UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended March 31, 2024

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)

(800) 532-2417

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 April 30, 2024, the registrant had 348,535,064 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

TABLE OF CONTENTS

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, as amended (the "Securities Act") and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), which involve substantial risks and uncertainties. These statements reflect the current views of management with respect to future events and our financial performance. These forward-looking statements include statements regarding product plans, future growth, sales estimates/Order Book numbers, market opportunities, strategic initiatives, industry positioning, customer acquisition and retention, revenue growth and anticipated impacts on our business of any future health epidemics and outbreaks. 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 and anticipated trends in our business.

These statements are only predictions based on our current expectations and projections about future events. There are 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 Advanced Driving Assistance Systems ("ADAS") by automotive original equipment manufacturers ("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, including Order Book, 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 ability to successfully fund our growth if there are considerable delays in product introductions by us or our customers; 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, OEM 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; the effect of general economic conditions, including inflation, recession risks and rising interest rates, generally and on our industry and us in particular, including the level of demand and financial performance of the autonomous vehicle industry and the decline in fair value of available-for-sale debt securities in a rising interest rate environment; market adoption of LiDAR as well as developments in alternative technology and the increasingly competitive environment in which we operate, which includes established competitors and market participants that have substantially greater resources; our ability to achieve technological feasibility and commercialize our software products and the requirement to continue to develop new products and product innovations due to rapidly changing markets and government regulations of such technologies; our ability to build, launch, receive regulatory approval, sell, and service insurance products as well as market and differentiate the benefits of LiDAR-based ADAS to consumers; 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, regulatory and geopolitical risks; changes in our government contracts business and our defense customers' business due to political change and global conflicts; adverse impacts due to limited availability and quality of materials, supplies, and capital equipment, or dependency on third-party service providers and single-source suppliers; the project-based nature of our orders, which can cause our results of operations to fluctuate on a quarterly and annual basis; 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 maintain an effective system of internal control over financial reporting; our ability to protect and enforce our intellectual property rights; availability of qualified personnel, loss of highly skilled personnel and dependence on Austin Russell, our Founder, President and Chief Executive Officer; the impact of inflation and our stock price on our ability to hire and retain highly skilled personnel; 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; our ability to establish and maintain confidence in our long-term business prospects among customers and analysts and within our industry; whether we are subject to negative publicity; the effects of 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; cybersecurity risks to our operational systems, security systems, infrastructure, integrated software in our LiDAR solutions; market instability exacerbated by geopolitical conflicts, including the Israel-Hamas war and the conflict between Russia and Ukraine, as well as trade disputes with China and including the effect of sanctions and trade restrictions that may affect supply chain or sales opportunities; 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, 2023 (our "2023 Annual Report") under the heading "Risk Factors" and in subsequent reports filed with the SEC 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 Securities and Exchange Commission (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)

	March 31, 2024 (Unaudited)	December 31, 2023
ASSETS		
Current assets:		
Cash and cash equivalents	$ 109,563	$ 139,095
Restricted cash	1,733	1,529
Marketable securities	108,768	150,727
Accounts receivable	29,034	14,124
Inventory	16,417	12,196
Prepaid expenses and other current assets	41,122	32,950
Total current assets	306,637	350,621
Property and equipment, net	62,127	66,300
Operating lease right-of-use assets	46,631	42,706
Intangible assets, net	21,994	22,994
Goodwill	7,390	7,390
Other non-current assets	23,166	22,356
Total assets	$ 467,945	$ 512,367
LIABILITIES AND STOCKHOLDERS' DEFICIT		
Current liabilities:		
Accounts payable	$ 27,359	$ 21,113
Accrued and other current liabilities	52,136	52,605
Operating lease liabilities	11,309	10,154
Total current liabilities	90,804	83,872
Warrant liabilities	248	1,069
Convertible senior notes	616,237	615,428
Operating lease liabilities, non-current	38,386	35,079
Other non-current liabilities	2,115	1,667
Total liabilities	747,790	737,115
Commitments and contingencies (Note 14)		
Stockholders' deficit:		
Class A common stock	36	34
Class B common stock	10	10
Additional paid-in capital	1,998,063	1,927,378
Accumulated other comprehensive income (loss)	(68)	2
Treasury stock	(312,477)	(312,477)
Accumulated deficit	(1,965,409)	(1,839,695)
Total stockholders' deficit	(279,845)	(224,748)
Total liabilities and stockholders' deficit	$ 467,945	$ 512,367

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 March 31, 2024	Three Months Ended March 31, 2023
Revenue:		
Products	$ 15,302	$ 7,367
Services	5,666	7,142
Total revenue	20,968	14,509
Cost of sales:		
Products	24,507	19,203
Services	6,916	9,930
Total cost of sales	31,423	29,133
Gross loss	(10,455)	(14,624)
Operating expenses:		
Research and development	67,750	69,052
Sales and marketing	14,515	13,729
General and administrative	33,049	44,490
Total operating expenses	115,314	127,271
Loss from operations	(125,769)	(141,895)
Other income (expense), net:		
Change in fair value of warrant liabilities	821	(1,054)
Interest expense	(2,757)	(1,665)
Interest income	3,430	1,905
Gain from acquisition of EM4, LLC (“EM4”)	1,752	—
Losses related to investments and certain other assets, and other income (expense)	(2,604)	(4,065)
Total other income (expense), net	642	(4,879)
Loss before provision for income taxes	(125,127)	(146,774)
Provision for income taxes	587	—
Net loss	$ (125,714)	$ (146,774)
Net loss per share:		
Basic and diluted	$ (0.30)	$ (0.40)
Shares used in computing net loss per share:		
Basic and diluted	424,929,163	370,742,917
Comprehensive Loss:		
Net loss	$ (125,714)	$ (146,774)
Net unrealized gain (loss) on available-for-sale debt securities	(70)	2,226
Comprehensive loss	$ (125,784)	$ (144,548)

See accompanying notes to the unaudited condensed consolidated financial statements.

LUMINAR TECHNOLOGIES, INC. AND SUBSIDIARIES
Condensed Consolidated Statements of Stockholders' Deficit
(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' Deficit
	Shares	Amount	Shares	Amount					
Balance as of December 31, 2022	291,942,087	$ 29	97,088,670	$ 10	$ 1,558,685	$ (4,226)	$ (312,477)	$ (1,268,426)	$ (26,405)
Issuance of Class A common stock upon exercise of stock options and vesting of restricted stock units	4,715,737	1	—	—	1,038	—	—	—	1,039
Issuance of Class A common stock under the Equity Financing Program	2,759,689	—	—	—	22,665	—	—	—	22,665
Vendor payments under the stock-in-lieu of cash program	1,627,690	—	—	—	16,741	—	—	—	16,741
Share-based compensation	—	—	—	—	48,800	—	—	—	48,800
Payments of employee taxes related to stock-based awards	—	—	—	—	(572)	—	—	—	(572)
Other comprehensive income	—	—	—	—	—	2,226	—	—	2,226
Net loss	—	—	—	—	—	—	—	(146,774)	(146,774)
Balance as of March 31, 2023	301,045,203	$ 30	97,088,670	$ 10	$ 1,647,357	$ (2,000)	$ (312,477)	$ (1,415,200)	$ (82,280)
Balance as of December 31, 2023	344,606,104	$ 34	97,088,670	$ 10	$ 1,927,378	$ 2	$ (312,477)	$ (1,839,695)	$ (224,748)
Issuance of Class A common stock upon exercise of stock options and vesting of restricted stock units	5,993,324	1	—	—	372	—	—	—	373
Issuance of Class A common stock under 401(k) Plan	1,500,000	—	—	—	2,550	—	—	—	2,550
Issuance of Class A common stock under the Equity Financing Program	9,644,286	1	—	—	17,229	—	—	—	17,230
Issuance of Class A common stock in settlement of certain claims	704,691	—	—	—	1,842	—	—	—	1,842
Vendor payments under the stock-in-lieu of cash program	151,206	—	—	—	2,220	—	—	—	2,220
Milestone awards related to acquisition	2,709,457	—	—	—	5,635	—	—	—	5,635
Share-based compensation	—	—	—	—	40,963	—	—	—	40,963
Payments of employee taxes related to vested restricted stock units	—	—	—	—	(126)	—	—	—	(126)
Other comprehensive income	—	—	—	—	—	(70)	—	—	(70)
Net loss	—	—	—	—	—	—	—	(125,714)	(125,714)
Balance as of March 31, 2024	365,309,068	$ 36	97,088,670	$ 10	$ 1,998,063	$ (68)	$ (312,477)	$ (1,965,409)	$ (279,845)

See accompanying notes to the unaudited condensed consolidated financial statements.

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

	Three Months Ended March 31,	
	2024	**2023**
Cash flows from operating activities:		
Net loss	$ (125,714)	$ (146,774)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	8,066	2,987
Amortization of operating lease right-of-use assets	2,010	1,610
Amortization of premium (discount) on marketable securities	(870)	(743)
Loss on marketable securities	2,320	3,033
Change in fair value of private warrants	(821)	1,054
Vendor stock-in-lieu of cash program	4,034	5,684
Gain from acquisition of EM4	(1,752)	—
Amortization of debt discount and issuance costs	809	809
Inventory write-offs and write-downs	16,903	5,451
Share-based compensation	44,465	55,954
Product warranty and other	(1,684)	586
Changes in operating assets and liabilities:		
Accounts receivable	(13,846)	(9,877)
Inventories	(17,586)	(11,578)
Prepaid expenses and other current assets	(7,495)	9,932
Other non-current assets	(1,071)	(4,156)
Accounts payable	6,128	11,191
Accrued and other current liabilities	7,445	11,651
Other non-current liabilities	(2,570)	(1,488)
Net cash used in operating activities	(81,229)	(64,674)
Cash flows from investing activities:		
Acquisition of EM4 (net of cash acquired)	(4,727)	—
Acquisition of Seagate’s lidar business	—	(12,608)
Purchases of marketable securities	(48,827)	(81,623)
Proceeds from maturities of marketable securities	88,990	148,345
Proceeds from sales/redemptions of marketable securities	274	20,165
Purchases of property and equipment	(1,284)	(11,680)
Net cash provided by investing activities	34,426	62,599
Cash flows from financing activities:		
Net proceeds from issuance of Class A common stock under the Equity Financing Program	17,230	22,665
Proceeds from exercise of stock options	371	1,036
Payments of employee taxes related to stock-based awards	(126)	(572)
Net cash provided by financing activities	17,475	23,129
Net increase (decrease) in cash, cash equivalents and restricted cash	(29,328)	21,054
Beginning cash, cash equivalents and restricted cash	140,624	71,105
Ending cash, cash equivalents and restricted cash	$ 111,296	$ 92,159
Supplemental disclosures of noncash investing and financing activities:		
Operating lease right-of-use assets obtained in exchange for lease obligations	$ 3,842	$ 1,211
Purchases of property and equipment recorded in accounts payable and accrued liabilities	299	7,978
Vendor stock-in-lieu of cash program—advances for capital projects and equipment	—	2,520

See accompanying notes to the unaudited condensed consolidated financial statements.

LUMINAR TECHNOLOGIES, INC. AND SUBSIDIARIES
Notes to Condensed Consolidated Financial Statements (Unaudited)

Note 1. Organization and Description of Business

Luminar Technologies, Inc. (together with its wholly-owned subsidiaries, the “Company” or “Luminar”) is incorporated in Delaware.Luminar is a global automotive technology company ushering in a new era of vehicle safety and autonomy. Over the past decade, Luminar has been building from the chip-level up, its light detection and ranging sensor, or LiDAR, which is expected to meet the demanding performance, safety, reliability and cost requirements to enable next-generation safety and autonomous capabilities for passenger and commercial vehicles as well as other adjacent markets. The Company’s Class A common stock is listed on the NASDAQ under the symbol “LAZR.”

The Company is headquartered in Orlando, Florida and has personnel that conducts the Company’s operations from various locations in the United States and internationally including Germany, Sweden, Mexico, China and India.

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 (the “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, 2023 (the “2023 Annual Report”) filed with the SEC on February 28, 2024. 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, useful life of long-lived assets, valuation allowance for deferred tax assets, valuation of warrants issued in a private placement (“Private Warrants”), valuation of contingent consideration payable, and assets acquired in mergers and acquisitions including intangible assets, forecasted costs associated with non-recurring engineering (“NRE”) services, restructuring costs and stock-based compensation expense. 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’s business activities are organized in two operating segments:

(i) “Autonomy Solutions” 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, development of software products that enable autonomy capabilities for automotive applications, and licensing of certain information. In June 2022, the Company acquired certain assets from Solfice Research, Inc. (“Solfice” or “Civil Maps”). In January 2023, the Company acquired certain assets from Seagate Technology LLC and Seagate Singapore International Headquarters Pte. Ltd. (individually and collectively, “Seagate”). Assets purchased from both, Civil Maps and Seagate 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 August 2021 and in April 2022, the Company acquired Optogration, Inc. (“Optogration”) and Freedom Photonics LLC (“Freedom Photonics”), respectively. Operations of Optogration and Freedom Photonics have been included in the ATS segment. In March 2024, the Company acquired EM4, LLC (“EM4”) and included operations of EM4 in the ATS segment.

Concentration of Credit Risk

The Company's financial instruments that are exposed to concentrations of credit risk consist primarily of cash and cash equivalents, debt securities and accounts receivable. The Company's deposits exceed federally insured limits. Cash held by foreign subsidiaries of the Company as of March 31, 2024 and December 31, 2023 was not material.

The Company's revenue is derived from customers located in the United States and international markets.One customer, Scale AI, Inc., accounted for 69% and 71% of the Company's accounts receivable as of March 31, 2024 and December 31, 2023, respectively.

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, 2023. There has been no material change to the Company's significant accounting policies during the three months ended March 31, 2024.

Recent Accounting Pronouncements Not Yet Effective

In December 2023, the Financial Accounting Standards Board ("FASB") issued Accounting Standard Update ("ASU") No. ASU 2023-09, Income Taxes (Topic 740): *Improvements to Income Tax Disclosures* ("ASU 2023-09"). ASU 2023-09 requires a public company to enhance the transparency and decision usefulness of income tax disclosures to provide information to better assess how an entity's operations and related tax risks and tax planning and operational opportunities affect its tax rate and prospects for future cash flows. ASU 2023-09 will be effective for the Company for the annual period beginning January 1, 2025 with early adoption permitted. The Company is currently evaluating this guidance and the impact it may have on its financial statement disclosures.

In November 2023, the FASB issued ASU 2023-07, Segment Reporting (Topic 280): *Improvements to Reportable Segment Disclosures* ("ASU 2023-07"). ASU 2023-07 requires a public company to enhance disclosures about significant segment expenses and provide incremental segment information on an annual and interim basis to enable investors to develop more decision-useful financial analyses. ASU 2023-07 will be effective for the Company for fiscal year beginning January 1, 2024, and interim periods within fiscal year beginning January 1, 2025, with early adoption permitted. The Company is currently evaluating this guidance and the impact it may have on its financial statement disclosures.

Note 3. Business Combinations and Acquisitions

Acquisition of EM4

On March 18, 2024 (the "Acquisition Date"), the Company completed its acquisition of EM4, a designer, manufacturer and seller of packaged photonic components and sub-systems for industrial markets. The EM4 acquisition is expected to accelerate the Company's strategy to package lasers, detectors and ASICs.

The Company acquired 100% of the membership interests of EM4 from G&H Investment Holding, Inc. ("G&H"), for an aggregate purchase price of approximately $4.5 million in cash, net of working capital adjustments, and up to $6.75 million in contingent future payments to G&H subject to the achievement of certain financial performance targets. The fair value of the contingent consideration at the Acquisition Date was estimated to be $0.1 million. The Company utilized a Monte Carlo simulation model to estimate the probability-weighted fair value of the contingent consideration. This transaction has been accounted for as a business combination. The acquisition related costs incurred as part of the transaction were not material.

Recording of Assets Acquired and Liabilities Assumed

Price allocation includes preliminary estimates of deferred tax balances, certain tax liabilities, for which the Company is in the process of collecting documentation to ascertain potential amounts, and fair value of certain working capital components. Preliminary estimates of fair values included in the condensed consolidated financial statements are expected to be finalized within a one-year measurement period following the acquisition date after which any subsequent adjustments will be reflected in the consolidated statements of operations.

The following table summarizes the preliminary purchase price allocation to assets acquired (in thousands):

	Preliminary Recorded Value
Cash and cash equivalents	$ 557
Accounts receivable	1,064
Contract asset	1,644
Inventories, net	3,539
Prepaid expenses and other current assets	252
Property plant and equipment	1,888
Operating lease right-of-use assets	2,072
Total assets acquired	11,016
Current liabilities	(3,148)
Operating lease liabilities, non-current	(1,628)
Total liabilities assumed	(4,776)
Net assets acquired	$ 6,240

Since the consideration paid by the Company to acquire EM4's business was lower than the estimated fair value of net assets acquired, the Company recognized a $1.8 million gain from the acquisition of EM4. The following factors contributed towards the purchase price paid by the Company being lower than the estimated fair value of the net assets acquired: (a) EM4 had historically been incurring losses and G&H viewed it as non-core; (b) although G&H pursued a competitive auction process for the business, the ultimate timeline to completion was drawn-out due to the complexity of the transaction structure; and (c) during the later stages of the sale process, after the Company was selected as the winning bidder, EM4's business was impacted by the cancellation of certain material government programs as well as delays in certain other purchase orders, which also served to significantly reduce the estimated probability of the contingent future payments to G&H.

The results of operations related to EM4 are included in our condensed consolidated statements of operations beginning from the Acquisition Date. The impact of the acquisition on the consolidated financial results of the Company for the three months ended March 31, 2024 was not material.

Note 4. Revenue

The Company's revenue is comprised of sales of LiDAR sensors hardware, components, NRE services and licensing of certain information available with the Company.

Disaggregation of Revenues

The Company disaggregates its revenue from contracts with customers by (1) geographic region based on a 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 March 31,			
	2024		2023	
	Revenue	% of Revenue	Revenue	% of Revenue
Revenue by primary geographical market:				
North America	$ 20,337	97 %	$ 13,198	91 %
Asia Pacific	81	— %	592	4 %
Europe and Middle East	550	3 %	719	5 %
Total	$ 20,968	100 %	$ 14,509	100 %
Revenue by timing of recognition:				
Recognized at a point in time	$ 15,304	73 %	$ 7,358	51 %
Recognized over time	5,664	27 %	7,151	49 %
Total	$ 20,968	100 %	$ 14,509	100 %
Revenue by segment:				
Autonomy Solutions	$ 16,320	78 %	$ 10,673	74 %
ATS	4,648	22 %	3,836	26 %
Total	$ 20,968	100 %	$ 14,509	100 %

Volvo Stock Purchase Warrant

The Company had previously issued certain stock purchase warrants ("Volvo Warrants") to Volvo Car Technology Fund AB ("VCTF") in connection with an engineering services contract. The Volvo Warrants vest and become exercisable in two tranches based on satisfaction of certain commercial milestones. The fair value of the first tranche of the Volvo Warrants was recorded as a reduction in revenue in 2021. The second tranche of the Volvo warrants will be recorded as reduction in revenue to be amortized over sales of a certain number of the Company's sensors to Volvo for use in their commercial vehicles, which commenced in the second quarter of 2024.

Contract assets and liabilities

Changes in the Company's contract assets and contract liabilities primarily result from the timing difference between the Company's performance and the customer's payment based on contractual terms. Contract assets primarily represent revenues recognized for performance obligations that have been satisfied but for which amounts have not been billed. Contract liabilities consist of the Company's obligation to transfer goods or services to a customer for which the Company has received consideration from the customer. Customer advance payments represent required customer payments in advance of product shipments. Customer advance payments are recognized in revenue as or when control of the performance obligation is transferred to the customer.

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

	March 31, 2024	December 31, 2023
Contract assets, current	$ 14,580	$ 14,132
Contract assets, non-current	3,827	2,471
Ending balance	$ 18,407	$ 16,603

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

	March 31, 2024	December 31, 2023
Beginning balance	$ 16,603	$ 17,970
Amounts billed that were included in the contract assets beginning balance	(2,518)	(10,965)
Contract assets from acquisition of EM4 (See Note 3)	1,644	—
Revenue recognized for performance obligations that have been satisfied but for which amounts have not been billed	2,678	9,598
Ending balance	$ 18,407	$ 16,603

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

	March 31, 2024	December 31, 2023
Contract liabilities, current	$ 2,341	$ 3,127
Contract liabilities, non-current	525	805
Ending balance	$ 2,866	$ 3,932

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

	March 31, 2024	December 31, 2023
Beginning balance	$ 3,932	$ 3,008
Revenue recognized that was included in the contract liabilities beginning balance	(1,570)	(2,125)
Increase due to cash received and not recognized as revenue and billings in excess of revenue recognized during the period	504	3,049
Ending balance	$ 2,866	$ 3,932

Remaining Performance Obligations

Revenue allocated to remaining performance obligations was $8.9 million as of March 31, 2024 and includes amounts within contract liabilities. The Company expects to recognize approximately94% of this revenue over the next 12 months and the remainder thereafter.

Note 5. Investments

Debt Securities

The Company's investments in debt securities consisted of the following as of March 31, 2024 and December 31, 2023 (in thousands):

	March 31, 2024			
	Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
U.S. treasury securities	$ 17,189	$ —	$ (2)	$ 17,187
U.S. agency and government sponsored securities	2,523	—	(1)	2,522
Commercial paper	19,007	—	—	19,007
Corporate bonds	65,996	10	(75)	65,931
Certificate of deposit	500	—	—	500
Total debt securities	$ 105,215	$ 10	$ (78)	$ 105,147
Included in cash and cash equivalents	$ 1,739	$ —	$ —	$ 1,739
Included in marketable securities	$ 103,476	$ 10	$ (78)	$ 103,408

	December 31, 2023			
	Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
U.S. treasury securities	$ 86,764	$ 20	$ —	$ 86,784
U.S. agency and government sponsored securities	2,732	—	—	2,732
Commercial paper	10,144	—	—	10,144
Corporate bonds	44,924	9	(27)	44,906
Total debt securities	$ 144,564	$ 29	$ (27)	$ 144,566
Included in cash and cash equivalents	$ 1,595	$ —	$ (1)	$ 1,594
Included in marketable securities	$ 142,969	$ 29	$ (26)	$ 142,972

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 March 31, 2024 and December 31, 2023 (in thousands):

	March 31, 2024		December 31, 2023	
	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value
U.S. treasury securities	$ (2)	$ 9,263	$ —	$ —
U.S. agency and government sponsored securities	(1)	1,522	—	741
Corporate bonds	(75)	37,552	(27)	30,621
Total	$ (78)	$ 48,337	$ (27)	$ 31,362

Equity Investments

The Company's equity investments consisted of the following as of March 31, 2024 and December 31, 2023 (in thousands):

	Condensed Consolidated Balance Sheets Location	March 31, 2024	December 31, 2023
Money market funds[(1)]	Cash and cash equivalents	$ 83,433	$ 101,842
Marketable equity investments[(1)]	Marketable securities	5,360	7,755
Investment in non-marketable securities[(2)]	Other non-current assets	10,000	10,000
Non-marketable equity investment measured using the measurement alternative[(2)]	Other non-current assets	4,000	4,000
Total		$ 102,793	$ 123,597

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

The Company assesses its non-marketable equity investments quarterly for impairment. Adjustments and impairments are recorded in other income (expense), net on the condensed consolidated statements of operations.

Note 6. Financial Statement Components

Cash and Cash Equivalents

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

	March 31, 2024	December 31, 2023
Cash	$ 24,391	$ 35,659
Money market funds	83,433	101,842
U.S. treasury securities	1,739	—
Commercial paper	—	497
Corporate bonds	—	1,097
Total cash and cash equivalents	$ 109,563	$ 139,095

Inventory

Inventory comprised of the following (in thousands):

	March 31, 2024	December 31, 2023
Raw materials	$ 7,699	$ 5,614
Work-in-process	3,960	2,521
Finished goods	4,758	4,061
Total inventories, net	$ 16,417	$ 12,196

The Company's inventory write-downs were $16.9 million and $5.5 million for the three months ended March 31, 2024 and 2023, respectively. The write-downs were primarily due to obsolescence charges as a result of change in product design, lower of cost or market assessment, yield losses, and other adjustments.

Prepaid Expenses and Other Current Assets

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

	March 31, 2024	December 31, 2023
Prepaid expenses	$ 20,144	$ 12,434
Contract assets	14,580	14,132
Advance payments to vendors	1,256	3,038
Other receivables	5,142	3,346
Total prepaid expenses and other current assets	$ 41,122	$ 32,950

Property and Equipment

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

	March 31, 2024	December 31, 2023
Machinery and equipment	$ 60,159	$ 58,815
Computer hardware and software	7,768	7,025
Land	1,001	1,001
Leasehold improvements	22,620	22,531
Vehicles, including demonstration fleet	2,026	2,207
Furniture and fixtures	928	900
Construction in progress	1,443	2,256
Total property and equipment	95,945	94,735
Accumulated depreciation and amortization	(33,818)	(28,435)
Total property and equipment, net	$ 62,127	$ 66,300

Property and equipment capitalized under finance lease were not material.

Depreciation and amortization expense associated with property and equipment was $7.1 million and $1.9 million for the three months ended March 31, 2024 and 2023, respectively.

The Company continually evaluates opportunities for optimizing its manufacturing processes and product design. In 2023, the Company finalized and committed to a plan to change its sourcing of certain sub-assemblies and components from one supplier to another which requires the Company to abandon certain equipment located at the legacy supplier. As a result, the Company has reduced the useful lives of the long-lived assets within the impacted asset group in line with when these assets are expected to be abandoned. The Company expects the transition to the new supplier to be completed in 2024. The reduction in the estimated useful lives of the impacted assets resulted in the Company recording $2.1 million of incremental accelerated depreciation charges in the three months ended March 31, 2024.

Intangible Assets

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

	March 31, 2024	December 31, 2023
Beginning of the period	$ 22,994	$ 22,077
Additions	—	8,240
Amortization	(1,000)	(4,323)
Impairment	—	(3,000)
End of the period	$ 21,994	$ 22,994

Intangible assets were acquired in connection with the Company's acquisition of Optogration in August 2021, Freedom Photonics in April 2022 and Solfice in June 2022. The components of intangible assets were as follows (in thousands):

	March 31, 2024					December 31, 2023				
	Gross Carrying Amount	Accumulated Amortization	Impairment	Net Carrying Amount	Weighted Average Remaining Period (Years)	Gross Carrying Amount	Accumulated Amortization	Impairment	Net Carrying Amount	Weighted Average Remaining Period (Years)
Customer relationships	$ 3,730	$ (1,683)	$ —	$ 2,047	3.5	$ 3,730	$ (1,479)	$ —	$ 2,251	3.7
Customer backlog	—	—	—	—	—	650	(650)	—	—	—
Tradename	620	(370)	—	250	2.0	620	(339)	—	281	2.3
Assembled workforce	—	—	—	—	—	130	(130)	—	—	—
Developed technology	20,150	(4,953)	—	15,197	5.4	20,150	(4,188)	—	15,962	5.5
IPR&D	4,500	—	—	4,500	—	7,500	—	(3,000)	4,500	—
Total intangible assets	$ 29,000	$ (7,006)	$ —	$ 21,994	5.1	$ 32,780	$ (6,786)	$ (3,000)	$ 22,994	5.2

Amortization expense related to intangible assets was $1.0 million and $1.1 million for the three months ended March 31, 2024 and 2023, respectively.

As of March 31, 2024, the expected future amortization expense for intangible assets was as follows (in thousands):

Period	Expected Future Amortization Expense
2024 (remaining nine months)	$ 3,001
2025	4,001
2026	3,354
2027	3,138
2028	1,646
Thereafter	2,354
IPR&D	4,500
Total	$ 21,994

Goodwill

The carrying amount of goodwill allocated to the Company's reportable segments was as follows (in thousands):

	Autonomy Solutions	ATS	Total
Balance as of December 31, 2022	$ 687	$ 18,129	$ 18,816
Goodwill related to acquisition of Seagate's lidar business	1,063	—	1,063
Impairment of goodwill related to Freedom Photonics	—	(12,489)	(12,489)
Balance as of December 31, 2023	$ 1,750	$ 5,640	$ 7,390
Balance as of March 31, 2024	$ 1,750	$ 5,640	$ 7,390

During the year ended December 31, 2023, the Company recognized impairment charges of $12.5 million and $3.0 million related to goodwill and IPR&D related to Freedom Photonics. These impairment charges were due to events which occurred during the fourth quarter of 2023, including a decision to delay development activities on certain new products resulting from an increase in focus on supporting the product roadmap of the Autonomy Solutions segment, and a lowering of the growth outlook for the business due to less than anticipated traction in sales of new products. Total life-to-date goodwill impairment charge recorded by the ATS reportable segment was $12.5 million and no impairment charge has been recorded by the Autonomy Solutions reportable segment.

In relation to the goodwill, the Company engaged third-party valuation specialists and used industry accepted valuation models and criteria that were reviewed and approved by various levels of management. The Company assessed the fair value of the Freedom Photonics reporting during the fourth quarter of 2023, using the discounted cash flow method under the income approach, utilizing estimated cash flows and a terminal value, discounted at a rate of return that reflects the relative risk of the cash flows. The significant assumptions used in the assessment of the reporting unit included revenue growth rates, profit margins, operating expenses, capital expenditures, terminal value and a discount rate. As a result of this assessment, the Company concluded that the carrying value of the Freedom Photonics reporting unit exceeded the estimated fair value by $12.5 million, which was recorded as a noncash impairment charge to goodwill.

In relation to the intangibles, the significant assumptions used in the assessment of the IPR&D intangible asset included revenue growth rates, a discount rate and a royalty rate. Based on this assessment, the Company recorded a $3.0 million noncash impairment charge related to the IPR&D intangible asset.

Other Non-Current Assets

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

	March 31, 2024	December 31, 2023
Security deposits	$ 2,604	$ 2,410
Non-marketable equity investment	14,000	14,000
Contract assets	3,827	2,471
Other non-current assets	2,735	3,475
Total other non-current assets	$ 23,166	$ 22,356

Accrued and Other Current Liabilities

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

	March 31, 2024	December 31, 2023
Accrued compensation and benefits	$ 17,533	$ 20,658
Accrued expenses	19,605	14,723
Contract losses	8,195	8,790
Warranty reserves	1,443	4,154
Contract liabilities	2,341	3,127
Accrued interest payable and other liabilities	3,019	1,153
Total accrued and other current liabilities	$ 52,136	$ 52,605

During the three months ended March 31, 2024 and 2023, the Company recorded $2.3 million and $3.3 million, respectively, in cost of sales (services) estimated losses expected to be incurred on NRE projects with certain customers. The estimated contract losses recorded in the three months ended March 31, 2024 and 2023 were primarily driven by changes in scope of project deliverables agreed upon with a customer.

Note 7. Debt

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 Senior Notes will mature on December 15, 2026, unless repurchased or redeemed earlier 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 Convertible Senior 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 March 31, 2024, the conditions allowing holders of the Convertible Senior Notes to convert were not met.

The Company currently intends 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 the effective interest rate method is immaterial.

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

	March 31, 2024	December 31, 2023
Principal	$ 625,000	$ 625,000
Unamortized debt discount and issuance costs	(8,763)	(9,572)
Net carrying amount	$ 616,237	$ 615,428

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

	Three Months Ended March 31,	
	2024	2023
Contractual interest expense	$ 1,948	$ 1,926
Amortization of debt discount and issuance costs	809	809
Total interest expense	$ 2,757	$ 2,735

The remaining term over which the debt discount and issuance costs will be amortized is2.7 years.

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.

Credit Facility

In February 2024, the Company entered into two non-recourse loan and securities pledge agreements (the "Loan Agreements") with The St. James Bank & Trust Company Ltd. (the "Lender"), pursuant to which the Company may borrow up to an aggregate of $50.0 million. Any loans made by the Lender under the Loan Agreements would be collateralized by shares of the Company's Class A common stock or stock the Company holds of another company. The Loan Agreements require the Company to pay an up-front structure fee of 1.5% on any amounts borrowed, and any outstanding amounts would bear interest at8.0% per annum. The Company did not borrow any amounts from the credit facility and had no outstanding balance as of March 31, 2024.

Note 8. Fair Value Measurements

As of March 31, 2024, the Company carried cash equivalents, marketable investments and Private Warrants that are measured at fair value on a recurring basis. Additionally, the Company measures its equity-settled fixed value awards at fair value on a recurring basis. See Note 11 for further information on the Company's fixed value equity awards.

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. ("Gores") would result in the Private Warrants having substantially the same terms as warrants issued in connection with the initial public offering of Gores ("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 March 31, 2024, 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 1.67 years volatility of 88.89% and a risk-free rate of 4.73%. 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, 2023	$ 1,069
Change in fair value of outstanding warrants	(821)
Balance as of March 31, 2024	$ 248

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 March 31, 2024:			
	Level 1	Level 2	Level 3	Total
Assets:				
Cash equivalents:				
Money market funds	$ 83,433	$ —	$ —	$ 83,433
U.S. treasury securities	1,739	—	—	1,739
Total cash equivalents	$ 85,172	$ —	$ —	$ 85,172
Marketable investments:				
U.S. treasury securities	$ 15,448	$ —	$ —	$ 15,448
U.S. agency and government sponsored securities	—	2,522	—	2,522
Commercial paper	—	19,007	—	19,007
Corporate bonds	—	65,931	—	65,931
Certificate of deposit	—	500	—	500
Marketable equity investments	5,360	—	—	5,360
Total marketable investments	$ 20,808	$ 87,960	$ —	$ 108,768
Liabilities:				
Private Warrants	$ —	$ —	$ 248	$ 248

	Fair Value (in thousands) Measured as of December 31, 2023:			
	Level 1	Level 2	Level 3	Total
Assets:				
Cash equivalents:				
Money market funds	$ 101,842	$ —	$ —	$ 101,842
Commercial paper	—	497	—	497
Corporate bonds	—	1,097	—	1,097
Total cash equivalents	$ 101,842	$ 1,594	$ —	$ 103,436
Marketable investments:				
U.S. treasury securities	$ 86,784	$ —	$ —	$ 86,784
U.S. agency and government sponsored securities	—	2,732	—	2,732
Commercial paper	—	9,647	—	9,647
Corporate bonds	—	43,809	—	43,809
Marketable equity investments	7,755	—	—	7,755
Total marketable investments	$ 94,539	$ 56,188	$ —	$ 150,727
Liabilities:				
Private Warrants	$ —	$ —	$ 1,069	$ 1,069

As of March 31, 2024 and December 31, 2023, the estimated fair value of the Company’s outstanding Convertible Senior Notes was $214.4 million and $296.3 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 fair value of Company’s other financial instruments, including accounts receivable, accounts payable and other current liabilities, approximate their 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 months ended March 31, 2024 and 2023 (in thousands, except for share and per share amounts):

	Three Months Ended March 31,	
	2024	2023
Numerator:		
Net loss	$ (125,714)	$ (146,774)
Denominator:		
Weighted average common shares outstanding—Basic	424,929,163	370,742,917
Weighted average common shares outstanding—Diluted	424,929,163	370,742,917
Net loss per share—Basic and Diluted	$ (0.30)	$ (0.40)

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 or related contingencies on issuance of shares had not been met as of March 31, 2024:

	March 31, 2024
Warrants	5,757,549
Stock-based awards—Equity classified	37,170,747
Stock-based awards—Liability classified	27,582,139
Vendor stock-in-lieu of cash program	1,996,615
Convertible Senior Notes	31,279,716
Earn-out shares	8,606,717
Total	112,393,483

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 March 31, 2024 was less than the initial conversion price.

Note 10. Stockholders' Equity

Class A and Class B Common Stock

The Company's board of directors (the "Board") has authorized two classes of common stock, Class A and Class B. As of March 31, 2024, the Company had authorized 715,000,000 shares of Class A common stock and 121,000,000 shares of Class B common stock with a par value of $0.0001 per share for each class. As of March 31, 2024, the Company had 365,309,068 shares issued and 343,445,618 shares outstanding of Class A common stock, and 97,088,670 shares issued and outstanding of Class B common stock. Holders of 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.

Equity Financing Program

On February 28, 2023, the Company entered into an agreement (the "Sales Agreement") with Virtu Americas LLC (the "Agent") under which the Company may offer and sell, from time to time in its sole discretion, shares of the Company's Class A common stock with aggregate gross sales proceeds of up to $75.0 million through an equity offering program under which the Agent will act as sales agent (the "Equity Financing Program"). The Company intends to use the net proceeds from offerings under the Equity Financing Program primarily for expenditures or payments in connection with strategic merger and acquisition opportunities, as well as potential strategic investments, partnerships and similar transactions.

Under the Sales Agreement, the Company sets the parameters for the sale of the shares, including the number of shares to be issued, the time period during which sales are requested to be made, limitations on the number of shares that may be sold in any one trading day and any minimum price below which sales may not be made. Subject to the terms and conditions of the Sales Agreement, the Agent has agreed to use its commercially reasonable efforts, consistent with its normal trading and sales practices, to sell the shares by methods deemed to be an "at the market" offering as defined in Rule 415 promulgated under the Securities Act of 1933, as amended, (the "Securities Act") including sales made through The Nasdaq Global Select Market.

The Company issued 9,644,286 shares of Class A common stock under the Equity Financing Program during the three months ended March 31, 2024 for net proceeds of $17.2 million. As of March 31, 2024, no amounts were available for sale under the program.

Private Warrants

The Company had 1,668,269 Private Warrants outstanding as of December 31, 2023. No Private Warrants were exercised in the three months ended March 31, 2024. The 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"). 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.

During the three months ended March 31, 2024, the Company issued 151,206 shares of Class A common stock as part of the Stock-in-lieu of Cash Program. As of March 31, 2024, the Company had a total of $9.4 million in prepaid expenses and other current and non-current assets related to its Stock-in-lieu of Cash Program.

The Company's vendor Stock-in-lieu of Cash Program activity for the three months ended March 31, 2024 was as follows:

	Shares	Weighted Average Grant Date Fair Value per Share
Unvested shares as of December 31, 2023	878,060	$ 4.32
Granted	151,206	3.37
Vested	(657,588)	3.69
Unvested shares as of March 31, 2024	371,678	5.05

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 between Gores Metropoulos, Inc. and Luminar Technologies, Inc. on December 2, 2020 (the "Business Combination"), the Company has not issued any new stock-based awards under the 2015 Plan.

In December 2020, the 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. Pursuant to the evergreen provision 20,991,566 additional shares of Class A common stock were added to the Amended 2020 Plan on January 1, 2024.

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.

The Company's stock option activity for the three months ended March 31, 2024 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, 2023	6,199,453	$ 1.76		
Exercised	(223,401)	1.67		
Cancelled/Forfeited	(25,805)	4.27		
Outstanding as of March 31, 2024	5,950,247	1.75	5.71	$ 1,749

The aggregate intrinsic value of stock options exercised during the three months ended March 31, 2024 was $0.2 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 stock options vested during the three months ended March 31, 2024 was $0.3 million.

Restricted Stock units

Since the closing of the Business Combination, the Company has granted restricted stock units ("RSUs") under the Amended 2020 Plan (and prior to its amendment and restatement, under the 2020 Plan). Each RSU granted under the Amended 2020 Plan 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 Company has granted certain performance-based equity awards that vest upon achievement of certain performance milestones. The fair value of RSUs is equal to the fair value of the Company's common stock on the date of grant.

The Company's Time-Based RSUs and Performance-Based and Other RSUs activity for the three months ended March 31, 2024 was as follows:

	Time-Based RSUs		Performance-Based and Other RSUs	
	Shares	Weighted Average Grant Date Fair Value per Share	Shares	Weighted Average Grant Date Fair Value per Share
Outstanding as of December 31, 2023	31,251,698	$ 8.60	266,921	$ 8.91
Granted	7,030,338	2.26	179,452	1.92
Forfeited	(1,371,438)	8.28	(14,229)	8.58
Vested	(6,352,879)	6.86	(179,452)	1.92
Change in units based on performance	—	—	—	—
Outstanding as of March 31, 2024	30,557,719	7.52	252,692	8.93

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 under 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 six 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 $4.0 million and $2.9 million for the three months ended March 31, 2024 and 2023, respectively.

Freedom Photonics Awards

As part of the acquisition of Freedom Photonics LLC ("Freedom Photonics") in April 2022, the Company owed up to $29.8 million of post combination compensation related to certain service and performance conditions including achievement of certain technical and financial milestones. In March 2024, the Company issued 2,651,085 shares of Class A common stock for $5.4 million of the post combination compensation due to achievement of the service and performance conditions. As of March 31, 2024, it is probable that the remaining conditions will be met for an amount equal to approximately $15.4 million of post combination compensation.

Management Awards

On May 2, 2022, the Board granted an award of 10.8 million RSUs to Austin Russell, the Company's Chief Executive Officer. The grant date fair value per share of the award granted to Mr. Russell was $8.70 per share. On August 19, 2022, the Board granted 500,000 RSUs to each of Thomas Fennimore, the Company's Chief Financial Officer, and Alan Prescott, the Company's Chief Legal Officer. The grant date fair value per share of the awards granted to Mr. Fennimore and Mr. Prescott was $6.12 per share.

These awards to Mr. Russell, Mr. Fennimore and Mr. Prescott are subject to all of the following vesting conditions:

- Public Market condition: Achievement of three stock price milestones: $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: Approximately 7-years of vesting; and
- Performance condition: Start of production for at least one series production program.

The Company measured the compensation cost for the management awards outlined above using a Monte Carlo simulation model and recorded $5.7 million in stock-based compensation expense related to these awards in the three months ended March 31, 2024.

The Company's management awards activity for the three months ended March 31, 2024 was as follows:

	Shares	Weighted Average Grant Date Fair Value per Share
Outstanding as of December 31, 2023	11,800,000	$ 8.48
Outstanding as of March 31, 2024	11,800,000	8.48

On November 8, 2023, the Board approved a formula for RSU grants to Messrs. Fennimore and Prescott for each year from 2024 through 2029 for Mr. Fennimore and through 2026 for Mr. Prescott based on achievement of annual performance goals with respect to the immediately preceding year ("Annual Performance Award"). The number of RSUs to be awarded in a year will be determined at the sole discretion of the Human Resources and Compensation Committee of the Board (the "Compensation Committee") based on actual achievement of the annual performance goals established by the Board based on the Company's approved operating plan in respect of the immediately preceding year, with such awards ranging from 137,500 RSUs at the threshold level, 550,000 RSUs at the target level, and 825,000 RSUs at the maximum level for extraordinary performance (interpolated linearly between target levels, as applicable). For a potential award to be made in 2024, the Compensation Committee had determined that annual performance goals will be weighted 50% based on revenue and 50% based on free cash flow, with target performance for the revenue performance goal equal to $81.4 million and target performance for the 2023 fourth quarter free cash flow goal equal to $(37) million. In March 2024, the Compensation Committee determined that the achievement of the 2023 performance goals was below the threshold level. Accordingly, no 2023 Annual Performance Award was granted to Messrs. Fennimore and Prescott in March 2024.

Compensation expense

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

	Three Months Ended March 31, 2024	Three Months Ended March 31, 2023
Cost of sales	$ 3,395	$ 2,662
Research and development	14,484	17,471
Sales and marketing	5,223	5,828
General and administrative	21,363	29,993
Total	$ 44,465	$ 55,954

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

	Three Months Ended March 31,	
	2024	2023
Equity Classified Awards:		
Stock options	$ 262	$ 727
RSAs	—	60
RSUs	31,339	38,332
Management awards	5,716	5,659
ESPP	364	403
Liability Classified Awards:		
Equity-settled fixed value	4,013	2,881
Optogration	—	2,581
Freedom Photonics	2,214	4,555
Other	557	756
Total	$ 44,465	$ 55,954

Note 12. Income Taxes

Provision for income taxes for the three months ended March 31, 2024 and 2023 was not material. The effective tax rate was (0.5)% and 0.0% for the three months ended March 31, 2024 and 2023, 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 August 2032. Some of the Company's leases include one 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 were as follows (in thousands):

	Three Months Ended March 31,	
	2024	2023
Operating lease cost	$ 2,720	$ 1,972
Variable lease cost	327	516
Total operating lease cost	$ 3,047	$ 2,488

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

	Three Months Ended March 31,	
	2024	2023
Cash paid for amounts included in the measurement of lease liabilities:		
Cash paid for operating leases included in operating activities	$ (2,336)	$ (1,695)
Right of use assets obtained in exchange for lease obligations:		
Operating leases	3,842	1,211

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

	March 31, 2024	December 31, 2023
Operating leases:		
Operating lease right-of-use assets	$ 46,631	$ 42,706
Operating lease liabilities:		
Operating lease liabilities, current	$ 11,309	$ 10,154
Operating lease liabilities, non-current	38,386	35,079
Total operating lease liabilities	$ 49,695	$ 45,233

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

	March 31, 2024	December 31, 2023
Weighted average remaining lease term		
Operating leases	5.40	5.61

Weighted average discount rates were as follows:

	March 31, 2024	December 31, 2023
Weighted average discount rate		
Operating leases	6.29 %	6.45 %

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

Year Ending December 31,	Operating Leases
2024 (remaining nine months)	$ 8,742
2025	11,707
2026	11,440
2027	10,518
2028	7,418
2029	2,455
Thereafter	6,489
Total lease payments	58,769
Less: imputed interest	(9,074)
Total leases liabilities	$ 49,695

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 $181.2 million as of March 31, 2024.

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 material to the financial statements.

On May 26, 2023, a putative class action styled Johnson v. Luminar Technologies, Inc., et al., Case No. 6:23-cv-00982-PGB-LHP, was filed in the United States District Court for the Middle District of Florida, against the Company and an employee. The suit asserts purported claims on behalf of purchasers of the Company's securities between February 28, 2023 and March 17, 2023 under Sections 10(b) and 20(a) of the Exchange Act for allegedly misleading statements regarding the Company's photonic integrated circuits technology. Defendants filed a motion to dismiss the complaint on December 29, 2023. The Company disputes the allegations in the complaint and intends to vigorously defend the litigation. The Company presently does not expect this matter to have a material adverse impact on the Company's financial results and did not accrue anything related to this matter as of March 31, 2024. On October 21, 2023, a shareholder derivative suit entitled *Bhavsar v. McAuliffe, et al.*Bhavsar v. McAuliffe, et al., No. 6:23-cv-02037 was filed in the United States District Court for the Middle District of Florida against directors of the Company and an employee. The suit avers claims for purported breaches of fiduciary duty, unjust enrichment, abuse of control, gross mismanagement, waste, aiding and abetting, and contribution under Sections 10(b) and 21D of the Exchange Act on the basis of the same wrongdoing alleged in the first lawsuit described above. In November 2023, three additional shareholder derivative suits averring similar claims to *Bhavsar* were filed in the United States District Court for the District of Delaware:*Lance Dechant, et al. v. Alec E. Gores, et al*, C.A. No. 23-cv-01318-UNA, *Hutchinson v. Russell, et al*., C.A. No. 23-cv-01345-UNA, and *Ulerio v. Russell, et al*., C.A. No. 23-cv-01359-UNA. The Company disputes the allegations in the complaint and intends to vigorously defend the litigation. The Company has determined that the likelihood of this matter resulting in a material adverse impact on the Company's financial results is remote.

On March 21, 2024, a putative class action styled Smith v. Gores, et al., C.A. No. 2024-0285-MTZ (Del. Ch.) was filed in the Delaware Court of Chancery against the Company and the members of its Board of Directors. The lawsuit asserts claims on behalf of a putative class comprised of all stockholders other than defendants and any current directors or officers of the Company. The plaintiff alleges that certain provisions in the Company's advance notice bylaws (the "Challenged Provisions") are invalid and void and that the members of the Board have breached their fiduciary duty of loyalty by adopting and maintaining the Challenged Provisions. In addition to seeking declaratory, equitable, and injunctive relief, the plaintiff seeks an award of attorneys' fees and other costs and expenses on behalf of the putative class. On April 15, 2024, the Company moved to dismiss the complaint. The Company has determined that the likelihood of this matter resulting in a material adverse impact on the Company's financial results is remote.

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 for automotive mobility applications. This segment is impacted by trends in the automobile and autonomous vehicles sector and the infrastructure/technology sector.

ATS

This segment is in the business of development of semiconductor technology based lasers and sensors. This segment also designs, tests and provides consulting services for development of integrated circuits. This segment is impacted by trends in and the strength of the automobile and aeronautics sectors 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 March 31, 2024				
	Autonomy Solutions	ATS	Total reportable segments	Eliminations (1)	Total Consolidated
Revenues from external customers	$ 16,320	$ 4,648	$ 20,968	$ —	$ 20,968
Depreciation and amortization	7,428	638	8,066	—	8,066
Operating income (loss)	(125,019)	(750)	(125,769)	—	(125,769)
Other significant items:					
Segment assets	554,708	63,120	617,828	(149,883)	467,945
Inventories, net	11,863	4,591	16,454	(37)	16,417

	Three Months Ended March 31, 2023				
	Autonomy Solutions	ATS	Total reportable segments	Eliminations (1)	Total Consolidated
Revenues from external customers	$ 10,673	$ 3,836	$ 14,509	$ —	$ 14,509
Depreciation and amortization	2,326	661	2,987	—	2,987
Operating income (loss)	(141,584)	(596)	(142,180)	285	(141,895)
Other significant items:					
Segment assets	735,264	64,157	799,421	(141,070)	658,351
Inventory	14,477	479	14,956	(38)	14,918

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

Three customers, Scale AI, Inc., Tesla, Inc. and Mercedes-Benz ExTra, LLC of Autonomy Solutions segment, accounted for 48%, 11% and 10% of the Company's revenue for the three months ended March 31, 2024, respectively. Two customers, Scale AI, Inc. and Mercedes-Benz ExTra, LLC of Autonomy Solutions segment, accounted for 28% and 24% of the Company's revenue for the three months ended March 31, 2023, respectively. A vast majority of the Company's long-lived assets are located in North America.

Note 16. Subsequent Event

Equity Financing Program

The Company sold 2,915,534 and 954,000 shares of Class A common stock on March 27, 2024 and March 28, 2024, respectively. Upon settlement of these sales, the Company received net proceeds of $6.9 million and issued shares of Class A common stock in April 2024.

On May 3, 2024, the Company entered into a Financing Agreement with the Agent under which the Company may offer and sell, from time to time in its sole discretion, shares of the Company's Class A common stock with aggregate gross sales proceeds of up to $150.0 million under the Equity Financing Program. This is an extension of the prior Equity Financing Program the Company established with the Agent in February 2023. The Company intends to use the net proceeds from offerings under the Equity Financing Program for expenditures or payments in connection with strategic merger and acquisitions, strategic investments, partnerships and similar transactions, repurchases of convertible debt securities, and if needed, for general corporate and business purposes.

Restructuring

On May 3, 2024, the Company approved and announced a restructuring plan (the "2024 Restructuring Plan") consisting of the following:

- a reduction in its workforce by approximately 20%, which is intended to realign its employee base to its highest priorities and core competencies as a company, eliminate redundancies with resources gained through the expanded

TPK partnership, and reduce operating costs and drive operating leverage as the Company continues to scale in the future; and

- a reduction in its global footprint by sub-leasing portions or the entirety of certain facilities.

The actions associated with the 2024 Restructuring Plan commenced in May 2024 and are estimated to be substantially complete by the end of 2024. The Company estimates that it will incur approximately $6 million to $8 million in cash charges associated with employee severance and related employee costs, to be incurred primarily in the second quarter and third quarter of 2024. Incrementally, the Company expects to incur charges related to acceleration of certain previously granted stock-based awards and grants of new awards as part of severance packages for employees impacted under the 2024 Restructuring Plan. The Company expects to incur $2 million to $5 million in losses from sub-leasing of facilities, to be incurred during the remainder of 2024. The Company's estimates are subject to a number of assumptions, and actual results may materially differ.

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 Form 10-Q and our Annual Report on Form 10-K for the year ended December 31, 2023 (the "2023 Annual Report") filed with the SEC on February 28, 2024. 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 2023 Annual Report and elsewhere in this Form 10-Q. See also "Cautionary Note Regarding Forward-Looking Statements" at the beginning of this Form 10-Q.

Overview

We are a global automotive technology company ushering 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. Over the past decade, Luminar has been building our light detection and ranging (LiDAR) sensor from the chip-level up, which is expected to meet the demanding performance, safety, reliability and cost requirements to enable next-generation safety and autonomous capabilities for passenger and commercial vehicles as well as other adjacent markets.

We are in the process of developing perception, decision-making and mapping software. As of the end of the first quarter of 2024, most of our software products had not achieved technological feasibility.

Acquisition of EM4

On March 18, 2024, we completed the acquisition of EM4, a designer, manufacturer and seller of packaged photonic components and sub-systems for industrial markets. The EM4 acquisition is expected to accelerate our strategy to package lasers, detectors and ASICs.

Industrialization Update

We continue to execute on our industrialization plan in conjunction with our automaker partners.

We announced our achievement of start of production ("SOP") for Volvo Cars at the manufacturing facility in Mexico in April 2024 and began shipping production LiDAR sensors for the Volvo EX90.

We continually evaluate opportunities for optimizing our manufacturing processes and product design. During 2023, we began evaluating our sourcing strategy with the objective to reduce future per unit sensor manufacturing costs, and then finalized and committed to a plan to change our sourcing of certain sub-assemblies and components from one supplier to another, which will require us to abandon certain equipment located at the legacy supplier. As a result, we have reduced the useful lives of the long-lived assets within the impacted asset group in line with when these assets are expected to be abandoned. We expect the transition to new suppliers to be completed in 2024. The reduction in the estimated useful lives of the impacted assets resulted in us recording $2.1 million of accelerated depreciation charges in the first quarter of 2024. We expect to record additional accelerated depreciation in the range of $5.0 million to $6.0 million by end of 2024. Our continuing optimization of our manufacturing and product design processes may impact estimated useful lives or carrying values of additional property, plant and equipment or other assets.

In the first quarter of 2024, we agreed to establish an engineering center in Xiamen, China to be staffed by TPK, one of our existing contract manufacturing partners to assist with our industrialization efforts, including manufacturing process design, development and validation, component process verification and validation, supplier development support, system validation, cost analysis and benchmarking. TPK is also in the process of building a high volume facility in Asia.

Business Updates

In the first quarter of 2024, we successfully passed the final Run at Rate production audit for Volvo Cars at the manufacturing facility in Mexico, our final milestone ahead of SOP.

Given the customary business practices in the automotive industry, the rapidly changing nature of the markets in which we compete and that LiDAR is new, 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 risks of cancellation or postponement of the contract or unsuccessful implementation" in "Risk Factors" in Item IA of Part I in our 2023 Annual Report.

Basis of Presentation

Our condensed consolidated financial statements include the accounts of our wholly owned subsidiaries. We have eliminated intercompany accounts and transactions.

Components of Results of Operations

Revenue

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

The Autonomy Solutions segment is engaged in design, manufacturing, and sale of LiDAR sensors catering mainly to the OEMs 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, as well as revenue generated from licensing of certain information.

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

Three customers, Scale AI, Inc., Tesla, Inc. and Mercedes-Benz ExTra, LLC of Autonomy Solutions segment, accounted for 48%, 11% and 10% of the Company's revenue for the three months ended March 31, 2024, respectively. Two customers, Scale AI, Inc. and Mercedes-Benz ExTra, LLC of Autonomy Solutions segment, accounted for 28% and 24% of the Company's revenue for the three months ended March 31, 2023, respectively.

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 stock-based compensation expense for personnel engaged in manufacturing, engineering, 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. As we transition from prototype production to series production, average selling prices will be lower and we expect these lower average selling prices to temporarily increase our gross loss over the next few quarters until we start to realize the benefits of cost reduction and efficiency measures and production scaling.

Operating Expenses

Research and Development (R&D)

R&D costs are expensed as incurred. Design and development costs for products to be sold under long-term supply arrangements are expensed as incurred. Design and development costs for molds, dies, and other tools involved in developing new technologies 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; and
- 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, and we expect to continue to incur operating losses for at least the foreseeable future due to continued R&D investments.

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.

Other income (expense), net

Interest income consists 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. Interest expense consists primarily of interest on convertible senior notes as well as amortization of premium (discount) on marketable securities. Other income (expense) includes realized gains and losses related to the marketable securities, as well as impact of gains and losses related to foreign exchange transactions.

Results of Operations for the Three Months Ended March 31, 2024 and 2023

The results of operations presented below should be reviewed in conjunction with the condensed consolidated financial statements and notes included elsewhere in this Form 10-Q. The following table sets forth our consolidated results of operations data for the periods presented (in thousands):

	Three Months Ended March 31,			
	2024	2023	$ Change	% Change
Revenue	$ 20,968	$ 14,509	$ 6,459	45 %
Cost of sales	31,423	29,133	2,290	8 %
Gross loss	(10,455)	(14,624)	4,169	(29) %
Operating Expenses:				
Research and development	67,750	69,052	(1,302)	(2) %
Sales and marketing	14,515	13,729	786	6 %
General and administrative	33,049	44,490	(11,441)	(26) %
Total operating expenses	115,314	127,271	(11,957)	(9) %
Loss from operations	(125,769)	(141,895)	16,126	(11) %
Other income (expense), net:				
Change in fair value of warrant liabilities	821	(1,054)	1,875	(178) %
Interest expense	(2,757)	(1,665)	(1,092)	66 %
Interest income	3,430	1,905	1,525	80 %
Gain from acquisition of EM4	1,752	—	1,752	nm
Losses related to investments and certain other assets, and other income (expense)	(2,604)	(4,065)	1,461	(36) %
Total other income (expense), net	642	(4,879)	5,521	(113) %
Loss before provision for income taxes	(125,127)	(146,774)	21,647	(15) %
Provision for income taxes	587	—	587	nm
Net loss	$ (125,714)	$ (146,774)	$ 21,060	(14) %

Revenue

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

	Three Months Ended March 31,			
	2024	2023	$ Change	% Change
Revenue from sales to external customers:				
Autonomy Solutions	$ 16,320	$ 10,673	$ 5,647	53 %
ATS	4,648	3,836	812	21 %
Total	$ 20,968	$ 14,509	$ 6,459	45 %

The increase in revenue of our Autonomy Solutions in the three months ended March 31, 2024 compared to the same period in 2023 was primarily due to an increase in sales of our LiDAR sensors and licensing of certain information.

The increase in revenue of our ATS segment in the three months ended March 31, 2024 compared to the same period in 2023 primarily due to an increase in revenue from the acquisition of EM4 and non-recurring engineering services.

Cost of Sales

The $2.3 million increase in the cost of sales in the three months ended March 31, 2024, compared to the same period in 2023, was primarily due to impairment of inventory due to (a) obsolescence caused by changes in design of our sensors and (b) net realizable value reserves caused by expected selling prices for the inventory in hand being lower than cost.

In 2023, we finalized and committed to a plan to proceed with a change in our sourcing strategy for certain manufacturing activities. Implementation of this plan is expected to result in discontinued use of certain plant, property and equipment assets as they will no longer be needed for their original intended use. We have revised the estimated useful lives of said long-lived assets within the impacted asset group, which resulted in recording depreciation for these assets over an accelerated period. In the first quarter of 2024, we recorded $2.1 million of accelerated depreciation charges associated with this manufacturing and sourcing change.

Operating Expenses

Research and Development

The $1.3 million decrease in research and development expenses in the three months ended March 31, 2024 compared to the same period in 2023 was primarily due to a decreases in personnel-related costs, decrease in purchased materials, contractor fees and external spend related to development as we get closer to industrialization of our LiDAR sensors.

Sales and Marketing

The $0.8 million increase in sales and marketing expenses for the three months ended March 31, 2024 compared to the same period in 2023 was primarily due to Formula 1 sponsorship, partially offset by lower marketing spend related to trade shows and presentations in auto industry conventions.

General and Administrative

The $11.4 million decrease in general and administrative expenses for the three months ended March 31, 2024 compared to the same period in 2023 was primarily due to:

- a $7.2 million decrease in personnel-related costs driven mainly by a decrease in stock-based compensation expense;
- a $2.9 million decrease in outside consultants, contractors and other costs; and
- a $0.6 million decrease in travel related costs.

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 issued in a private placement in connection with the initial public offering of Gores Metropoulos, Inc. ("Private Warrants").

The non-cash gain related to the Private Warrants was $0.8 million for the three months ended March 31, 2024.

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 March 31,			
	2024	2023	$ Change	% Change
Segment operating income (loss)				
Autonomy Solutions	$ (125,019)	$ (141,584)	$ 16,565	(12 %)
ATS	(750)	(596)	(154)	(26 %)

Liquidity and Capital Resources

Sources of Liquidity and Capital Requirements

Our capital requirements will depend on many factors, including:

- production capacity and volume;
- the timing and extent of spending to support R&D efforts;
- investments in manufacturing equipment and facilities;
- the expansion of sales and marketing activities, market adoption of new and enhanced products and features; and
- investments in information technology systems.

Until we can generate sufficient revenue and profits 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. In addition, we may from time to time seek to retire or repurchase material amounts of our outstanding debt securities through open-market purchases, privately negotiated transactions or otherwise, for cash or through exchanges for debt or equity. Any repurchases or exchanges would be on terms and at prices that we may determine in our discretion and would depend on prevailing market conditions, our liquidity requirements, our receipt of any necessary corporate approvals and other factors. The credit market and financial services industry 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. We expect to fund these product and business development initiatives and capital expenditures either through our cash, cash equivalents and marketable securities or through issuance of shares of our Class A common stock to vendors and third parties for services provided (“Stock-in-lieu of Cash Program”).

In February 2024, we entered into two non-recourse loan and securities pledge agreements (the “Loan Agreements”) with The St. James Bank & Trust Company Ltd. (the “Lender”), pursuant to which we may borrow up to an aggregate of $50.0 million. Any loans made by the Lender under the Loan Agreements would be collateralized by shares of our Class A common stock or stock we hold of another company. The Loan Agreements require us to pay an up-front structure fee of 1.5% on any amounts borrowed, and any outstanding amounts would bear interest at 8.0% per annum. We did not borrow any amount from this credit facility and had no outstanding balance as of March 31, 2024.

On February 28, 2023, we entered into an agreement (the “2023 Sales Agreement”) with Virtu Americas LLC (the “Agent”) under which we may offer and sell, from time to time in its sole discretion, shares of the Company’s Class A Common Stock with aggregate gross sales proceeds of up to $75,000,000 through an equity offering program under which Virtu Americas LLC will act as sales agent (the “Equity Financing Program”). We intend to use the net proceeds from offerings under the Equity Financing Program primarily for expenditures or payments in connection with strategic merger and acquisition opportunities, as well as potential strategic investments, partnerships and similar transactions.

Under the Sales Agreement, we set the parameters for the sale of the shares, including the number of shares to be issued, the time period during which sales are requested to be made, limitations on the number of shares that may be sold in any one trading day and any minimum price below which sales may not be made. Subject to the terms and conditions of the Sales Agreement, the Agent has agreed to use its commercially reasonable efforts, consistent with its normal trading and sales practices, to sell the shares by methods deemed to be an “at the market” offering as defined in Rule 415 promulgated under the Securities Act, including sales made through The Nasdaq Global Select Market.

We issued 9,644,286 shares of Class A common stock under the Equity Financing Program during the three months ended March 31, 2024 for net proceeds of $17.2 million. As of March 31, 2024, no amounts were available for sale under the program.

We sold 2,915,534 and 954,000 shares of Class A common stock on March 27, 2024 and March 28, 2024, respectively. Upon settlement of these sales, we received $6.9 million cash in net proceeds and issued shares of Class A common stock in April 2024 and completed sales under the 2023 Sales Agreement.

On May 3, 2024, we entered into another Sales Agreement with the Agent under which we may offer and sell, from time to time in our sole discretion, shares of our Class A common stock with aggregate gross sales proceeds of up to $150.0 million under the Equity Financing Program. This is an extension of the prior Equity Financing Program we established with the Agent in February 2023. We intend to use the net proceeds from offerings under the Equity Financing Program for expenditures or payments in connection with strategic merger and acquisitions, strategic investments, partnerships and similar transactions, repurchases of convertible debt securities, and if needed, for general corporate and business purposes.

As of March 31, 2024, we had cash and cash equivalents totaling $109.6 million and marketable securities of $108.8 million, totaling $218.3 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 the 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 $2.0 billion as of March 31, 2024. We expect to continue to incur operating losses for at least the foreseeable future due to continued R&D investments that we intend 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.

Cash Flow Summary

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

	Three months ended March 31,	
	2024	2023
Net cash provided by (used in):		
Operating activities	$ (81,229)	$ (64,674)
Investing activities	34,426	62,599
Financing activities	17,475	23,129

Operating Activities

Net cash used in operating activities was $81.2 million during the three months ended March 31, 2024. Net cash used in operating activities was due to our net loss of $125.7 million adjusted for non-cash items of $73.5 million, primarily consisting of $44.5 million of stock-based compensation, $16.9 million of inventory write-offs and write-downs, $8.1 million of depreciation and amortization, $4.0 million of vendor payments in stock in lieu of cash, $2.3 million of loss on marketable securities and $0.8 million of change in fair value of warrant liabilities, and cash used for operating assets and liabilities of $29.0 million due to the timing of cash payments to vendors and cash receipts from customers.

Investing Activities

Net cash provided by investing activities of $34.4 million in the three months ended March 31, 2024 was comprised of cash proceeds from maturities of marketable securities of $89.0 million, offset by $48.8 million related to purchases of marketable securities, $1.3 million in cash spent for capital expenditures, and $4.7 million cash paid for acquisition of EM4.

Financing Activities

Net cash provided by financing activities of $17.5 million in the three months ended March 31, 2024 was comprised of $17.2 million cash received from the sale and issuance of shares of Class A common stock under the Equity Financing Program and $0.4 million cash received from exercises of stock options, offset by $0.1 million cash paid for employee taxes related to stock-based awards.

Critical Accounting Policies and Estimates

Our condensed consolidated financial statements are prepared in accordance with generally accepted accounting principles in the United States. 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 months ended March 31, 2024, 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 2023 Annual Report and Note 2 of the notes to condensed consolidated financial statements included in this Form 10-Q.

Recent Accounting Pronouncements

See Note 2 of the notes to condensed consolidated financial statements included in this Form 10-Q.

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 2023 Annual Report. Our exposure to market risk has not changed materially since December 31, 2023.

We had cash and cash equivalents, and marketable securities totaling $218.3 million as of March 31, 2024. 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 March 31, 2024, 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 a 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

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of 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 March 31, 2024.

Based on management's evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as of March 31, 2024, our disclosure controls and procedures were designed, and were effective, to provide assurance at a reasonable level that the information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC rules and forms, and that such information is accumulated and communicated to our management as appropriate to allow timely decisions regarding required disclosures.

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.

Changes in Internal Control Over Financial Reporting

During the three months ended March 31, 2024, there was no change in our internal control over financial reporting that has materially affected, or is 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 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 2023 Annual Report. You should carefully consider the "Risk Factors" discussed in our 2023 Annual Report 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

None.

ITEM 3. Defaults Upon Senior Securities.

None.

ITEM 4. Mine Safety Disclosures.

Not applicable.

ITEM 5. Other Information.

During the three months ended March 31, 2024, none of our directors or officers (as defined in Rule 16a-1(f) under the Securities Exchange Act adopted or terminated a "Rule 10b5-1 trading arrangement" or "non-Rule 10b5-1 trading arrangement," as those terms are defined in Item 408 of Regulation S-K.

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	Certificate of Amendment to the Second Amended and Restated Certificate of Incorporation of the Company.	10-K	001-38791	3.2	02/28/24	
3.3	Amended and Restated Bylaws of the Company (as amended on March 17, 2023).	8-K	001-38791	3.1	03/21/23	
10.1	Non-Recourse Loan and Securities Pledge Agreement, dated as of February 23, 2024, by and between The St. James Bank & Trust Company Ltd. and the Company.	10-K	001-38791	10.20	02/28/24	
10.2	Non-Recourse Loan and Securities Pledge Agreement, dated as of February 23, 2024, by and between The St. James Bank & Trust Company Ltd. and the Company.	10-K	001-38791	10.21	12/8/20 02/28/24	
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: May 10, 2024

By: /s/ Austin Russell
Austin Russell
President, Chief Executive Officer and Chairperson of the Board
(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 March 31, 2024;
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: May 10, 2024

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 March 31, 2024;
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: May 10, 2024 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 March 31, 2024 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: May 10, 2024	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 March 31, 2024 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: May 10, 2024	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.