan will be increased on the first day of each fiscal year of the Company beginning with the 2023 fiscal year and ending on (and including) the first day of the 2030 fiscal year, in an amount equal to the lesser of (i) 5% of the outstanding shares of common stock on the last day of the immediately preceding fiscal year, (ii) 40,000,000 shares or (iii) such number of shares determined by the Board.

Stock Options

Under the terms of the 2015 Plan, incentive stock options had an exercise price at or above the fair market value of the stock on the date of the grant, while non-qualified stock options were permitted to be granted below fair market value of the stock on the date of grant. Stock options granted have service-based vesting conditions only. The service-based vesting conditions vary, though typically, stock options vest over four years with 25% of stock options vesting on the first anniversary of the grant and the remaining 75% vesting monthly over the remaining 36 months. Option holders have a 10-year period to exercise their options before they expire. Forfeitures are recognized in the period of occurrence.

A summary of the Company's stock option activity for the six months ended June 30, 2022 was as follows:

	Number of Common Stock Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value (In Thousands)
Outstanding as of December 31, 2021	11,507,643	$ 1.72		
Exercised	(1,053,499)	1.67		
Cancelled/Forfeited	(826,089)	1.67		
Outstanding as of June 30, 2022	9,628,055	1.73	7.23	$ 41,035

The aggregate intrinsic value of stock options exercised during the six months ended June 30, 2022 was $11.8 million. The intrinsic value is calculated as the difference between the exercise price and the fair value of the common stock on the exercise date. The total grant-date fair value of the options vested was $1.5 million during the six months ended June 30, 2022.

Restricted Stock Awards

Prior to June 30, 2019, the Company granted restricted stock awards to employees. Recipients purchased the restricted stock on the grant date and the Company has the right to repurchase the restricted shares at the same price recipients paid to obtain those shares. The restrictions lapse solely based on continued service, and generally lapse over 4 years —25% on the first anniversary of the date of issuance, and the remaining 75% monthly over the remaining 36 months. At the grant date of the award, recipients of restricted stock are granted voting rights and receive dividends on unvested shares. No restricted stock awards have been granted after June 30, 2019.

Restricted stock awards activity for the six months ended June 30, 2022 was as follows:

	Shares	Weighted Average Grant Date Fair Value per Share
Outstanding as of December 31, 2021	666,298	$ 1.21
Forfeited	(17,429)	1.23
Vested	(309,888)	1.18
Outstanding as of June 30, 2022	338,981	1.23

Restricted Stock units

The Company has been granting restricted stock units ("RSUs") under the Amended 2020 Plan (and prior to its amendment and restatement, under the 2020 Plan). Each RSU granted represents a right to receive one share of the Company's Class A common stock when the RSU vests. RSUs generally vest over a period up to six years. The fair value of RSU is equal to the fair value of the Company's common stock on the date of grant.

A summary of the Company's restricted stock units activity for the six months ended June 30, 2022 was as follows:

	Shares	Weighted Average Grant Date Fair Value per Share
Outstanding as of December 31, 2021	11,983,032	$ 19.56
Granted	9,974,655	12.84
Forfeited	(794,702)	18.14
Vested	(3,276,558)	17.73
Outstanding as of June 30, 2022	17,886,427	16.20

Fixed Value Equity Awards

The Company issues fixed value equity awards to certain employees as a part of their compensation package. These awards are issued as RSUs out of the Amended 2020 Plan (and prior to its amendment and restatement, under the 2020 Plan) and are accounted for as liability classified awards under ASC 718 — Stock Compensation. Fixed value equity awards granted have service-based conditions only and vest quarterly over a period of up to four years. These awards represent a fixed dollar amount settled in a variable number of shares determined at each vesting period. Stock-based compensation expense related to these awards was $1.7 million and $3.5 million for the three and six months ended June 30, 2022, respectively, and $0.6 million and $0.6 million for the three and six months ended June 30, 2021, respectively.

Employee Stock Purchase Plan

In December 2020, the Company's board of directors and stockholders adopted the 2020 Employee Stock Purchase Plan ("2020 ESPP") under which 7,317,655 shares were authorized for issuance. The 2020 ESPP became effective on February 26, 2021.

The 2020 ESPP permits eligible employees to purchase the Company's Class A common stock through payroll deduction with up to 15% of their pre-tax earnings subject to certain Internal Revenue Code limitations. The purchase price of shares is 85% of the lower of the fair market value of the Company's common stock on the first day of a six-month offering period, or the relevant purchase date. In addition, no participant may purchase more than 5,000 shares of common stock in each purchase period.

Optogration Awards

As part of the Optogration acquisition in August 2021, the Company owes up to $22.0 million of post combination compensation related to certain service and performance conditions. As of June 30, 2022, it is probable that the conditions will be met, and as a result, the Company recorded $9.2 million in stock-based compensation expense from inception to June 30, 2022.

Freedom Photonics Awards

As part of the Freedom Photonics acquisition in April 2022, the Company owes up to $28.3 million of post combination compensation related to certain service and performance conditions. As of June 30, 2022, it is probable that the conditions will be met, and as a result, the Company recorded $2.8 million in stock-based compensation expense through June 30, 2022.

Solfice Awards

The Company owes up to $0.7 million of post combination compensation related to certain service and performance conditions. As of June 30, 2022, it is probable that the conditions will be met, and as a result, the Company recorded $0.1 million in stock-based compensation expense through June 30, 2022.

Chief Executive Officer Awards

On May 2, 2022, the Board of Directors of the Company granted an award of 10.8 million RSUs to Austin Russell, the Company's Chief Executive Officer. The grant date fair value per share was $12.61 per share. The Company recorded $3.5 million in in stock-based compensation expense related to this award. This award represents Mr. Russell's total compensation from the Company, and is subject to all of the following vesting conditions:

- Market condition: Upon achievement of stock price of $50 or more, $60 or more, and $70 or more. The stock price will be measured based on the volume-weighted average price per share for 90 consecutive trading days;
- Service condition: Vesting over 7-years; and
- Performance condition: Upon start of production of one series production program.

Compensation expense

Stock-based compensation expense by function was as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Cost of sales	$ 6,989	$ 1,127	$ 8,775	$ 1,210
Research and development	8,714	5,663	15,816	6,425
Sales and marketing	2,741	934	5,609	1,120
General and administrative	20,181	6,806	35,123	7,612
Total	$ 38,625	$ 14,530	$ 65,323	$ 16,367

Stock-based compensation expense by type of award was as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Equity Classified Awards:				
Stock options	$ 748	$ 1,235	$ 1,270	$ 1,398
RSAs	187	250	21	1,924
RSUs	32,540	12,426	54,049	12,426
ESPP	157	—	157	—
Liability Classified Awards:				
Fixed value equity awards	1,741	619	3,521	619
Optogration awards	394	—	3,447	—
Freedom Photonics awards	2,800	—	2,800	—
Solfice awards	58	—	58	—
Total	$ 38,625	$ 14,530	$ 65,323	$ 16,367

Note 12. Income Taxes

Provision for income taxes for the three and six months ended June 30, 2022 and2021 was not material. The effective tax rate was 0.2% and 0.0% for the six months ended June 30, 2022 and 2021, respectively. The effective tax rates differ significantly from the statutory tax rate of 21%, primarily due to the Company's valuation allowance movement in each period presented.

Note 13. Leases

The Company leases office and manufacturing facilities under non-cancelable operating leases expiring at various dates through September 2028. In October 2021, the Company entered into a lease agreement commencing on April 1, 2022 for a term of 65 months through August 31, 2027. Some of the Company's leases includeone or more options to renew, with renewal terms that if exercised by the Company, extend the lease term from one to six years. The exercise of these renewal options is at the Company's discretion. The Company's lease agreements do not contain any material terms and conditions of residual value guarantees or material restrictive covenants. The Company's short-term leases and sublease income were not material.

The components of lease expenses for were as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Operating lease cost	$ 1,597	$ 1,184	$ 2,713	$ 2,358
Variable lease cost	515	445	1,070	904
Total operating lease cost	$ 2,112	$ 1,629	$ 3,783	$ 3,262

Supplemental cash flow information related to leases was as follows (in thousands):

	Six Months Ended June 30,	
	2022	2021
Cash paid for amounts included in the measurement of lease liabilities:		
Cash paid for operating leases included in operating activities	$ (2,857)	$ (2,459)
Right of use assets obtained in exchange for lease obligations:		
Operating leases	9,993	2,876

Supplemental balance sheet information related to leases was as follows (in thousands):

	June 30, 2022	December 31, 2021
Operating leases:		
Operating lease right-of-use assets	$ 17,447	$ 9,145
Operating lease liabilities:		
Operating lease liabilities, current	$ 6,217	$ 4,735
Operating lease liabilities, non-current	12,464	5,768
Total operating lease liabilities	$ 18,681	$ 10,503

Weighted average remaining terms were as follows (in years):

	June 30, 2022	December 31, 2021
Weighted average remaining lease term		
Operating leases	4.21	2.95

Weighted average discount rates were as follows:

	June 30, 2022	December 31, 2021
Weighted average discount rate		
Operating leases	4.23 %	2.80 %

Maturities of lease liabilities were as follows (in thousands):

	Operating Leases
Year Ending December 31,	
2022 (remaining six months)	$ 3,213
2023	5,758
2024	3,298
2025	3,304
2026	2,777
2027	1,903
Thereafter	799
Total lease payments	21,052
Less: imputed interest	(2,371)
Total leases liabilities	$ 18,681

Note 14. Commitments and Contingencies

Purchase and Other Obligations

The Company purchases goods and services from a variety of suppliers in the ordinary course of business. Purchase obligations are defined as agreements that are enforceable and legally binding and that specify all significant terms, including fixed or minimum quantities to be purchased, fixed, minimum, or variable price provisions, and the approximate timing of the transaction. The Company had purchase obligations primarily for purchases of inventory, R&D, and general and administrative activities totaling $62.3 million as of June 30, 2022, which are expected to be received within a year.

In June 2021, the Company entered into an agreement with P3 USA, Inc. ("P3") to provide engineering, and general and administrative services. Under the said agreement, the Company issued 291,940 shares of Class A common stock to P3 in the third quarter of 2021. In September 2021, the Company entered into an amendment to modify the existing agreement with P3 and among other things, extended the term of the agreement until December 2025. The Company has committed a spend of $30.0 million with P3 over the contracted term.

In May 2022, the Company entered into a strategic investment agreement with ECARX Holdings Inc. ("ECARX") to purchase1.5 million shares of class A ordinary shares of ECARX, at a purchase price of $10.00 per share with an aggregate amount of $15.0 million, contingent upon the closing of ECARX's merger with a special purpose acquisition company, COVA Acquisition Corp., of which Jun Hong Heng is the Chairman and Chief Executive Officer, and a principal shareholder. Mr.

Heng is also a director of Luminar. The purchase of such shares can be made with cash or Luminar's shares of Class A common stock, at the Company's discretion.

Legal Matters

From time to time, the Company is involved in actions, claims, suits and other proceedings in the ordinary course of business, including assertions by third parties relating to intellectual property infringement, breaches of contract or warranties or employment-related matters. When it is both probable that a liability has been incurred and the amount of the loss can be reasonably estimated, the Company records a liability for such loss contingencies. The Company's estimates regarding potential losses and materiality are based on the Company's judgment and assessment of the claims utilizing currently available information. Although the Company will continue to reassess its reserves and estimates based on future developments, the Company's objective assessment of the legal merits of such claims may not always be predictive of the outcome and actual results may vary from the Company's current estimates. The Company's current legal accrual is not deemed to be significant to the financial statements.

Note 15. Segment and Customer Concentration Information

Reportable segments are (i) Autonomy Solutions and (ii) ATS. These segments reflect the way the chief operating decision maker ("CODM") evaluates the Company's business performance and manages its operations. Each segment has distinct product offerings, customers, and market penetration. The Chief Executive Officer is the CODM of the Company.

Autonomy Solutions

This segment manufactures and distributes commercial lidar sensors that measure distance using laser light to generate a highly accurate 3D map for automotive mobility applications. This segment is impacted by trends in and the strength of the autonomous vehicles and associated infrastructure/technology sector.

ATS

This segment is in the business of development of ultra-sensitive pixel-based sensors. This segment also designs, tests and provides consulting services for non-standard integrated circuits that are essential for systems to meet the requirement of customers. This segment is impacted by trends in and the strength of automobile and aeronautics sector as well as government spending in military and defense activities.

The accounting policies of the operating segments are the same as those described in Note 2. Segment operating results and reconciliations to the Company's consolidated balances are as follows (in thousands):

	Three Months Ended June 30, 2022				
	Autonomy Solutions	ATS	Total reportable segments	Eliminations (1)	Total Consolidated
Revenue:					
Revenues from external customers	$ 4,179	$ 5,753	$ 9,932	$ —	$ 9,932
Revenues from internal customer	5,435	504	5,939	(5,939)	—
Total revenue	$ 9,614	$ 6,257	$ 15,871	$ (5,939)	$ 9,932
Depreciation and amortization	$ 976	$ 763	$ 1,739	$ —	$ 1,739
Operating income (loss)	(105,592)	728	(104,864)	424	(104,440)
Other significant items:					
Segment assets	786,708	51,046	837,754	(62,157)	775,597
Inventories, net	9,022	327	9,349	—	9,349

	Three Months Ended June 30, 2021				
	Autonomy Solutions	ATS	Total reportable segments	Eliminations (1)	Total Consolidated
Revenue:					
Revenues from external customers	$ 5,822	$ 487	$ 6,309	$ —	$ 6,309
Revenues from internal customer	1,846	1,207	3,053	(3,053)	—
Total revenue	$ 7,668	$ 1,694	$ 9,362	$ (3,053)	$ 6,309
Depreciation and amortization	$ 652	$ 23	$ 675	$ —	$ 675
Operating income (loss)	(44,169)	(76)	(44,245)	44	(44,201)
Other significant items:					
Segment assets	625,386	3,483	628,869	(2,702)	626,167
Inventories, net	4,288	30	4,318	—	4,318

	Six Months Ended June 30, 2022				
	Autonomy Solutions	ATS	Total reportable segments	Eliminations (1)	Total Consolidated
Revenue:					
Revenues from external customers	$ 10,077	$ 6,710	$ 16,787	$ —	$ 16,787
Revenues from internal customer	7,796	2,660	10,456	(10,456)	—
Total revenue	$ 17,873	$ 9,370	$ 27,243	$ (10,456)	$ 16,787
Depreciation and amortization	$ 1,520	$ 1,024	$ 2,544	$ —	$ 2,544
Operating loss	(187,769)	998	(186,771)	—	(186,771)
Other significant items:					
Segment assets	786,708	51,046	837,754	(62,157)	775,597
Inventories, net	9,022	327	9,349	—	9,349

	Six Months Ended June 30, 2021				
	Autonomy Solutions	ATS	Total reportable segments	Eliminations (1)	Total Consolidated
Revenue:					
Revenues from external customers	$ 10,158	$ 1,464	$ 11,622	$ —	$ 11,622
Revenues from internal customer	3,121	2,349	5,470	(5,470)	—
Total revenue	$ 13,279	$ 3,813	$ 17,092	$ (5,470)	$ 11,622
Depreciation and amortization	$ 1,290	$ 43	$ 1,333	$ (1)	$ 1,332
Operating income (loss)	(73,037)	(313)	(73,350)	(95)	(73,445)
Other significant items:					
Segment assets	625,386	3,483	628,869	(2,702)	626,167
Inventories, net	4,288	30	4,318	—	4,318

(1) Represents the eliminations of all intercompany balances and transactions during the period presented.

One customer accounted for 24% of the Company's revenue for the three months ended June 30, 2022. Two customers accounted for35% and 15% of the Company's revenue for the six months ended June 30, 2022. Three customers accounted for 30%, 30% and 25%, respectively, of the Company's revenue for the three months ended June 30, 2021. Three customers accounted for 21%, 37% and 18%, respectively, of the Company's revenue for the six months ended June 30, 2021.

Note 16. Related Party Transactions

Equity Investments

In February 2021, the Company invested $15.0 million in a special purpose acquisition company, of which Mr. Jun Hong Heng, is the Chairman and Chief Executive Officer, and a principal shareholder. Mr. Heng became a director of the Company in June 2021. The terms of such investment were no less favorable to the Company than to other third party investors. During 2021, the Company sold $2.9 million of this investment and had a remaining balance of $12.1 million as of December 31, 2021. The fair value of this investment as of December 31, 2021 was $12.2 million, which was included in marketable securities in the balance sheet. The Company sold this investment in its entirety in the three months ended June 30, 2022.

In June 2022, the Company invested in a special purpose acquisition company through open market purchases, of which Mr. Alec Gores, was the Chairman and Chief Executive Officer, and a principal shareholder. The special purpose acquisition company merged with Polestar Automotive Holdings UK PLC on June 24, 2022 and Mr. Gores continues to be a director of the merged company. Mr. Gores is a director of Luminar as well. The Company had a remaining balance of $4.7 million of this investment as of June 30, 2022, which was included in marketable securities in the balance sheet.

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

You should read the following discussion in conjunction with the condensed consolidated financial statements and notes thereto included elsewhere in this Quarterly Report on Form 10-Q and our Annual Report on Form 10-K for the year ended December 31, 2021 filed with the SEC on March 1, 2022. This discussion contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those contained in these forward-looking statements due to a number of factors, including those discussed under the caption "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2021, and in Part II, Item 1A - "Risk Factors" and elsewhere in this report. See also "Cautionary Note Regarding Forward-Looking Statements" at the beginning of this report.

Overview

Luminar is a global automotive technology company ushering in a new era of vehicle safety and autonomy. We are enabling solutions for series production passenger cars and commercial trucks as well as other targeted markets.

Founded in 2012 by President and Chief Executive Officer Austin Russell, Luminar built a new type of lidar from the chip-level up, with technological breakthroughs across all core components. As a result, we have created what we believe is the lidar sensor that meets the demanding performance, safety, and cost requirements for Level 3 through Level 5 autonomous vehicles in production, bypassing the traditional limitations of legacy lidar technology, while also enabling Level 0 through Level 3 (Advanced Driving Assistance Systems ("ADAS") and/or Luminar Proactive SafetyTM) with our Proactive SafetyTM solution. Integrating this advanced hardware with our custom developed software stack enables a turn-key autonomous solution to accelerate widespread adoption across automakers at series production scale.

Our lidar hardware and software products help set the standard for safety in the industry and are designed to enable accurate and reliable detections of some of the most challenging "edge cases" autonomous vehicles can encounter on a regular basis. This is achieved by advancing existing lidar range and resolution to new levels, ensuring hard-to-see objects like a tire on the road ahead or a child that runs into the street are not missed, as well as by developing our software to interpret the data needed to inform autonomous and assisted driving decisions.

Our full-stack hardware and presently under development software autonomy solution for cars and trucks as well as our standalone lidar technology offerings are expected to make us one of the leading technology partners for the world's top OEMs.

COVID-19 Impact

The coronavirus (COVID-19) pandemic has adversely affected our and some of our customers' business operations. The extent of the continued impact of the coronavirus pandemic on our operational and financial performance will depend on various future developments, including the duration and spread of the outbreak, including the emergence of variants, and impact on our customers, suppliers, and employees, all of which is uncertain at this time. We expect the coronavirus (COVID-19) pandemic to adversely impact our business, including product development and industrialization initiatives, timing of shipment of products and provision of services to customers, supply chain, and may impact our financial position and results of operations. We are unable to predict at this time the potential adverse impact. For more information on our operations and risks related to health epidemics, including the COVID-19 pandemic, see Item 1A. Risk Factors in our Annual Report on Form 10-K for the year ended December 31, 2021.

Industrialization Update

Luminar believes it remains on track to its previously announced goal of achieving series production readiness for Iris lidar and core software by the end of 2022In the second quarter of 2022, Luminar continued to validate and successfully ramp production of Iris samples.

Luminar continues to make progress on development of Sentinel software.

Customer Updates

In the second quarter, Luminar announced a collaboration with ECARX, a global mobility tech company, to enable advanced safety and automated driving capabilities for consumer vehicles and commercial trucks. The partnership is expected to further strengthen Luminar's presence in China, the world's largest automotive market. ECARX is a key strategic partner to various Geely ecosystem brands.

Additionally, Polestar announced that the world premiere of its next car, the Polestar 3 electric performance SUV, will be in October 2022, and that, over time, Polestar 3 will offer "autonomous highway piloting powered by the best-in-class LiDAR sensor from Luminar."

We identify major commercial wins only when we have entered into a collaboration or partnership agreement and have reason to believe that such engagement is expected to result in future series production. Given the customary business practices in the automotive industry, there remains potential risk that our major commercial wins may not ultimately generate any significant revenue. See the discussion under the heading "The period of time from a major commercial win to implementation is long and we are subject to the risks of cancellation or postponement of the contract or unsuccessful implementation" in "Risk Factors" in Item IA of Part I in our Annual Report on Form 10-K for the fiscal year ended December 31, 2021 filed with the SEC on March 1, 2022.

Basis of Presentation

We currently conduct our business through two operating segments: (i) Autonomy Solutions and (ii) ATS.

Components of Results of Operations

Revenue

Our revenue producing activities are organized in two operating segments: (i) Autonomy Solutions and (ii) ATS.

The Autonomy Solutions segment is engaged in design, manufacturing, and sale of lidar sensors catering mainly to the original equipment manufacturers in the automobile, commercial vehicle, robo-taxi and adjacent industries. The Autonomy Solutions segment revenue also includes fees earned from non-recurring engineering services provided to customers in connection with customization of our sensor and software products.

The ATS segment provides advanced semiconductors and related components as well as design, test and consulting services to the Autonomy Solutions segment as well as various third-party customers, including government agencies and defense contractors, in markets generally unrelated to autonomous vehicles.

Revenue is recognized when control of the promised goods or services is transferred to our customers, in an amount that reflects the consideration we expect to be entitled to in exchange for those goods or services. Fixed fee arrangements are satisfied over time and utilize the input method based on costs incurred. Accordingly, revenue for fixed fee arrangements is recognized on a percentage of completion basis. Certain customer contracts are also structured as time and materials and billed at cost of time incurred plus a markup. Such time and material contracts are recognized over time.

One customer accounted for 24% of the Company's revenue for the three months ended June 30, 2022. Two customers accounted for 35% and 15% of the Company's revenue for the six months ended June 30, 2022.Three customers accounted for 30%, 30% and 25%, respectively, of the Company's revenue for the three months ended June 30, 2021. Three customers accounted for 21%, 37% and 18%, respectively, of the Company's revenue for the six months ended June 30, 2021.

Cost of sales and gross profit (loss)

Cost of sales includes the fixed and variable manufacturing cost of our lidar sensors, which primarily consists of personnel-related costs including certain engineering personnel and stock-based compensation and material purchases from third-party contract manufacturers and suppliers which are directly associated with our manufacturing process. Cost of sales includes cost of providing services to customers, depreciation and amortization for manufacturing fixed assets or equipment, cost of components, product testing and launch-related costs, an allocated portion of overhead, facility and information technology ("IT") costs, write downs for excess and obsolete inventory and shipping costs.

The ATS segment provides certain services and components to the Autonomy Solutions segment which are recorded as cost of goods sold or research and development costs depending on the nature and use of such services and components by the Autonomy Solutions segment. These inter-segment transactions are eliminated in the consolidated results.

Gross profit (loss) equals revenue less cost of sales.

Operating Expenses

Research and Development (R&D)

R&D costs are expensed as incurred.

Our R&D efforts are focused on enhancing and developing additional functionality for our existing products and on new product development, including new releases and upgrades to our lidar sensors and integrated software solutions. R&D expenses consist primarily of:

- Personnel-related expenses, including salaries, benefits, and stock-based compensation expense, for personnel in our research and engineering functions;
- Expenses related to materials, software licenses, supplies and third-party services;
- Prototype expenses;
- An allocated portion of facility and IT costs and depreciation.

The ATS segment provides certain services and components to the Autonomy Solutions segment which are recorded as cost of goods sold or research and development costs depending on the nature and use of such services and components by the Autonomy Solutions segment. These inter-segment transactions are eliminated in our consolidated results. We expect our R&D costs to increase for the foreseeable future as we continue to invest in research and development activities to achieve our product roadmap.

Sales and Marketing Expenses

Sales and marketing expenses consist of personnel and personnel-related expenses, including stock-based compensation of our business development team as well as advertising and marketing expenses. These include the cost of marketing programs, trade shows, promotional materials, demonstration equipment, an allocated portion of facility and IT costs and depreciation.

We expect to increase our sales and marketing activities, mainly in order to continue to build out our geographic presence to be closer to our partners and better serve them. We also expect that our sales and marketing expenses will increase over time as we continue to hire additional personnel to scale our business.

General and Administrative Expenses

General and administrative expenses consist of personnel and personnel-related expenses, including stock-based compensation of our executive, finance, human resources, information systems and legal departments as well as legal and accounting fees for professional and contract services.

We expect our general and administrative expenses to increase for the foreseeable future as we scale headcount with the growth of our business, and as a result of operating as a public company, including compliance with the rules and regulations of the SEC, legal, audit, additional insurance expenses, investor relations activities, and other administrative and professional services.

Change in Fair Value of Warrants

The warrant liabilities are classified as marked-to-market liabilities and the corresponding increase or decrease in value is reflected in change in fair value of warrants.

Interest Income and Other, and Interest Expense and Other

Interest income and other consists primarily of income earned on our cash equivalents and marketable securities. These amounts will vary based on our cash, cash equivalents and marketable securities balances, and also with market rates. It also includes realized gains and losses related to the marketable securities, as well as impact of gains and losses related to foreign exchange transactions. Interest expense and other consisted primarily of interest on convertible senior notes issued in December 2021, finance leases and interest on our senior secured term loan facility, which was repaid upon consummation of the Business Combination.

Results of Operations for the Three and Six Months Ended June 30, 2022 and 2021

The results of operations presented below should be reviewed in conjunction with the condensed consolidated financial statements and notes included elsewhere in this report. The following table sets forth our consolidated results of operations data for the periods presented (in thousands):

	Three Months Ended June 30,				Six Months Ended June 30,			
	2022	2021	$ Change	% Change	2022	2021	$ Change	% Change
Revenue	$ 9,932	$ 6,309	$ 3,623	57 %	$ 16,787	$ 11,622	$ 5,165	44 %
Cost of sales	28,092	7,853	20,239	258 %	44,746	15,492	29,254	189 %
Gross loss	(18,160)	(1,544)	(16,616)	1076 %	(27,959)	(3,870)	(24,089)	622 %
Operating Expenses:								
Research and development	40,941	19,913	21,028	106 %	74,050	33,923	40,127	118 %
Sales and marketing	7,189	3,507	3,682	105 %	16,587	6,142	10,445	170 %
General and administrative	38,150	19,237	18,913	98 %	68,175	29,510	38,665	131 %
Total operating expenses	86,280	42,657	43,623	102 %	158,812	69,575	89,237	128 %
Loss from operations	(104,440)	(44,201)	(60,239)	136 %	(186,771)	(73,445)	(113,326)	154 %
Other income (expense), net:								
Change in fair value of warrants	11,733	6,928	4,805	69 %	7,876	(39,721)	47,597	(120) %
Interest expense and other	(3,148)	(288)	(2,860)	993 %	(6,428)	(488)	(5,940)	1217 %
Interest income and other	603	731	(128)	(18) %	2,142	901	1,241	138 %
Total other income (expense), net	9,188	7,371	1,817	25 %	3,590	(39,308)	42,898	(109) %
Loss before income taxes	(95,252)	(36,830)	(58,422)	159 %	(183,181)	(112,753)	(70,428)	62 %
Provision for income taxes	(13)	—	(13)	nm	391	—	391	nm
Net loss	$ (95,239)	$ (36,830)	$ (58,409)	159 %	$ (183,572)	$ (112,753)	$ (70,819)	63 %

Revenue

The following table sets forth a breakdown of our revenue by these segments for the periods presented (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Revenue from sales to external customers:				
Autonomy Solutions	$ 4,179	$ 5,822	$ 10,077	$ 10,158
ATS	5,753	487	6,710	1,464
Total	$ 9,932	$ 6,309	$ 16,787	$ 11,622

The increase in revenue of our ATS segment in the three and six months ended June 30, 2022 compared to the same periods in 2021 was primarily driven by an increase in revenue from the Optogration and Freedom Photonics acquisitions. The change in revenue of our Autonomy Solutions segment in the three and six months ended June 30, 2022 compared to the same periods in 2021 was due to a decrease in revenue from customization/ non-recurring engineering services as certain projects were completed or are approaching completion, offset by an increase in sales of sensors.

Cost of Sales

The $20.2 million and $29.3 million increases in the cost of sales in the six months ended June 30, 2022, compared to the same periods in 2021, was primarily due to launch-related costs, increase in sales of sensors and increases in customization / NRE services and tooling costs, as well as impairment of inventory and costs associated with industrialization of Iris as we approach closer to series production readiness.

Operating Expenses

Research and Development

The $21.0 million and $40.1 million increases in research and development expenses in the three and six months ended June 30, 2022 compared to the same periods in 2021 was primarily due to:

- a $7.0 million and $16.5 million increase in personnel-related costs driven mainly by increased headcount and an increase in stock-based compensation expense; and
- a $11.9 million and $20.5 million increased contractor fees and external spend in relation to continued development and testing of our sensor and software products, as well as development activities related to advanced manufacturing.

Sales and Marketing

The $3.7 million and $10.4 million increases in sales and marketing expenses for the three and six months ended June 30, 2022 compared to the same periods in 2021 was primarily due to:

- a $2.7 million and $6.0 million increase in personnel related costs including stock-based compensation costs due to increased headcount; and
- a $0.5 million and $3.4 million increase in marketing expenses related to trade shows and presentations in auto industry conventions as well as increased outside consultants costs related to business development activities.

General and Administrative

The $18.9 million and $38.7 million increases in general and administrative expenses for the three and six months ended June 30, 2022 compared to the same periods in 2021 was primarily due to:

- a $15.1 million and $30.9 million increase in personnel costs including stock-based compensation costs, driven mainly by increased headcount;
- a $1.2 million and $3.8 million increase in costs associated with being a public company, including audit fees and tax advisory fees;
- a $2.3 million and $4.5 million increase in legal and other costs associated with our acquisition of Freedom Photonics LLC and Solfice.

Change in Fair Value of Warrant Liabilities

The change in fair value of warrant liabilities is a non-cash benefit or charge due to the corresponding decrease or increase in the estimated fair value of warrants.

In January 2022 and April 2022, 1,389,529 and 19,223 Private Warrants were exercised. The non-cash gain related to Private Warrants was $11.7 million and $7.9 million for the three and six months ended June 30, 2022.

Segment Operating Income or Loss

Segment income or loss is defined as income or loss before taxes. Our segment income or loss breakdown is as follows (in thousands):

	Three Months Ended June 30,				Six Months Ended June 30,			
	2022	2021	$ Change	% Change	2022	2021	$ Change	% Change
Segment operating income (loss)								
Autonomy Solutions	$ (105,592)	$ (44,169)	$ (61,423)	139 %	$ (187,769)	$ (73,037)	$ (114,732)	157 %
ATS	728	(76)	804	1058 %	998	(313)	1,311	419 %

Liquidity and Capital Resources

Sources of Liquidity

Our capital requirements will depend on many factors, including lidar and software sales volume, the timing and extent of spending to support R&D efforts, investments in information technology systems, the expansion of sales and marketing activities, and market adoption of new and enhanced products and features. Until we can generate sufficient revenue from sale of products and services to cover our operating expenses, working capital, and capital expenditures, we expect our cash, cash equivalents and marketable securities, and proceeds from debt and/or equity financings to fund our cash needs. If we are required to raise additional funds by issuing equity securities, dilution to stockholders would result. Any equity securities issued may also provide for rights, preferences or privileges senior to those of holders of our common stock. If we raise funds by issuing debt securities, these debt securities may have rights, preferences and privileges senior to those of holders of our common stock. The terms of debt securities or borrowings could impose significant restrictions on our operations. The credit market and financial services industries have in the past, and may in the future, experience periods of uncertainty that could impact the availability and cost of equity and debt financing.

We expect to continue to invest in our product and software development as well as incur efforts to build customer relations and markets. Further, we expect to invest in developing advanced manufacturing capabilities, both, internally as well as with our contract manufacturing partners. For example, in January 2022, we executed an arrangement with Celestica committing approximately $26.9 million for purchase of capital equipment as well as engineering efforts related to manufacturing process. We expect to fund these product and business development initiatives, and capital expenditures either through our cash, cash equivalents and marketable securities or through our Stock-in-lieu of Cash Program.

As of June 30, 2022, we had cash and cash equivalents totaling $76.7 million and marketable securities of $528.5 million, totaling $605.3 million of total liquidity. To date, our principal sources of liquidity have been proceeds received from issuances of debt and equity. Market and economic conditions, such as increase in interest rates by federal agencies, may materially impact relative cost and mix of these sources of liquidity.

To date, we have not generated positive cash flows from operating activities and have incurred significant losses from operations in the past as reflected in our accumulated deficit of $1.0 billion as of June 30, 2022. We expect to continue to incur operating losses for at least the foreseeable future due to continued R&D and other infrastructure investments that we have made and intend to continue to make in our business and, as a result, we may require additional capital resources to grow our business. We believe that current cash, cash equivalents, and marketable securities will be sufficient to continue to execute our business strategy in the next 12 months and until we expect to begin series production.

Cash Flow Summary

The following table summarizes our cash flows for the periods presented:

	Six Months Ended June 30,	
	2022	2021
Net cash provided by (used in):		
Operating activities	$ (85,198)	$ (58,183)
Investing activities	$ (86,996)	$ (172,443)
Financing activities	$ (80,811)	$ 156,321

Operating Activities

Net cash used in operating activities was $85.2 million during the six months ended June 30, 2022. Net cash used in operating activities was due to our net loss of $183.6 million adjusted for non-cash items of $89.5 million, primarily consisting of $65.3 million of stock-based compensation, $19.9 million of vendor payments in stock in lieu of cash and $7.9 million of change in fair value of warrant liabilities, offset by use of cash for operating assets and liabilities of $8.8 million due to the timing of cash payments to vendors and cash receipts from customers.

Investing Activities

Net cash used in investing activities of $87.0 million in the six months ended June 30, 2022 comprised of $270.4 million related to purchases of marketable securities, $7.5 million in capital expenditures, $4.8 million net cash paid for acquisitions of Freedom Photonics and assets from Solfice, and $1.7 million in advances for capital projects and equipment, offset by $50.3 million and $147.1 million, respectively, of cash proceeds from sales and maturities of marketable securities.

Financing Activities

Net cash used in financing activities of $80.8 million in the six months ended June 30, 2022 comprised primarily of $80.9 million cash paid for repurchases of shares of Class A common stock and $1.7 million cash paid for employee taxes related to stock-based awards, offset by $1.8 million cash received from exercises of stock options.

Critical Accounting Policies and Estimates

Our condensed consolidated financial statements are prepared in accordance with U.S. GAAP. The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, expenses and related disclosures. On an ongoing basis, we evaluate our estimates and assumptions. Our actual results may differ from these estimates under different assumptions or conditions.

We believe our critical accounting policies involve the greatest degree of judgment and complexity and have the greatest potential impact on our condensed consolidated financial statements.

During the three and six months ended June 30, 2022, there were no significant changes to our critical accounting policies and estimates. For a more detailed discussion of our critical accounting policies and estimates, please refer to our Annual Report on Form 10-K for the fiscal year ended December 31, 2021 and Note 2 of the notes to condensed consolidated financial statements included in this report.

Recent Accounting Pronouncements

See Note 2 of the notes to condensed consolidated financial statements included in this report.

ITEM 3. Quantitative and Qualitative Disclosures about Market Risk.

We are exposed to market risk in the ordinary course of our business. Market risk represents the risk of loss that may impact our financial position due to adverse changes in financial market prices and rates. Our market risk exposure is primarily a result of fluctuations in interest rates and foreign currency exchange rates. We do not hold or issue financial instruments for trading purposes. For a discussion of market risk, see “Quantitative and Qualitative Disclosure about Market Risk” in Item 7A of our Annual Report on Form 10-K for the fiscal year ended December 31, 2021. Our exposure to market risk has not changed materially since December 31, 2021.

We had cash and cash equivalents, and marketable securities totaling $605.3 million as of June 30, 2022. Cash equivalents and marketable securities were invested primarily in U.S. treasury securities, commercial paper, corporate bonds, U.S. agency and government sponsored securities, equity investments and asset-backed securities. Our investment policy is focused on the preservation of capital and supporting our liquidity needs. Under the policy, we invest in highly rated securities, while limiting the amount of credit exposure to any one issuer other than the U.S. government. We do not invest in financial instruments for trading or speculative purposes, nor do we use leveraged financial instruments. We utilize external investment managers who adhere to the guidelines of our investment policy. A hypothetical 100 basis point change in interest rates would not have a material impact on the value of our cash and cash equivalents or marketable investments.

As of June 30, 2022, the principal amount outstanding of our Convertible Senior Notes was $625.0 million. The fair value of the Convertible Senior Notes is subject to interest rate risk, market risk and other factors due to their conversion features. The fair value of the Convertible Senior Notes will generally increase as our common stock price increases and will generally decrease as our common stock price declines. The interest and market value changes affect the fair value of the Convertible Senior Notes but do not impact our financial position, cash flows or results of operations due to the fixed nature of the debt obligations. We carry the Convertible Senior Notes at face value less unamortized discount on our consolidated balance sheets.

Our Convertible Senior Notes bear fixed interest rate, and therefore, are not subject to interest rate risk. We have not utilized derivative financial instruments, derivative commodity instruments or other market risk sensitive instruments, positions or transactions in any material fashion, except for the privately negotiated capped call transactions entered into in December 2021 related to the issuance of our Convertible Senior Notes.

Our results of operations and cash flows are subject to fluctuations due to changes in foreign currency exchange rates. Currently, all of our revenue is generated in U.S. dollars. Our expenses are generally denominated in the currencies of the jurisdictions in which we conduct our operations, which are primarily in the U.S. and in Europe. Luminar’s results of operations and cash flows in the future may be adversely affected due to an expansion of non-U.S. dollar denominated contracts, growth of its international entities, and changes in foreign exchange rates. The effect of a hypothetical 10% change in foreign currency exchange rates applicable to our business would not have a material impact on our historical or current consolidated financial statements. To date, we have not engaged in any hedging strategies. As our international operations grow, we will continue to reassess our approach to manage the risk relating to fluctuations in currency rates.

ITEM 4. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

In designing and evaluating our disclosure controls and procedures, management recognizes that any disclosure controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints and that management is required to apply its judgment in evaluating the benefits of possible controls and procedures relative to their costs.

Our management, with the participation of our Chief Executive Officer (CEO) and Chief Financial Officer (CFO), has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of the end of the fiscal quarter ended June 30, 2022. Based on this evaluation and for the reasons set forth below, our CEO and CFO have concluded that our disclosure controls and procedures were not effective as of June 30, 2022 due to the material weaknesses in internal control over financial reporting disclosed in Part II, Item 9A of our Annual Report on Form 10-K for the fiscal year ended December 31, 2021 (the “2021 Annual Report”).

Previously identified material weaknesses

As discussed in Part II, Item 9A in our 2021 Annual Report, we identified deficiencies in the control environment, control activities, information & communication, and monitoring components of the Internal Control-Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (the “COSO framework”) that constitute material weaknesses, either individually or in the aggregate. The material weaknesses in these components of the COSO framework resulted from a lack of sufficient number of qualified personnel within our accounting and internal audit functions who possessed an appropriate level of expertise to effectively perform certain functions and activities and led to additional material weaknesses, as discussed in Part II, Item 9A in our 2021 Annual Report.

Notwithstanding the conclusion by our CEO and CFO that our disclosure controls and procedures as of June 30, 2022 were not effective, and notwithstanding the identified material weaknesses, management, including our CEO and CFO, believes the condensed consolidated financial statements included in this Quarterly Report on Form 10-Q fairly represent in all material respects our financial condition, results of operations and cash flows at and for the periods presented in accordance with U.S. GAAP.

Remediation Plan and Status

Management is committed to remediating the material weaknesses identified as promptly as possible. As part of our remediation plan described in Part II, Item 9A in our 2021 Annual Report, we are continuing to test the ongoing operating effectiveness of new and existing controls. The material weaknesses cannot be considered completely remediated until the applicable controls have operated for a sufficient period of time and management has concluded, through testing, that these controls are operating effectively. We cannot assure you that the measures we have taken to date, and are continuing to implement, will be sufficient to remediate the material weaknesses we have identified or avoid potential future material weaknesses.

During the six months ended June 30, 2022, we continued to initiate and will continue to implement measures designed to improve our internal control over financial reporting to remediate this material weakness, including the following:

- During 2021, we initiated formalizing our internal controls environment and had performed a risk assessment and scoping of key systems and business processes, including a risk assessment at the financial statement assertion level to ensure that the level of precision of relevant controls is adequate to address the identified risks. We are continuing to revise our risk assessment and scoping to rectify the deficiencies noted, enhance design and implement new controls, expand education and training, update documentation and strengthen supervisory reviews by our management. We continue to remediate the design effectiveness of certain specific controls and test the operating effectiveness of the remediated controls in 2022.
- We have added and we continue to be in the process of adding sufficient number of qualified personnel within our accounting function. In the fourth quarter of 2021, we hired our new Chief Accounting Officer, and in the first six-months of 2022, we hired our new Corporate Controller, Assistant Corporate Controller, Vice President of Internal Audit, Head of Accounting Operations as well as various other personnel. We will further invest in building an in-house internal audit function and hire further personnel with accounting, financial reporting, and compliance experience as necessary.
- We are in the process of strengthening access and segregation of duties related Information Technology General Controls related to financial accounting and reporting systems. We are increasing standardization and automation within accounting processes to improve the reliability of information used by existing accounting personnel. We are revising our information technology general controls in the context of the systems and applications used in the key processes to address access changes segregation of duties related deficiencies.
- We continue to provide training, implement technology tools, and enhance oversight over the execution and review of manual journal entry controls.

Changes in Internal Control Over Financial Reporting

Other than the above-mentioned remediation efforts, there were no changes in our internal control over financial reporting during the quarter ended June 30, 2022 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. Legal Proceedings.

Information with respect to this Item may be found under the heading “Legal Matters” in Note 14 to the condensed consolidated financial statements in this Quarterly Report on Form 10-Q, which information is incorporated herein by reference.

ITEM 1A. Risk Factors.

There have been no material changes from the Risk Factors previously disclosed in Part 1, Item 1A, of our Annual Report on Form 10-K for the fiscal year ended December 31, 2021. You should carefully consider the Risk Factors discussed in our Annual Report on Form 10-K as they could materially affect our business, financial condition and future results of operation.

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

Unregistered Sales of Equity Securities

On May 31, 2022, we issued 349,301 shares of Class A Common Stock in lieu of cash to a certain service provider for services rendered to us pursuant to a private placement in reliance on Section 4(a)(2) of the Securities Act of 1933, as amended (the “Securities Act”).

On June 15, 2022, we issued 374,193 shares of Class A Common Stock in connection with the acquisition of Solfice assets pursuant to a private placement in reliance on Section 4(a)(2) of the Securities Act.

On August 3, 2022, we issued 1,632,056 shares of Class A Common Stock in connection with the acquisition of Optogration pursuant to a private placement in reliance on Section 4(a)(2) of the Securities Act.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

In December 2021, our Board of Directors authorized a program for us to repurchase shares of $312.5 million of the Company’s Class A common stock. The Company’s share repurchase program does not obligate the Company to acquire any specific number of shares. Under the program, shares may be repurchased in privately negotiated and/or open market transactions, including under plans complying with Rule 10b5-1 under the Securities Exchange Act of 1934, as amended (the “Exchange Act”). Our stock repurchase program may be accelerated, suspended, delayed or discontinued at any time. As of June 30, 2022, approximately $37.0 million remained available for stock repurchases pursuant to our stock repurchase program. The following table summarizes the stock repurchase activity for the three months ended June 30, 2022 and the approximate dollar value of shares that may yet be purchased pursuant to our stock repurchase program (in thousands, except share and per share amounts):

Period	(a) Total Number of Shares Purchased	(b) Average Price Paid per Share	(c) Total Number of Shares Purchased as Part of Publicly Announced Program	(d) Approximate Dollar Value of Shares that May Yet Be Purchased Under the Program
April 1, 2022 — April 30, 2022	—	$ —	—	$ 36,982
May 1, 2022 — May 31, 2022	3,917,141	$ 9.44	3,917,141	$ 23
June 1, 2022 — June 30, 2022	—	$ —	—	$ 23
Total	3,917,141	$ 9.44	3,917,141	

ITEM 3. Defaults Upon Senior Securities.

None.

ITEM 4. Mine Safety Disclosures.

Not applicable.

ITEM 5. Other Information.

None.

ITEM 6. Exhibits.

		Incorporation by Reference				
Exhibit Number	**Description**	**Form**	**File Number**	**Exhibit/Appendix Reference**	**Filing Date**	**Filed Herewith**
3.1	Second Amended and Restated Certificate of Incorporation of the Company.	8-K/A	001-38791	3.1	12/8/20	
3.2	Amended and Restated Bylaws of the Company.	8-K/A	001-38791	3.2	12/8/20	
10.1	Luminar Technologies, Inc. Amended and Restated 2020 Equity Incentive Plan.	8-K	001-38791	10.1	6/8/22	
31.1	Certification of Principal Executive Officer pursuant to Rules 13a-14(a) and 15(d)-14(a) under the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
31.2	Certification of Principal Financial Officer pursuant to Rules 13a-14(a) and 15(d)-14(a) under the Securities Exchange Act of 1934, as adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
32.1	Certification of Principal Executive Officer and Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					Furnished herewith
101.INS	XBRL Instance Document					X
101.SCH	XBRL Taxonomy Extension Schema Document					X
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document					X
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document					X
101.LAB	XBRL Taxonomy Extension Label Linkbase Document					X
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document					X
104	Cover Page Interactive Data File (formatted as Inline XBRL).					X

SIGNATURES.

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

Luminar Technologies, Inc.

Date: August 8, 2022

By: /s/ Austin Russell

Austin Russell
President, Chief Executive Officer and Chairman of the Board of Directors
(Principal Executive Officer)

/s/ Thomas J. Fennimore

Thomas J. Fennimore
Chief Financial Officer
(Principal Financial Officer)

Exhibit 31.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER

PURSUANT TO RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934, AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Austin Russell, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Luminar Technologies, Inc. for the quarter ended June 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(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; 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 (or persons performing the equivalent functions):
   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 8, 2022

By: /s/ Austin Russell
Austin Russell
Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER

PURSUANT TO RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934, AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Thomas J. Fennimore, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Luminar Technologies, Inc. for the quarter ended June 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(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; 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 (or persons performing the equivalent functions):
   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 8, 2022	By:	/s/ Thomas J. Fennimore
		Thomas J. Fennimore
		Chief Financial Officer
		(Principal Financial and Accounting Officer)

Exhibit 32.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER

PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Austin Russell, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Quarterly Report of Luminar Technologies, Inc. (the "Company") on Form 10-Q for the fiscal quarter ended June 30, 2022 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, and that information contained in such Quarterly Report on Form 10-Q fairly presents in all material respects the financial condition and results of operations of the Company.

Date: August 8, 2022	By:	/s/ Austin Russell
		Austin Russell
		Chief Executive Officer
		(Principal Executive Officer)

I, Thomas J. Fennimore, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Quarterly Report of Luminar Technologies, Inc. (the "Company") on Form 10-Q for the fiscal quarter ended June 30, 2022 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, and that information contained in such Quarterly Report on Form 10-Q fairly presents in all material respects the financial condition and results of operations of the Company.

Date: August 8, 2022	By:	/s/ Thomas J. Fennimore
		Thomas J. Fennimore
		Chief Financial Officer
		(Principal Financial and Accounting Officer)

This certification accompanies the Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Luminar Technologies, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing.