CEPTON®

2022 ANNUAL REPORT

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

FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2022

OR

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

For the transition period from   to

CEPTON®

Cepton, Inc.

(Exact name of registrant as specified in its charter)

Delaware	001-39959	27-2447291
(State or other jurisdiction of incorporation or organization)	(Commission File Number)	(I.R.S. Employer Identification Number)

399 West Trimble Road San Jose, California	95131
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: 408-459-7579

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common stock, par value $0.00001 per share	CPTN	The Nasdaq Stock Market LLC
Redeemable warrants, exercisable for common stock at an exercise price of $11.50 per share, subject to adjustment	CPTNW	The Nasdaq Stock Market LLC

Securities registered pursuant to Section 12(g) of the Act: **None**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 of Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 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 has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. Yes ☐ No ☒

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to § 240.10D-1(b). ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☒

The aggregate market value of voting stock held by non-affiliates of the registrant was approximately $80.2 million as of June 30, 2022 (the last business day of the registrant's most recently completed second fiscal quarter) based upon the closing sale price on The Nasdaq Capital Market reported for such date. Shares of Common Stock held by each officer and director and by each person who may be deemed to be an affiliate have been excluded. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of March 1, 2023, 156,761,170 shares of common stock, par value $0.00001, of the registrant were issued and outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

None.

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Cautionary Note Regarding Forward-Looking Statements

In this Report, we make references to our website at *www.cepton.com*. References to our website through this Report are provided for convenience only and the content on our website does not constitute a part of, and shall not be deemed incorporated by reference into, this Report.

This Annual Report on Form 10-K (the "Report") includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). All statements other than statements of historical or current fact included in this Report are forward-looking statements. Forward-looking statements may be identified by the use of words such as "estimate," "plan," "project," "forecast," "intend," "will," "expect," "anticipate," "believe," "seek," "target," "designed to" or other similar expressions that predict or imply future events or trends or that are not statements of historical matters. In addition, any statements that refer to projections, forecasts or other characterizations of future events or circumstances, including any underlying assumptions, are forward-looking statements. The Company cautions readers of this Report that these forward-looking statements are subject to risks and uncertainties, most of which are difficult to predict and many of which are beyond the Company's control, that could cause the actual results to differ materially from the expected results. These factors include the information set forth in Part I, Item 1A, of this Report under the heading "*Risk Factors*", which we encourage you to carefully read. Forward-looking statements include, but are not limited to, statements regarding estimates and forecasts of financial and performance metrics, projections of market opportunity and market share, potential benefits and the commercial attractiveness to its customers of the Company's products and services, the potential success of the Company's marketing and expansion strategies, and the potential for the Company to achieve design awards. These statements are based on various assumptions, whether or not identified in this Report, and on the current expectations of the Company's management and are not predictions of actual performance. These forward-looking statements are provided for illustrative purposes only and are not intended to serve as, and must not be relied on by any investor as, a guarantee, an assurance, a prediction or a definitive statement of fact or probability. Actual events and circumstances are difficult or impossible to predict and will differ from assumptions. You are therefore cautioned not to place undue reliance on such statements. Any forward-looking statement speaks only as of the date on which it is made, and we undertake no obligation to update any forward-looking statement to reflect events or circumstances after the date on which the statement is made or to reflect the occurrence of unanticipated events, except as required by law.

Part I

Item 1. Business

Company Overview

Cepton, Inc., and its wholly owned subsidiaries, (collectively, “Cepton” or the “Company”) formerly known as Growth Capital Acquisition Corp. (“GCAC”), was originally incorporated in Delaware on January 4, 2010, under the name PinstripesNYS, Inc. GCAC changed its name to Growth Capital Acquisition Corp. on February 14, 2020. GCAC was a special purpose acquisition company formed for the purpose of effecting a merger, capital stock exchange, asset acquisition, stock purchase, reorganization, or other similar business combination with one or more target businesses. On February 2, 2021, the Company consummated its initial public offering (the “IPO”), following which its shares began trading on the Nasdaq National Market (“Nasdaq”). On August 4, 2021, GCAC entered into a Business Combination Agreement (as amended, the “Merger Agreement”) with Cepton Technologies, Inc. (“Legacy Cepton”) and GCAC Merger Sub Inc., a wholly owned subsidiary of GCAC (“Merger Sub”). On February 10, 2022 (the “Closing Date”), the transactions contemplated by the Merger Agreement (the “Business Combination”) were consummated. In connection with the closing of the Business Combination, GCAC changed its name to Cepton, Inc. and its shares and public warrants began trading on the Nasdaq under the symbols “CPTN” and “CPTNW”, respectively. As a result of the Business Combination, Cepton, Inc. became the owner, directly or indirectly, of all of the equity interests of Legacy Cepton and its subsidiaries.

Cepton is focused on the deployment of high performance, mass-market light detection and ranging (“lidar”) technologies to deliver safety and autonomy across the Automotive and Smart Infrastructure markets (each as defined below). We offer near-range lidars, long-range lidars and ultra-long-range lidars, automotive software and smart lidar systems that include our perception software. Our solutions include industrial and automotive grade lidars. For mass market automotive advanced driver assistance systems (“ADAS”) applications, we also sell components and license technologies to Tier 1 suppliers to enable them to manufacture lidars in high volume and sell to original equipment manufacturers (“OEMs”) customers. By adopting our solutions, our customers can enable safety and autonomy applications across a broad range of end-markets including our primary market, ADAS in consumer and commercial vehicles, which we believe represents not just the largest market opportunity for lidar applications over the next decade, but also the market with the best potential for near term mass-market commercialization.

Since the inception of our company in 2016, building lidars for broad market adoption has been our guiding principle. Mass-market deployment guides not just our end-market focus, but also our product design choices, our areas of technological innovation, our approach to manufacturing, and our go-to-market strategy and partnerships. To pursue mass-market adoption, our value proposition has focused on developing a lidar solution that achieves high performance with automotive grade reliability at competitive prices. Our thesis is that lidar will gain broad based adoption only when solutions strike the right balance across three key facets of performance, cost and reliability.

Based on this approach, we have gained acceptance for our technology in the Automotive market (as defined below). In 2019, following approximately three years of rigorous engagement, we have been awarded a significant ADAS lidar series production award with our tier 1 partner, Koito Manufacturing Co., Ltd. (“Koito”) on the General Motors (“GM”) business. This award includes multiple platforms and vehicle models, with an estimated production start in 2023.

As a Silicon Valley-based company led by recognized technical experts in the optical electronics field, technology innovation is at the core of our company. We developed a comprehensive lidar platform consisting of proprietary components including our breakthrough imaging technology and our system-on-a-chip lidar engine application-specific integrated circuit, a portfolio of automotive grade and industrial grade long-range and near-range lidars, a software layer enabling the integration of automotive functions, and feature rich perception software capabilities.

Our Technology Advantage

Lidar Design Principles and Our Technology Choices

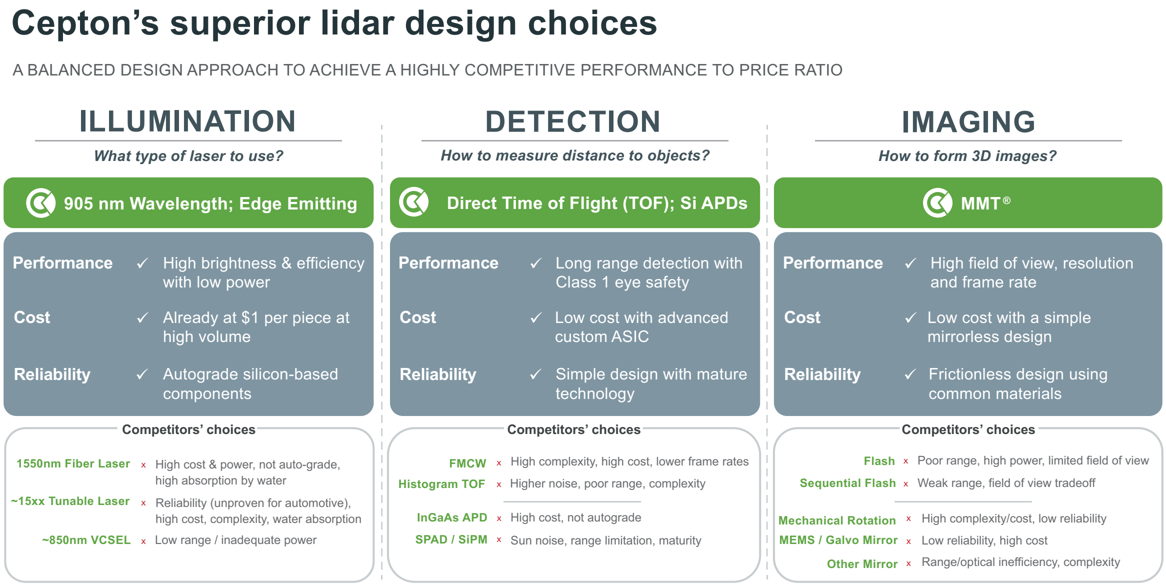
We believe that selecting the right mix of technologies is a fundamental aspect to developing a lidar solution suitable for mass-market ADAS applications. We have developed our lidars focused on using technologies, components and design principles that are synergistic when combined, with the goal of achieving our three key pillars for success: performance, cost and reliability.

To understand different lidar technologies and choices, it is important to break down the core functions of the lidar. One of the three significant functions of lidar is to transmit light into the environment (transmission) using a source. When the light falls on objects, part of the light is reflected back. The second key function of the lidar is to detect the light that is reflected back (detection) using a detector (also known as receiver). Light has a well-known speed of transmission, and by measuring the time between when the light is transmitted from the source and when it is received by the detector (time of flight), we can accurately measure the three-dimensional distance (range) of the object from the lidar. At the same time, the lidar can capture data not just from a single point source and detector but cover a 2D field of view either by scanning or other methods. This third function of lidar is referred to as "imaging," with different techniques offering varying image resolution. Choices of lidar technologies can therefore be evaluated based on how these three functions are achieved and how they balance the three key pillars for mass market deployment: performance, cost and reliability.

The principles around lidar illumination and detection have been researched extensively over many decades. To achieve high reliability and low cost, maximizing the use of commonly available and proven materials and components is important. This is especially true when those choices adequately achieve the performance level required for the targeted applications. We believe this is the case when it comes to illumination and detection, as a result of which we chose proven, mature technologies and low cost components, such as 905 nm wavelength edge-emitting laser diodes for illumination and silicon based APDs for detection. We therefore chose to focus on innovation that enables the highest performance using mainstream technologies — namely, our powerful lidar engine ASIC for illumination control and detection, as well as our proprietary micro-optical lidar modules that combine the laser diodes, the APDs and our ASICs.

We believe that the key area of differentiation in lidar design today is how to form a 3D image efficiently — namely imaging, with high reliability and low cost. To achieve this objective, we invented and patented an imaging mechanism that is frictionless, mirrorless and rotation-free. This mechanism enables autograde reliability, high performance, low power and compact form factor lidars. Our lidars use durable, inexpensive and commonly available materials, with the ability to scale up to high manufacturing volumes to achieve low cost.

We believe that our technology choices in system design and our focus on combining mature and proven solutions with state of the art innovation led us to overcome what we believe is the hardest challenge in developing lidar, thereby allowing us to offer lidar solutions with high performance and autograde reliability at competitive prices and obtain a significant ADAS lidar series production award.



Cepton's superior lidar design choices

A BALANCED DESIGN APPROACH TO ACHIEVE A HIGHLY COMPETITIVE PERFORMANCE TO PRICE RATIO

	ILLUMINATION	DETECTION	IMAGING
	What type of laser to use?	*How to measure distance to objects?*	*How to form 3D images?*
	905 nm Wavelength; Edge Emitting	**Direct Time of Flight (TOF); Si APDs**	**MMT®**
Performance	✓ High brightness & efficiency with low power	✓ Long range detection with Class 1 eye safety	✓ High field of view, resolution and frame rate
Cost	✓ Already at $1 per piece at high volume	✓ Low cost with advanced custom ASIC	✓ Low cost with a simple mirrorless design
Reliability	✓ Autograde silicon-based components	✓ Simple design with mature technology	✓ Frictionless design using common materials

Competitors' choices

Illumination		Detection		Imaging	
1550nm Fiber Laser	× High cost & power, not auto-grade, high absorption by water	FMCW	× High complexity, high cost, lower frame rates	Flash	× Poor range, high power, limited field of view
~15xx Tunable Laser	× Reliability (unproven for automotive), high cost, complexity, water absorption	Histogram TOF	× Higher noise, poor range, complexity	Sequential Flash	× Weak range, field of view tradeoff
~850nm VCSEL	× Low range / inadequate power	InGaAs APD	× High cost, not autograde	Mechanical Rotation	× High complexity/cost, low reliability
		SPAD / SiPM	× Sun noise, range limitation, maturity	MEMS / Galvo Mirror	× Low reliability, high cost
				Other Mirror	× Range/optical inefficiency, complexity

Advantages of Our Lidar Technology Choices

We focused our technology innovation on what we believe are the most important areas of differentiation to deliver lidar solutions that meet or exceed our customers' requirements for mass-market deployment. We believe our current technology choices achieve the balance between performance, cost and reliability and will enable high volume production to accelerate adoption in ADAS and other market segments. At the same time, our core innovations in imaging are complementary with emerging technologies and components in illumination and detection, which we continue to monitor and evaluate.

Illumination

We adopted 905nm wavelength infrared laser diodes, which combine the commonly used illumination wavelength with low cost, autograde laser components that enable us to meet Class 1 eye safety requirements. Alternative illumination solutions available in the market include less mature 1550 nm fiber and tunable lasers, which have higher cost, require substantially more power to operate and are not easily qualified for automotive applications. Yet another market option involves ~850 nm wavelength lasers (vertical cavity surface emitting lasers, or "VCSELs"), which have significantly lower range performance. If these alternative illumination technologies were to mature to the point where they can meet long range ADAS performance requirements, reliability and cost objectives, we have the option to integrate such technologies in its lidars.

Detection

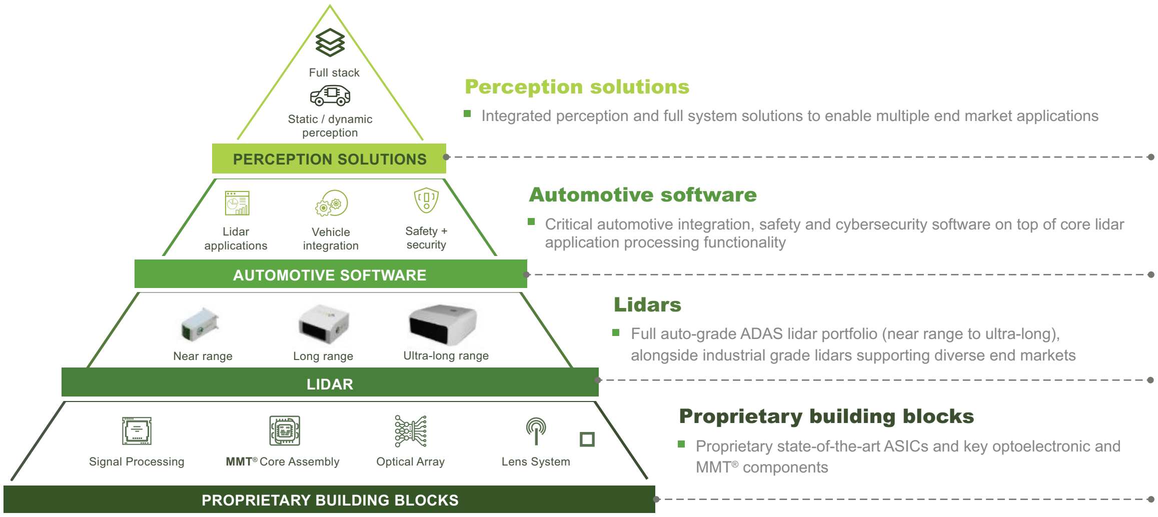
We selected direct time of flight based measurement of object distances using mature and commonly available receiver technologies such as silicon APDs. The simplicity and accuracy of this approach is well established, along with the low cost and ease of mass production. Coupled with the APDs, we use a proprietary custom ASIC, designed using proven silicon technologies and cost competitively manufactured with automotive qualified wafer fabs to implement advanced detection algorithms that are key to our performance advantages. Alternative detection modalities available in the market include those used with 1550 nm illumination, such as boutique components like InGaAs APDs which are more expensive and not proven for automotive applications. VCSEL-based illumination systems typically use a specialized detector technology called single photon avalanche diodes that are new to automotive applications and have limitations such as noise and range. Finally, a more recent emerging technology used for detection is frequency modulated continuous wave, which is a significantly more complex system with higher cost, frame rate limitations and unproven automotive reliability. If some of these alternative technologies can meet long range ADAS performance requirements, reliability and cost goals in the future, we have the option to integrate such technologies in our lidars.

Imaging

Lidar imaging is an important area of innovation and differentiation for the Company. Our imaging technology provides an elegant and efficient solution. Alternative lidar imaging methods commonly involve the use of mirrors, whereas our imaging technology is mirrorless, thereby increasing the optical efficiency and performance of the system, while reducing cost and eliminating mirror-related reliability problems. Our imaging architecture is a frictionless and rotation-free design that creates a dense 2-D image using sparse point measurements obtained from the receiver array. For ADAS applications, we believe that our lidars offer the desired balance between performance, cost and reliability. In addition, our core imaging design is compatible with various illumination and detection technologies; should some emerging solutions in transmission and detection become proven for automotive applications and achieve cost competitiveness, we have the option to incorporate these solutions.

Our Lidar Platform

We offer a comprehensive lidar solutions platform comprised of both hardware and software. Our innovation and product development has focused on every layer of the lidar stack, including (a) key proprietary building block hardware components that are used in our lidars, (b) a suite of lidar products for automotive and industrial applications covering near-range, long-range and ultra-long range detection, (c) software to enable seamless automotive integration, and (d) perception solutions for a variety of end markets applications, including ADAS.



Cepton's end-to-end lidar solution platform

COMPREHENSIVE ADAS LIDAR SOLUTION PORTFOLIO ACROSS HARDWARE AND SOFTWARE

Proprietary Hardware Building Blocks

We have developed multiple proprietary hardware building blocks supporting our lidar products. We combine widely available materials and components with proprietary or patented intellectual property to deliver lidars optimized for their intended application by balancing performance, cost and reliability. In the following, we highlight two of our key proprietary building blocks:

- ***Core Assembly.*** Our patented imaging technology is a frictionless, mirrorless, rotation-free architecture that enables high resolution, long range 3D imaging, while maximizing the sensor robustness and reliability to meet the stringent requirements of automotive applications. We developed our imaging technology in-house, and we consider it a breakthrough innovation in the lidar industry due to its following qualities:
    - *Reliable:* Design using durable materials
    - *Versatile:* Ability to achieve near range to ultra-long-range and wide field of view
    - *Innovative:* Simplicity combined with high precision, with patents covering all key aspects
    - *Efficient:* Enables compact form factor with low power consumption and uses low-cost components
    - *Scalable:* Modular design approach that can be easily scaled up for high volume manufacturing
- ***Lidar engine ASIC for signal processing.*** Our proprietary single chip lidar engine ASIC is a powerful data processing SoC that combines illumination control and advanced detection functions. Our ASIC chip was developed in-house and features the processing power equivalent to a multi-core computer with embedded proprietary algorithms and intelligence to enable lidar illumination control and detection. The ASIC is:
    - *Reliable:* Uses mature silicon process technology and is manufactured by an automotive certified leading silicon foundry

    - *Powerful:* Features include lidar illumination control combined with a sophisticated detection engine and signal processing capabilities
    - *Innovative:* State-of-the-art lidar signal processing maximizes range and minimizes noise
    - *Inexpensive:* Low cost and low power attributes stem from the size of our ASIC chip, which also enables seamless integration into our proprietary micro-optical arrays
    - *Available:* Currently shipping in B-sample lidars

Comprehensive Portfolio of Lidar Solutions

We offer multiple product families of lidars that are used in industrial and automotive applications.

- ***Autograde lidar sensors***
    - *Vista-X:* Compact lidar solutions with a range of up to 200m for long-range applications in ADAS L2+/L3, AV L4/L5 and suitable for Smart Infrastructure applications
    - *Nova:* Ultra small form factor lidar solution with a range of up to 30m for near-range applications in ADAS L2+/L3, AV L4/L5 and also suitable for Smart Infrastructure applications, with a wide horizontal and vertical field of view
- ***Industrial grade lidar sensors***
    - *Vista-P:* Compact lidar solutions with a range of up to 200m for long-range applications in ADAS L2+/L3, AV L4/L5 and Smart Infrastructure
    - *Sora-P:* Ultra-high scan rate, compact, quasi line-scanning lidar solutions that deliver high-fidelity profiling of objects moving at high speeds, for free flow tolling and other industrial applications

Automotive Software

We have developed capabilities to provide automotive software to support efficient automotive integration for ADAS applications. Software features that fall in this category include, but are not limited to, supporting AUTOSAR compatibility, extrinsic and dynamic calibration, ASIL-B functional safety, diagnostics, cybersecurity, and over-the-air update capability.

Lidar Perception Solutions

We offer intelligent, smart lidar perception solutions by combining lidar sensors with our advanced Helius® perception software and edge processing computers or servers. The Helius® software transforms 3D lidar point clouds (*i.e.*, a set of individual points in 3D) into smart lidar data, also known as “objects,” that indicates which collection of points belongs to a specific object, what the object’s size, location and velocity are, as well as what type of object it is (*e.g.*, vehicle, person). The process by which point cloud data is converted to actionable information is referred to as object detection, classification and tracking. At the same time, since lidar does not capture biometric information, our lidar-based intelligent perception solutions are anonymized and therefore privacy-sensitive. This actionable information offers real-time, 3D perception to support various “smart” applications for our partners and customers. Helius® is currently offered for Smart Cities and Smart Spaces applications, with support for ADAS applications expected in the future.

Industry Overview

We believe we are at the center of major shifts in technology, consumer preferences and industry trends that are catalyzing the adoption of lidar solutions across our target markets.

ADAS is one of the fastest growing segments in the automotive industry.

Automotive original equipment manufacturers ("OEMs") currently offer a range of Society of Automotive Engineers ("SAE") Level 1/Level 2 ("L1/L2") ADAS technologies such as lane keep assist, adaptive cruise control and automatic emergency braking, which have helped improve vehicle safety while adding comfort features that consumers value. Many OEMs and their tier 1 suppliers are actively working to improve their ADAS offerings on new vehicle models. This might involve enhancing the capability and usability of existing SAE Level 2 ("L2") features or offering additional features which do not meet the requirements of SAE Level 3 ("L3") systems, where the responsibilities of driving start to shift from the driver to the vehicle. The interim stage between SAE L2 and SAE L3 is commonly referred to as Level 2+ ("L2+"). While L2+ ADAS features are included in a select number of vehicles today, over the next five to ten years, such advanced ADAS features are expected to become mainstream and achieve wide-spread adoption.

Multiple factors are driving demand for ADAS functionality in modern consumer vehicles.

Demand for L2+ ADAS features are likely to be driven by multiple factors:

- Growing consumer demand for enhanced safety and autonomous features in consumer vehicles: According to the American Automobile Association's 2021 annual automated vehicle survey, 80% of drivers said that they want current vehicle safety systems, such as automatic emergency braking and lane keeping assistance, to work better, and 58% of drivers said they want these systems in their next vehicle.
- Continued emphasis by regulators on reducing traffic accidents and fatalities, which increases the likelihood that ADAS features considered optional today might become mandatory in the future.
- The shift towards software-based subscription models for ADAS features, which are expected to increase the availability of ADAS-related hardware in consumer vehicles.

Lidar technologies are proliferating and enabling ADAS functions with higher levels of safety and autonomy.

Highly dynamic environments around a moving vehicle require extensive sensor data to enable safety and autonomy features. To date, the industry has adopted a combination of sensors, primarily cameras and radars, to enable L1 and L2 functions. Vehicles equipped with L1/L2 capabilities face a number of deficiencies, such as the inability to detect pedestrians and bicyclists under certain conditions, including when under direct exposure to sunlight and in poor lighting conditions, and incomplete lane, road-edge and barrier detection. As a result, achieving L2+ and higher levels (*i.e.*, L3-L5) of autonomy coupled with vehicle safety requires enhanced sensing capabilities and complementary sensor data for faster, more accurate and more reliable perception and to meet redundancy requirements for functional safety. Lidar addresses many of these challenges and offers key benefits due to its high resolution combined with high accuracy in measuring distances to objects and its own independent and integrated light source. Many lidar capabilities cannot be easily replaced by other sensors, making lidar an essential sensor for L2+ ADAS applications.

Continual innovation is driving down lidar costs and enabling large scale adoption.

We believe that lidar adoption in mass-market consumer vehicles has been limited due to two major factors. First, lidars that have been able to achieve high performance levels have not been able to achieve autograde reliability and low cost. Second, lidars that were able to demonstrate a path towards autograde reliability and low cost have been unable to meet adequate performance requirements to achieve L2+ ADAS vehicle safety and autonomy goals. Lidar innovation is changing this landscape by combining high performance with high reliability and low cost, placing us in a prime position to drive this transformation using our patented, mirrorless and frictionless imaging technology.

Cost reductions may be enabled by the use of lower cost components, component integration (e.g., in the form of proprietary ASICs and lidar modules) and economies of scale accompanying larger scale deployments, especially in the ADAS market. Our view is that the path to autograde reliability is paved by using mainstream, proven components and technology architectures that are less vulnerable to reliability concerns. In addition, we believe that collaboration between lidar companies and Automotive tier 1 suppliers that have high volume manufacturing capabilities further enhances lidar quality and autograde reliability.

Multiple industrial and infrastructure sectors are undergoing digital transformation and are expected to benefit from high performance, lidar-based perception solutions.

Numerous market applications are adopting new solutions and modernizing their operations and infrastructure to improve safety and security, while driving higher efficiency and privacy. As many sectors transform in this manner, they are leveraging technologies that combine physical infrastructure and sensors with advanced digital technologies including the internet of things, artificial intelligence, and cloud and edge computing. Per the World Economic Forum, emerging technologies are projected to increase efficiency and reduce costs by up to 30% across all operations. Both public and private sectors are embracing these new technologies to reap the benefits of digital transformation in order to develop applications for Smart Cities, Smart Spaces, Smart Industrials and other market segments. Advanced sensing and perception solutions are increasingly at the foundation of such digital transformation, as they enable the capture, transmission, processing and real-time analysis of data at unprecedented levels of accuracy. For instance, many industries have previously adopted technologies such as video cameras and thermal cameras for perception-based applications. However, modern applications require a level of accuracy, uptime, and privacy not currently achievable with those sensors. Lidars provide accurate and anonymized 3D information under a variety of lighting and environmental conditions, and offer the solutions needed across a wide range of smart applications. Lidars can supplement cameras and other sensors in vision-critical applications and provide a compelling alternative to cameras in privacy-critical or vision-agnostic applications, for example, analysis of foot traffic at retail outlets without identifying personal information.

Our Market Focus

Our lidar solutions enable safety features and L2 to SAE Level 4 (“L4”) autonomy in ADAS and autonomous vehicles (“AV”) applications (the “Automotive” market). Since inception, we have targeted the consumer vehicle ADAS market, anticipating the need to serve the largest automotive OEMs in the world with sensors that would play an important role in enabling enhanced L2+ ADAS applications, with enhanced safety and autonomy features. ADAS is one of the fastest growing segments within the Automotive industry. This is supported by growing consumer demand for enhanced safety and autonomous features in vehicles.

While our main focus within the Automotive market has been the L2+ ADAS market, we have naturally extended our reach to L4 AVs. Level 4 AVs such as robotaxis typically operate for a prolonged period of time, which requires highly reliable sensors that can maintain high levels of performance. In addition, as AV technologies become more mature, cost and efficiency will become important design criteria to drive widespread adoption. The fundamental functions of lidars being used in ADAS and AV are similar and, based on our discussions with customers in the L4 AV market, we believe that the AD industry will adopt lidars optimized for ADAS to drive widespread adoption of AVs. This places us in a strong position to capture a significant share in the AV market as that market matures.

As an additional area of focus, we have established a strong presence in the Smart Infrastructure market. We believe our strength in this market is that our lidar sensors and perception solutions provide an attractive value proposition and high suitability for applications in market segments such as Smart Cities, Smart Spaces and Smart Industrials (each defined below), which together comprise the “Smart Infrastructure” market. This enables us to build a diversified business with an additional pillar of growth opportunities outside of the Automotive space.

- “Smart Cities” includes applications such as: (i) pedestrian safety, vehicle safety, wrong-way driving detection, emergency vehicle guidance, and traffic flow management for smart roads; (ii) vehicle profiling/classification, vehicle speed and dimension estimation, axle classification, and container scanning for smart tolling; and (iii) obstacle detection, pedestrian detection, track health monitoring and intersection monitoring for smart rail.

- “Smart Spaces” includes applications such as: (i) foot traffic analysis, safe zones, and social distancing for crowd analytics; (ii) securing critical infrastructure, area/zone access, gateway entry monitoring and anonymized surveillance for security; and (iii) injury prevention, accident avoidance, workplace safety and early warning/alerts for safety.

- “Smart Industrials” includes applications such as: (i) container scanning, free space detection, object detection and object classification for industrial applications; and (ii) 3D mapping, object detection, object classification and autonomous navigation for autonomous ground vehicles.

Differentiated Value Proposition

Our lidar solutions enable high performance and autograde reliability at competitive prices. Our lidars are able to achieve this because our designs use robust, low-cost components coupled with a proprietary lidar engine ASIC and our frictionless, mirrorless 3D-imaging technology. Our design choices coupled with our proprietary technology results in our lidars having high performance, low power consumption, compact form factor and high manufacturability for large scale deployment.

Designing a lidar for mass market adoption in the Automotive market requires balancing performance (*e.g.*, range, resolution and field of view), reliability (*e.g.*, automotive certifications), price, vehicle integration (*e.g.*, size and power) and volume manufacturability. For example, a lidar might have high performance but compromise on reliability, size, power and price. On the other end of the spectrum, a lidar could achieve low cost and good reliability but fail to meet minimum performance requirements. Our differentiated value proposition is further validated by our significant ADAS lidar series production award with GM.

Significant Series Production Award at GM Positions Us as Lidar Market Share Leader

In 2017, we started a journey of rigorous engagement with GM through Koito to enable their next generation L2+ ADAS program, for vehicle models expected to commence production in 2023. Following approximately two years of engagement including design, testing, validation and integration workstreams, we, alongside our tier 1 partner, Koito, were selected as the sole lidar provider to support the ADAS program with a series production award covering multiple vehicle platforms and models through 2027. This award positions the Company as one of the key suppliers of GM through Koito.

We have gained significant commercial traction across our target markets. In the Automotive market, we have engagements with varying maturities, with many tier 1 partners and OEMs, including all 10 of the top 10 OEMs based on IHS Markit, a leading independent third-party industry analytics and information provider, vehicle production volume rankings for 2019. In the Smart Infrastructure market, we have many projects across the Smart Cities, Smart Spaces and Smart Industrials segments, often in partnership with system integrators and large customers. We believe our series production award through Koito in GM's ADAS program and the extent of our current engagements position the Company to be a market share leader in the lidar industry.

Proprietary Technologies Combined With A Comprehensive Offering Enables Sustainable Competitive Advantage

We developed our lidars with technologies, hardware building blocks and design principles that are highly synergistic. We combine proven, widely available materials and components with proprietary designs to achieve high performance, compact form factor, low power, high reliability and low cost, which we believe are all key aspects of a mass-market lidar. Some of our most important lidar sensor innovations include our proprietary single-chip ASIC lidar engine, our multi-chip lidar transceiver modules and our patented imaging technology. Our integrated lidar engine ASIC is a powerful data processing SoC that combines illumination control and high-sensitivity detection functions, with embedded proprietary algorithms and trade secrets to enable key lidar functions. Our imaging architecture integrates our multi-chip lidar transceiver module with mirrorless, frictionless and rotation-free imaging technique to increase the reliability and manufacturability of the product while delivering high performance and low power at affordable price points. Our imaging architecture is also flexible to accommodate other illumination and detection methods as these design options become proven and cost competitive in the future. We are also innovating in automotive software, having developed key automotive integration capabilities to enable seamless vehicle communication, cybersecurity, automotive safety integrity level ("ASIL")-B functional safety and over-the-air update capabilities. Finally, our full stack perception solutions integrate our lidars with edge computing and powerful lidar perception software to deliver intelligent 3D perception for a range of applications. We believe that our comprehensive end-to-end lidar solution platform including lidar building blocks, lidar systems for near range, long-range and ultra-long-range applications, automotive software and perception software provide us the technology advantages and allow us to address demanding requirements in ADAS, AV and Smart Infrastructure applications. We expect that our technology advantages coupled with our commercial success, as evidenced by our significant ADAS lidar series production award, will provide a sustainable competitive advantage.

Strategic Relationship With Global Automotive tier 1 Koito

In February 2020, we announced a strategic partnership with Koito, the number one supplier of automotive lighting systems globally (based on 2019 sales). Koito participated in our Series C funding round in February 2020, and in January 2023, Koito purchased 100,000 shares of our Series A Convertible Preferred Stock, par value $0.00001 per share (the "Preferred Stock"). As part of our collaboration, Koito obtained rights to manufacture and sell lidars based on our lidar sensor design for an automotive application, using key components supplied by the Company. In 2019, Koito and Cepton jointly won a significant ADAS lidar series production award from GM. We believe the combination of Koito's leadership in automotive lighting and its expertise in high volume manufacturing provides us with the capabilities to jointly compete for the largest automotive programs in the industry with global auto OEMs.

Visionary, Founder-Led Team

We are led by industry veterans with decades of collective experience across a range of lidar, imaging, optoelectronics and semiconductor technologies. Our co-founders, Dr. Jun Pei (CEO) and Dr. Mark McCord (CTO), both hold Ph.Ds. in Electrical Engineering from Stanford University and have been working together for over a decade. Dr. Jun Pei was one of Dr. McCord's top students during Dr. McCord's tenure as an Associate Professor of Electrical Engineering at Stanford. The founding team has focused on building an engineering team with deep expertise in technical specialties required to build and sustain breakthrough lidar innovations. Our history of innovation is evident from the four generations of directional lidars and two generations of perception software solutions we have launched since 2016.

Our Approach and Value Proposition

Our lidar value proposition stems from a balanced design that addresses three key foundational pillars that we believe are essential to serve the ADAS market: performance, cost and reliability. We believe that lidar solutions that only satisfy one or two of those pillars will have difficulty securing large scale market deployments. To truly become a mass-market solution, we believe that lidars need to meet all three key requirements, which requires a focused and highly innovative approach to lidar design, encompassing system architecture, technology and component choices, supply chain strategy and tier 1 partnerships for enhancing manufacturability and achieving economies of scale. We believe our value proposition derived from this approach is highly differentiated in the market and positions the Company to become one of the leaders in the lidar industry.

Our value proposition is centered on the following elements:

Proven design and technology. Our lidars were designed from the ground up to achieve a balanced approach to performance, cost and reliability. Our lidar design uses a breakthrough, patented innovation in 3D imaging technology. The imaging architecture is capable of high resolution and long-range 3D-imaging, while enabling sensor robustness and reliability to meet the stringent requirements of automotive applications. Our design has been evaluated for mass-market lidar applications by many tier 1 partners and customers across ADAS, AV and Smart Infrastructure markets. GM awarded us a significant ADAS lidar series production award through Koito after going through a rigorous selection process comparing our sensors to those of numerous competitors.

Superior performance. Our lidars offer strong performance combining long range, high resolution and low power consumption enabled by our proprietary design. An independent market study conducted by a leading consulting firm commissioned by the Company compared the performance specifications of our lidars to those of other major competitors across a set of characteristics. Their conclusion was that we were the only lidar provider able to meet all key OEM requirements defined by the consulting firm for long-range ADAS applications.

Cost advantage. We have designed our lidars to support attractive pricing at automotive production volumes, which is an important driver of lidar adoption for mass-market ADAS applications. Our lidars use proprietary micro-optical modules built with proven, low cost, 905 nm wavelength lasers (edge-emitting laser diodes) and silicon detectors (avalanche photo diodes or "APDs"). Our low cost, proprietary, lidar engine ASIC chips, which are integrated in our optical modules, enable high performance with a small footprint. Our imaging component assembly also uses low cost, widely available materials. Our manufacturing strategy leverages contract manufacturers for key components used in our lidars. We further anticipate using contract manufacturers to also manufacture lidars using our technology for sales to Smart Infrastructure customers and low volume Automotive customers. For Automotive series production, we partner with leading Automotive tier 1 suppliers for high volume manufacturing and to drive economies of scale. In this case, we expect to license our technology to tier 1 partners and sell lidar components to them, to enable tier 1 partners to assemble and manufacture lidars in high volume. In collaboration with our tier 1 partner, Koito, our series production award from GM is expected to allow us to drive down cost as our lidar production scales in 2023 and beyond.

Compact form factor and low power consumption. One of the biggest benefits of our lidars is their compact form factor, allowing multiple options for vehicle integration. The low power consumption of our lidars combined with their compact form factor makes it possible to integrate our lidars behind the windshield, inside headlamps and in vehicle fascia, allowing for multiple integration options. These integration options facilitate embeddability in the vehicle, minimizing disruption to the vehicle's natural styling — an important consideration for automotive OEMs.

Volume scalability and manufacturing. Our lidars are built with widely available, proven and inexpensive components using a manufacturable, modular and scalable architecture, making them ideally suited for high volume production. To enable high volume production, we are able to license our technology and sell components to Automotive tier 1 suppliers, who can manufacture and sell lidars using our technology.

Autograde reliability and integration. With respect to autograde applications, the design of our lidars is enabled by our material and component choices as well as the use of mirrorless, frictionless, rotation-free approach to 3D imaging. we have also developed significant expertise in automotive software, such as AUTOSAR, cybersecurity, functional safety (ASIL-B), over-the-air update capability and more, which enables lidar deployment in vehicles and significantly increases our competitive advantage.

Leading tier 1 partners. One of the most critical factors that enables lidar suppliers to win and deliver on ADAS programs is the ability to bring an experienced Automotive tier 1 partner into the OEM engagement. We have partnered with Koito, the world's largest Automotive lighting tier 1 supplier, based on auto lighting revenue for the year 2019. As described above, Koito is a development and manufacturing partner as well as a significant investor in the Company. Koito has a global footprint and customer base and has established a manufacturing line in Japan to make lidars using our technology with components produced by us. In addition to Koito, we continue to work with other tier 1 partners as needed based on specific customer engagements.

Commercial Traction Overview

We sell our products globally across the Automotive and Smart Infrastructure markets. Our primary market focus is ADAS within the Automotive market, with AV being an adjacent market. We define the ADAS market as including passenger cars, consumer vehicles and other commercial road vehicles that require an attentive driver. We define the AV market as including driverless vehicles, such as those used for delivery and taxi services, and are not owned by consumers. It is possible that many AVs might still require a safety driver for the foreseeable future, but they are nominally considered driverless vehicles and owned not by everyday consumers but as part of a commercial fleet. In Smart Infrastructure, we target a broad range of applications across Smart Cities, Smart Spaces and Smart Industrials market segments.

Automotive — ADAS

Our primary market focus is the L2+ ADAS market where we target lidar programs for OEM series production vehicles. Our target customer ecosystem includes traditional passenger vehicle automotive OEMs and electric vehicle ("EV") OEMs, as well as OEMs that sell commercial vehicles and trucks.

We target the ADAS industry by developing direct relationships with the OEMs globally and partnering with automotive tier 1 suppliers who have existing relationships with the OEMs and play an important role in sourcing of automotive systems and components for the OEMs. Since the early days of our company, we have engaged automotive tier 1 suppliers and OEM customers to develop relationships that enabled us to participate in some of the early lidar evaluations by the largest automotive OEMs in the world.

We are currently engaged in discussions with all Top 10 global automotive OEMs, based on vehicle production volume rankings for 2019, as well with four new EV OEMs, with varying maturities. We believe that our robust pipeline of engagements across OEMs and tier 1 suppliers will enable us to win additional series production programs in the future.

Smart Infrastructure

In Smart Infrastructure, our main go-to-market strategy is through partnership with system integrators, enabling them to offer complete solutions to their end customers using our lidar solutions. We consider system integrators who have selected our products to deploy as part of their solutions to their end customers as our partners. We have numerous system integrator partners and several active projects with these partners. Our system integration partners significantly expand our sales and marketing reach and complement our direct customer engagements in these segments. We also directly engage with large customers, such as large industrial players. Similar to the Automotive market, we expect to leverage tier 1 partnerships to manufacture lidars sold into the Smart Infrastructure market.

We have established engagements with Smart Infrastructure customers, ranging from early engagement, evaluation stage, advanced engagement and production partners, including nine production partner engagements with planned production ramps or partnership contracts. We typically establish and prove-out pilot projects for end customers with system integration partners before advancing into production.

Our Growth Strategies

We intend to drive the growth of our business by executing on the following strategies:

Grow our footprint with existing production customers. As customers realize the benefits of our lidar solutions, we expect to grow our relationship by expanding our footprint to more platforms over time. We plan to continue targeted investments intended to expand within our existing customer base. We also plan to invest in growing our relationship with AV divisions of OEM customers. Additionally, we will leverage our tier 1 and system integrator partnerships to deepen and broaden product adoption across our existing customers.

Expand our collaboration efforts with Koito to accelerate lidar adoption with new customers. Cepton and Koito's automotive supply partnership began in 2017. Since then, both companies have worked together to jointly execute the series production program with GM. We intend to expand the scope of the companies' automotive development efforts beyond the current series production program to cover the Company's certain future lidar products and provide for further collaboration through jointly conducted go-to-market activities.

Innovate and advance our platform and technology. We have a history of technological innovation having developed innovative technologies such as our lidar engine ASIC. We intend to continue making substantial investments in research and development ("R&D") and hiring top technical talent to develop new technologies, strengthen the technical aspects of our products and expand our ability to serve more opportunities and customers in our target end markets.

Convert existing customer engagements from evaluation to production. Many of our existing customer engagements are in early stages, and we believe there is substantial opportunity to develop our engagements to advanced stages and convert these engagements to production awards. To drive customer acquisition, we intend to invest in strengthening our product offering, dedicate additional resources to expanding our sales, marketing and customer support efforts and grow our partner ecosystem including tier 1 suppliers and system integrators.

Competition

The market for lidar solutions is competitive and rapidly evolving. We believe the market is in its early phases of maturity as many companies in the Automotive and Smart Infrastructure markets are evaluating the adoption of lidar technologies. At the same time, the barrier to entry in the Automotive market is extremely high due to the stringent performance, cost and reliability requirements, leading us to believe that a majority of current lidar suppliers are unlikely to be successful in creating a meaningful footprint in that market. We expect a situation where a small number of lidar suppliers are likely to compete in the Automotive market, with a number of lidar suppliers mainly competing in other end markets. However, as the size of other end markets is not large enough to sustain a large number of players in the long term, we believe that lidar suppliers focused primarily in non-automotive end markets are also likely to dwindle considerably over time.

We believe our competition primarily exists across the following categories:

- Lidars internally developed or acquired and owned by automotive tier 1 suppliers such as Denso Corporation, Valeo S.A., Bosch LLC and ZF Group

- Pureplay lidar companies developing lidar technologies in partnership with tier 1 suppliers such as AEye, Inc., Aeva Technologies, Inc., Innoviz Technologies Ltd. and Hesai Group
- Pureplay lidar companies developing lidar technologies in partnership with contract manufacturers such as Ouster, Inc. and Luminar Technologies, Inc.
- Automotive companies including OEMs who might have internally developed lidar solutions
- Industrial companies that develop their own internal lidar systems, primarily targeted at industrial applications such as Sick AG

We believe that major tier 1 suppliers with in-house lidar programs have experienced performance or cost challenges for mass market lidar deployment in L2+ ADAS applications. In contrast, pureplay lidar companies have been more successful in developing high performance lidars, but we believe that most have faced significant challenges in achieving autograde reliability, even with tier 1 partners, due to inherent limitations of their technologies. Lidar suppliers without tier 1 partners face an even greater hurdle to successfully translate the promise of their technology or a series production award into high volume production. As a result, although the number of lidar competitors is large, we believe that the number of competitors in a position to win substantial automotive series production awards is very limited. However, as lidar suppliers realize that the only way to create a sizable long term business is to enter the ADAS sector, we expect intense near-term competition from suppliers with greater financial resources.

Although certain of our competitors have greater financial resources, longer operating histories, greater brand recognition and may offer their products at lower price points today or in the future, we believe we compete favorably in the market on the basis of the following competitive factors:

- Commercial traction, including our significant ADAS lidar series production award with GM through Koito
- Ongoing engagement with other top 10 OEMs
- Depth of partnership and relationship with Koito, a major global tier 1 supplier that has built a manufacturing line to produce lidars using our technology and key components
- A licensable and manufacturable lidar technology that enables multiple tier 1 partners to work with us and potentially manufacture lidars using our technology
- A mirrorless, frictionless lidar architecture that is capable of high performance with autograde reliability and low cost for mass market adoption
- The compact size and low power consumption of our lidar sensors that enables elegant integration in consumer vehicles at OEM-preferred locations without impacting vehicle styling and promotes ease of deployment across many vehicle models
- The breadth and depth of our end-to-end lidar platform ranging from building blocks to lidars to automotive software to perception solutions
- Our high performance, cost scaling from our ADAS business and high reliability and attractively priced lidars, which are suitable to be used in AV and Smart Infrastructure markets, with the benefit of volume

We believe that we are positioned favorably against our competitors based on these principal competitive factors.

Research and Development

The markets in which we compete are rapidly evolving across hardware and software applications. We invest significant resources in ongoing research and development programs because we believe our ability to grow our market position depends, in part, on innovative technologies that offer a unique value proposition for our customers and differentiation from our competitors.

The majority of our R&D activities occur in San Jose, California. Our engineering team is responsible for developing and enhancing our lidar hardware and software technology, with a focus on design for manufacturability and ease of system integration. Our engineering and validation teams conduct the required verification and validation activities, sometimes in collaboration with tier 1 partners. The R&D team also partners with our operations and supply chain teams with the goal of developing scalable and reliable manufacturing processes and deploying those processes at key manufacturing partners.

Our R&D team consists of engineers, technicians, scientists, technical operators and professionals with experience from a wide variety of leading semiconductor, sensing, engineering, consumer electronics and automotive organizations.

Intellectual Property

Our success and competitive advantage in the lidar market depends in part upon our ability to protect and use our core technology and intellectual property rights. We rely on a combination of patents, copyrights, trademarks, trade secrets, know-how, our experience working with customers and potential customers, contractual provisions and confidentiality procedures to protect our intellectual property rights. Additionally, we protect our proprietary rights through agreements with our commercial partners, supply-chain vendors, employees and consultants, as well as close monitoring of the developments and products in the industry.

Our patents and patent applications cover a broad range of system level and component level aspects of our key technology including, among other things, lidar system, laser, imaging mechanism, receiver and perception technology. On October 22, 2019, we were granted a patent for our imaging technology, covering all key aspects of our proprietary imaging architecture.

As of March 20, 2023, we have 15 issued U.S. patents, 6 issued foreign patents and 12 pending U.S. patent applications. These issued patents begin expiring in October 2038. We also have in the aggregate 2 pending Patent Cooperation Treaty, or PCT, applications, and 29 non-U.S. national stage applications corresponding to various U.S. patent applications described above. In addition, we have 5 registered U.S. trademarks, 12 registered foreign trademarks and 3 pending trademark applications. We believe our patents will enable us to sustain a durable competitive advantage.

Manufacturing

We are focused on developing high-performance autograde lidars for mass market adoption. As such, our lidars are designed with the intent of enabling large scale manufacturing. Component choices are reviewed to support the manufacturability goal as well as to enable cost down at scale. We develop our own manufacturing processes for critical components and design our own manufacturing, calibration and testing procedures that are subsequently automated when a product reaches mass production stage, in collaboration with contract manufacturers and tier 1 partners. Koito, our tier 1 partner, has set up a manufacturing line in Japan for lidars, with plans to have the line fully qualified ahead of anticipated series production start in 2023.

As we transition the bulk of manufacturing to our contract manufacturers and to tier 1 partners, we will continue to maintain certain levels of in-house manufacturing capabilities for prototyping, new product introduction, and low volume manufacturing. We view this capability as a critical asset to complement our R&D efforts to meet our customer needs for rapid time to market and proof of concept demonstrations.

Our manufacturing operations employ a wide variety of semiconductors, electromechanical components and assemblies, and raw materials. For example, on the optical module front, we use proven and commonly available 905nm laser diodes for transmission, and silicon detectors (avalanche photo diodes or “APDs”) for detection. We purchase materials from multiple suppliers on a global basis. These supply relationships are generally conducted on a purchase order basis. While we have not experienced any significant difficulty in obtaining the materials used in the conduct of our business and we believe that no single supplier is material, some of the parts are not readily available from alternate suppliers due to their unique design or the length of time necessary for re-design or qualification.

We believe that our long-term relationships with our suppliers allow us to proactively manage our technology development and product discontinuance plans, and to monitor our suppliers’ financial health. Some suppliers may, nonetheless, extend their lead times, limit supplies, increase prices or cease to produce necessary parts for our products. If these are unique or highly specialized components, we may not be able to find a substitute quickly, or at all. To address the potential disruption in our supply chain, we may use a number of techniques, including, in some cases, qualifying more than one source of supply.

We maintain in-house manufacturing capabilities for certain proprietary components while outsourcing other components and lidar modules to contract manufacturers. For ADAS series production, our tier 1 partners are ultimately responsible for the manufacturing, testing, calibration, and quality assurance. While we intend to sell components and facilitate the flow of technology transfer to our tier 1 partners, our tier 1 partners will ultimately leverage their mass production capabilities for final product delivery to the OEMs.

Sales and Marketing

We have a multi-pronged go to market approach that allows us to serve a global customer base in an efficient manner. We combine our direct sales and business development efforts with the efforts of our partners, including tier 1 automotive suppliers, system integrators and distributors.

Our direct sales and marketing team has a primary focus on customers in North America, Europe, and Japan. Sales and business development efforts in multiple geographies are supplemented by our engagements with distributors, especially in Japan. In Smart Infrastructure markets, we also work closely with several system integration partners. These partnerships allow us to leverage the sales and marketing teams of our system integration partners, who deploy solutions to their end customers using our lidar hardware and/or smart lidar system solutions. We believe that this approach allows us to have substantially higher end customer and market coverage compared to what we would be able to achieve with just our direct sales and marketing team. For Automotive markets, we work with automotive tier 1 partners to secure series production awards at automotive OEMs. However, we have a direct relationship at all OEMs that we engage with, which we believe enables us to engage deeper and develop lidar solutions that are more optimized for the Automotive market.

Our marketing efforts are aimed at clearly communicating the value of our offerings to a large and diverse set of global customers. We utilize a variety of digital and non-digital marketing activities and programs to build awareness, engage with potential customers and build an opportunity pipeline for our sales team.

Regulatory Environment

At the federal, state, and local levels, the U.S. has developed a legal environment to permit safe testing, development, and deployment of certain autonomous technologies. We do not anticipate near-term federal standards that would prohibit the foreseeable deployments of our lidar technology. Federal regulators, however, have standards and regulations that relate to vehicle design and performance, and they continue to develop regulations, standards, and testing guidelines for autonomous technologies. Some states, including California and New York also have operational and registration requirements for certain autonomous functions. Regulators have generally signaled a goal to promote safe development of autonomous technologies, and many have conducted studies and requested public comments to gather additional information to inform evolving standards.

As our lidars go into production for integration into motor vehicles, we may be subject to certain requirements under the National Traffic and Motor Vehicle Safety Act of 1966 and Federal Motor Vehicle Safety Standards, including a duty to conduct appropriate testing, and to report (subject to timing requirements) safety defects with our products. There can be significant civil penalties for violations including the failure to comply with such reporting requirements, and the National Highway Traffic Safety Administration ("NHTSA") also can investigate alleged defects and require manufacturers to recall and/or repair of safety defects. We also may be subject to the existing U.S. Transportation Recall Enhancement, Accountability and Documentation Act ("TREAD"), which requires motor vehicle equipment manufacturers to comply with "Early Warning" requirements by reporting certain information to the NHTSA, such as information related to defects or reports of injury related to our products. TREAD can impose criminal liability for violating such requirements if a defect causes death or serious bodily injury. Other countries may also have similar regulations, as well as others. As the regulatory environment for autonomous technologies continues to evolve, we may be subject to additional regulatory requirements.

Our products also may be subject to regulations and other scrutiny related to cyber security and privacy. Federal, state and local regulators have had an increasing focus on both areas. In many ways, lidar technology increases security and privacy. Evolving standards and regulations may subject us to additional specific requirements.

As a lidar technology company, we also are subject to the Electronic Product Radiation Control Provisions of the Federal Food, Drug, and Cosmetic Act. These requirements are enforced by the Food and Drug Administration (the "FDA"). Regulated electronic products include certain laser products. Regulations governing these products are intended to protect the public from hazardous or unnecessary exposure. Manufacturers are required to certify in product labeling and reports to the FDA that their products comply with applicable performance standards as well as maintain manufacturing, testing and distribution records for their products.

Similarly, as a global company deploying cutting-edge technology, we are also subject to trade, customs product classification and sourcing regulations. In addition, our operations are subject to various federal, state and local laws and regulations governing the occupational health and safety of our employees and wage regulations. We are subject to the requirements of the federal Occupational Safety and Health Act, as amended and comparable state laws that protect and regulate employee health and safety.

Like all companies operating in similar industries, we are subject to environmental regulation, including water use; air emissions; use of recycled materials; energy sources; the storage, handling, treatment, transportation and disposal of hazardous materials; and the remediation of environmental contamination. Compliance with these rules may include permits, licenses and inspections of our facilities and products.

Human Capital Management

We recognize that attracting, motivating and retaining passionate talent at all levels is vital to continuing our success. By improving employee retention and engagement, we also improve our ability to support our customers and protect the long-term interests of our stakeholders and stockholders. We invest in our employees through continuously improving benefits and various health and wellness initiatives, and offer competitive compensation packages, working to continuously improve fairness in internal compensation practices.

Our future success depends on our ability to retain, attract and motivate qualified personnel. As the source of our technological and product innovations, our employees, especially our engineers are a significant asset. Competition for these employees is significant in Silicon Valley where qualified engineers are in high demand. As of December 31, 2022, we had 143 employees including 21 employees with PhDs. A significant majority of our employees are in the United States.

Corporate Information

Cepton was founded and incorporated as a Delaware corporation in 2016. Our principal executive offices are located at 399 West Trimble Road, San Jose, California, 95131 USA, and its telephone number is (408) 459-7579. Our website address is *www.cepton.com*. Information contained on or accessible through our website is not a part of this Report, and the inclusion of our website address in this Report is an inactive textual reference only.

Item 1A. Risk Factors

Our business, financial condition and results of operations can be affected by a number of risks and uncertainties, whether currently known or unknown, any one or more of which could, directly or indirectly, cause our actual financial condition and results of operations to vary materially from our past, or from anticipated future financial condition and results of operations. The risks discussed below are not the only ones facing our business but do represent those risks that we believe are material to us. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also adversely affect our business, financial condition and results of operations.

Risk Factors Summary

Our business is subject to numerous risks and uncertainties, including those highlighted in the section titled "*Risk Factors*" that represent challenges that we face in connection with the successful implementation of our strategy and growth of our business. The occurrence of one or more of the events or circumstances described in the section titled "*Risk Factors*" alone or in combination with other events or circumstances may have an adverse effect on our business, financial condition, results of operations, and prospects. Such risks include, but are not limited to:

Risks Related to Our Business and Industry

- We are an early stage company with a history of losses and expect to incur significant expenses and continuing losses for the foreseeable future.
- Our limited operating history makes it difficult to evaluate our future prospects and the risks and challenges we may encounter.
- Our forecasts and projections are based upon assumptions, analyses and internal estimates developed by our management, which may prove to be incorrect or inaccurate.
- The strategic initiatives we are implementing may prove more costly than we currently anticipate and we may not succeed in increasing our revenue in an amount sufficient to offset the costs of these initiatives and to achieve and maintain profitability.
- If our lidar products are not selected for inclusion in ADAS and autonomous driving systems by automotive OEMs, automotive tier 1 suppliers, mobility or technology companies or their respective suppliers, our business will be materially and adversely affected.
- Continued pricing pressures, automotive OEM cost reduction initiatives and the ability of automotive OEMs to re-source or cancel vehicle or technology programs may result in losses or lower than anticipated margins.
- Market adoption of lidar is uncertain, and if market adoption of lidar does not continue to develop, or develops more slowly than we expect, our business will be adversely affected.
- We are substantially dependent on our series production award from GM through Koito and our relationship with Koito, and our business and prospects will be materially and adversely affected if GM's development or launch plans for the multiple vehicle models in which our products are expected to be deployed are significantly scaled back or terminated.
- We rely on third-party suppliers, and because some of the raw materials and key components in our products come from limited or single-source suppliers, we are susceptible to supply shortages, long lead times for components, and supply changes, any of which could disrupt our supply chain, could delay deliveries of our products to customers, and could adversely affect our business, results of operations and financial condition.
- Because our sales have been primarily to customers engaged in development of ADAS deployments in consumer vehicles and pilot projects in the Smart Infrastructure segment and our orders are project-based, we expect our results of operations to fluctuate on a quarterly and annual basis.

- Even though many of the components in our lidars are modular and can be built using readily available materials, we, our outsourcing partners and our suppliers may rely on complex machinery and skilled labor for production, which involves a significant degree of risk and uncertainty in terms of operational performance and costs.
- The average selling prices of our current products could decrease rapidly over the life of the product, and the selling prices we are able to ultimately charge in the future for the products we are currently developing or commercializing may be less than what we currently project, which may negatively affect our revenue and gross margin.
- The discontinuation, lack of commercial success, or loss of business with respect to a particular vehicle model or other customer solution for which we are a significant supplier to, could reduce our sales and adversely affect our profitability.
- We have identified a material weakness in our internal control over financial reporting. If our remediation of this material weakness is not effective, or if we experience additional material weaknesses in the future or otherwise fail to maintain an effective system of internal controls in the future, we may not be able to accurately or timely report our financial condition or results of operations, which may adversely affect investor confidence in us and, as a result, the value of our common stock.

Legal and Regulatory Risks Related to Our Business

- We are subject to governmental export and import control laws and regulations. Our failure to comply with these laws and regulations could have an adverse effect on our business, prospects, financial condition and results of operations.
- We are subject to, and must remain in compliance with, numerous laws and governmental regulations across various jurisdictions concerning the manufacturing, use, distribution and sale of our products and, in some cases, related customer requirements, which could impose substantial costs upon us and materially impact our ability to fulfill certain business opportunities.

Risks Related to Our Intellectual Property

- We may not be able to adequately protect or enforce our intellectual property rights or prevent unauthorized parties from copying or reverse engineering our solutions. Our efforts to protect and enforce our intellectual property rights and prevent third parties from violating our rights may be costly.

Risks Related to Ownership of Our Shares and Warrants

- Koito has significant influence over us and may prevent other stockholders from influencing significant corporate decisions, and Koito may have interests that conflict with those of our other stockholders.
- The Preferred Stock will cause dilution to our stockholders, which may adversely affect the market price of our common stock. Future sales by Koito or other holders may also negatively impact the price of our common stock.
- Our Amended and Restated Certificate of Incorporation requires, to the fullest extent permitted by law, that derivative actions brought in our name against our directors, officers, other employees or stockholders for breach of fiduciary duty and other similar actions may be brought only in the Court of Chancery in the State of Delaware, which may have the effect of discouraging lawsuits against our directors, officers, other employees or stockholders.
- Anti-takeover provisions contained in our Amended and Restated Certificate of Incorporation and the Bylaws, as well as provisions of Delaware law, could impair a takeover attempt.
- Claims for indemnification by our directors and officers may reduce our available funds to satisfy successful third-party claims against us and may reduce the amount of money available to us.
- Future sales, or the perception of future sales, by us or our stockholders in the public market could cause the market price for our common stock to decline.

Risks Related to Our Business and Industry

We are an early stage company with a history of losses and expect to incur significant expenses and continuing operating losses for the foreseeable future.

We have incurred operating losses on an annual basis since our inception. We incurred annual operating loss of approximately $61.4 million and $38.3 million for the years ended December 31, 2022 and 2021, respectively. We believe that we will continue to incur operating and net losses each quarter until at least the first quarter of 2024. Even if we are able to successfully develop and sell our lidar solutions, there can be no assurance that we will be commercially successful. Our potential profitability is dependent upon the successful development and successful commercial introduction and acceptance of our lidar solutions, which may not occur.

The rate at which we have incurred losses has increased since our inception, and we expect losses to continue to increase in future periods as we:

- expand our production capabilities to produce our lidar solutions, including costs associated with outsourcing the production of our lidar solutions;
- expand our design, development, installation and servicing capabilities;
- build up inventories of parts and components for our lidar solutions;
- produce an inventory of our lidar solutions;
- increase our sales and marketing activities and develop our distribution infrastructure;
- continue to utilize our third-party partners for manufacturing, testing and commercialization; and
- continue to expand the financial, administrative, legal and other functions to support the above.

Because we will incur the costs and expenses from these efforts before we receive incremental revenues with respect thereto, our losses in future periods will be significant. In addition, we may find that these efforts are more expensive than we currently anticipate or that these efforts may not result in revenues, which would further increase our losses.

Our limited operating history makes it difficult to evaluate our future prospects and the risks and challenges we may encounter.

We have been focused on developing lidar products and perception software for mass-market ADAS and autonomous driving systems and Smart Infrastructure since 2016. This relatively limited operating history makes it difficult to evaluate our future prospects and the risks and challenges we may encounter. Risks and challenges we have faced or expect to face include, but are not limited to, our ability to:

- develop and commercialize our products;
- produce and deliver lidar and software products of acceptable performance;
- forecast our revenue and budget for and manage our expenses;
- attract new customers, retain existing customers and expand existing commercial relationships;
- comply with existing and new or modified laws and regulations applicable to our business;
- plan for and manage capital expenditures for our current and future products, and manage our supply chain and supplier relationships related to our current and future products;
- anticipate and respond to macroeconomic changes and changes in the markets in which we operate;
- maintain and enhance the value of our reputation and brand;
- effectively manage our growth and business operations, including the impacts of macroeconomic challenges, such as rising interest rates and inflation, on our business;
- develop and protect intellectual property;

- hire, integrate and retain talented people at all levels of our organization; and
- successfully develop new solutions to enhance the experience of customers.

If we fail to address the risks and difficulties that we face, including those associated with the challenges listed above as well as those described elsewhere in this "*Risk Factors*" section, our business, financial condition and results of operations could be adversely affected. Further, because we have limited historical financial data and operate in a rapidly evolving market, any predictions about our future revenue and expenses may not be as accurate as they would be if we had a longer operating history or operated in a more predictable market. We have encountered in the past, and will encounter in the future, risks and uncertainties frequently experienced by growing companies with limited operating histories in rapidly changing industries. If our assumptions regarding these risks and uncertainties, which we use to plan and operate our business, are incorrect or change, or if we do not address these risks successfully, our results of operations could differ materially from our expectations and our business, financial condition and results of operations could be adversely affected.

Our forecasts and projections are based upon assumptions, analyses and internal estimates developed by our management. If these assumptions, analyses or estimates prove to be incorrect or inaccurate, our actual results of operations may differ materially from those forecasted or projected.

Our forecasts and projections included in this report are subject to significant uncertainty and are based on assumptions, analyses and internal estimates developed by our management, any or all of which may not prove to be correct or accurate. If these assumptions, analyses or estimates prove to be incorrect or inaccurate, our actual results of operations may differ materially from those forecasted or projected.

The forecasts and projections in this report include forecasts and estimates relating to the expected size and growth of the markets for which we operate or seek to enter. Such markets may not develop or grow, or may develop and grow at a lower rate than expected, and even if these markets experience the forecasted growth described in this report, we may not grow our business at similar rates, or at all. Our future growth is subject to many factors, including, among others, our ability to develop and commercialize our products and the market's adoption of our products, both of which are subject to risks and uncertainties, many of which are beyond our control. Accordingly, the forecasts and estimates of market size and growth described in this report should not be taken as indicative of our future growth.

We continue to implement strategic initiatives designed to grow our business. These initiatives may prove more costly than we currently anticipate and we may not succeed in increasing our revenue in an amount sufficient to offset the costs of these initiatives and to achieve and maintain profitability.

We continue to make investments and implement initiatives designed to grow our business, including:

- expanding our sales and marketing efforts to attract new customers in our target end markets;
- investing in R&D;
- investing in new applications and markets for our products by expanding relationships with existing customers and creating opportunities for new customers;
- further enhancing our partnerships with third-parties to develop manufacturing processes; and
- investing in legal, accounting, and other administrative functions necessary to support our operations as a public company.

These initiatives may prove more expensive than we currently anticipate, and we may not succeed in increasing our revenue, if at all, in an amount sufficient to offset these higher expenses and to achieve and maintain profitability. The market opportunities we are pursuing are at various stages of development, and it may be many years before the end markets we expect to serve in the Automotive market generate demand for our products at scale, if at all. In the Smart Infrastructure market, we have a number of active projects and multiple developing engagement opportunities, but some of these relationships and market opportunities are also still in the early stages of development. Our revenue may be adversely affected for a number of reasons, including, but not limited to (i) the development and/or market acceptance of new technology that competes with our lidar products and automotive software, (ii) if certain automotive OEMs, or other market participants change their autonomous vehicle technology, (iii) failure of our customers to commercialize autonomous systems that include our solutions, (iv) our inability to effectively manage our inventory or manufacture products at scale, (v) our inability to enter new markets or help our customers adapt our products for new applications, (vi) our failure to attract new customers or expand orders from existing customers, or (vii) increasing competition. Furthermore, it is difficult to predict the size and growth rate of our target markets, customer demand for our products, commercialization timelines, developments in autonomous sensing and related technology, the entry of competitive products, or the success of existing competitive products and services. For these reasons, we do not expect to achieve profitability over the near term. If our revenue does not grow (including over the long term), our ability to achieve and maintain profitability may be adversely affected, and the value of our business may significantly decrease.

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

If our lidar products are not selected for inclusion in ADAS and autonomous driving systems by automotive OEMs, automotive tier 1 companies, mobility or technology companies or their respective suppliers, our business will be materially and adversely affected.

Automotive OEMs, tier 1 suppliers to automotive OEMs, mobility or technology companies, and their respective suppliers design and develop autonomous driving and ADAS technology over several years. These automotive OEMs, tier 1 suppliers, mobility or technology companies, and their respective suppliers undertake extensive testing or qualification processes prior to selecting a product such as our lidar products for use in a particular system, product or vehicle model, because such products will function as part of a larger system or platform and must meet certain other specifications. We spend significant time and resources to have our products selected by our customers and their suppliers for use in a particular system, product or vehicle model, which is known as a “series production win” or a “series production award.” In the case of autonomous driving and ADAS technology, a series production award means our lidar product has been selected for use in a particular vehicle model. However, if we do not achieve a series production award with respect to a particular vehicle model, we may not have an opportunity to supply our products to the automotive OEM for that vehicle model for a period of many years. In many cases, this period can be five years to seven years or more. If our products are not selected by an automotive OEM or our suppliers for one vehicle model or if our products are not successful in that vehicle model, it is unlikely that our product will be deployed in other vehicle models of that OEM. If we fail to win a significant number of vehicle models from one or more of automotive OEMs or their suppliers, our business, results of operations and financial condition will be materially and adversely affected. For more information about certain risks related to product selection, please see the risk factor in this Report captioned “*The period of time from engagement to a series production award and then to implementation is long, typically spanning over several years, especially in the Automotive market, and our customer arrangements are subject to cancellation or postponement of contracts or unsuccessful implementation.*”

We are reliant on key inputs and our inability to reduce and control the cost of such inputs could negatively impact the adoption of our products and our profitability.

The production of our sensors is dependent on producing or sourcing certain key components and raw materials at acceptable price levels. Recent supply chain constraints and rising inflation have led to increased lead times and increased costs for certain key components and raw materials and increased transportation expenses. If we are unable to adequately reduce and control the costs of such key components and raw materials, we will be unable to realize manufacturing costs targets, which could reduce the market adoption of our products, damage our reputation with current or prospective customers, and harm our brand, business, prospects, financial condition and results of operations.

Continued pricing pressures, automotive OEM cost reduction initiatives and the ability of automotive OEMs to re-source or cancel vehicle or technology programs may result in losses or lower than anticipated margins, which will materially and adversely affect our financial condition and results of operations.

Cost-cutting initiatives adopted by our customers often result in increased downward pressure on pricing. We expect that over the course of the terms of our arrangements with automotive OEMs, our customers may require step-downs in pricing. Automotive OEMs possess significant leverage over their suppliers, including us, because the automotive component supply industry is highly competitive, serves a limited number of customers and has a high fixed cost base. For example, our long-range lidars are currently in the low $1,000s range and, over the next five to six years, we expect that these prices could drop to the $500-$600 range. For near-range lidars, we expect high volume ADAS target pricing to be in the $100 range within a few years. Accordingly, we expect to be subject to substantial continuing pressure from automotive OEMs and tier 1 suppliers to reduce the price of our products. It is possible that pricing pressures beyond our expectations could intensify as automotive OEMs pursue restructuring, consolidation and cost-cutting initiatives. If we are unable to generate sufficient production cost savings in the future to offset price reductions, our gross margin and profitability would be adversely affected.

We expect to incur substantial R&D costs and devote significant resources to identifying and commercializing new products, which could significantly reduce our profitability and may never result in revenue to us.

Our future growth depends on penetrating new markets, adapting existing products to new applications and customer requirements, and introducing new products that achieve market acceptance. Our plans to incur substantial, and potentially increasing, R&D costs as part of our efforts to design, develop, manufacture and commercialize new products and enhance existing products. Our R&D expenses were approximately $33.0 million and $24.2 million for the years ended December 31, 2022 and 2021, respectively, and are likely to grow in the future. Because we account for R&D as an operating expense, these expenditures will adversely affect our results of operations in the future. Further, our R&D program may not produce successful results, and our new products may not achieve market acceptance, create additional revenue or become profitable.

Although we believe that lidar is likely to become an essential sensor for autonomous vehicles and other emerging markets, market adoption of lidar is uncertain. If market adoption of lidar does not continue to develop, or develops more slowly than we expect, our business will be adversely affected.

While our lidar solutions can be applied to different use cases across end markets, a significant portion of our revenue is currently primarily generated from product sales of lidar sensors to direct customers. Despite the fact that the automotive industry has engaged in considerable effort to research and test lidar products for ADAS and autonomous driving applications, the automotive industry may not introduce lidar products in commercially available vehicles. However, lidar products remain relatively new and it is possible that other sensing modalities, or a new disruptive modality based on new or existing technology, including a combination of technology, will achieve acceptance or leadership in the ADAS and autonomous driving industries. Even if lidar products are used in initial generations of autonomous driving technology and certain ADAS applications, we cannot guarantee that lidar products will be designed into or included in subsequent generations of such commercialized technology. In addition, we expect that initial generations of autonomous vehicles will be focused on limited applications, such as robotaxis and delivery vehicles, and that mass market adoption of autonomous technology may lag behind these initial applications significantly. The speed of market growth for ADAS or autonomous vehicles is difficult if not impossible to predict, and may be influenced by macroeconomic conditions, including inflation and rising interest rates, the effects of the COVID-19 pandemic or other future public health crises, and the potential impact of geopolitical conflicts, such as the ongoing conflict in Ukraine. Although we currently believe we are a leader in lidar-based systems for the ADAS market, by the time mass market adoption of ADAS and autonomous vehicle technology is achieved, we expect competition among providers of sensing technology based on lidar and other modalities to increase substantially. If commercialization of lidar products is not successful, or not as successful as we or the market expects, or if other sensing modalities gain acceptance by developers of ADAS or autonomous driving systems, automotive OEMs, regulators and safety organizations or other market participants by the time autonomous vehicle technology might achieve mass market adoption, our business, results of operations and financial condition will be materially and adversely affected.

We are investing in and pursuing market opportunities outside of the Automotive market, including in the Smart Infrastructure market. We believe that our future revenue growth, if any, will depend in part on our ability to expand within new markets such as these and to enter new markets as they emerge. Each of these markets presents distinct risks and, in many cases, requires us to address the particular requirements of that market.

Addressing these requirements can be time-consuming and costly. The market for lidar technology outside of automotive applications is relatively new, rapidly developing and unproven in many markets or industries. Many of our customers outside of the automotive industry are still in the testing and development phases and we cannot be certain that they will commercialize products or systems with our lidar products or at all. We cannot be certain that lidar will be sold into these markets, or any market outside of the Automotive market, at scale. Adoption of lidar products, including our products, outside of the automotive industry will depend on numerous factors, including: whether the technological capabilities of lidar and lidar-based products meet users' current or anticipated needs; whether the benefits of designing lidar into larger sensing systems outweigh the costs; complexity and time needed to deploy such technology or replace or modify existing systems that may have used other modalities such as cameras and radar; whether users in other applications can move beyond the testing and development phases and proceed to commercializing systems supported by lidar technology; whether lidar developers such as us can keep pace with rapid technological change in certain developing markets; macroeconomic conditions, including inflation and rising interest rates, the effects of the COVID-19 pandemic or other future public health crises; and the potential impact of geopolitical conflicts, such as the ongoing conflict in Ukraine. If lidar technology does not achieve commercial success outside of the automotive industry, or if the market develops at a pace slower than we expect, our business, results of operation and financial condition will be materially and adversely affected.

We are substantially dependent on our series production award from GM through Koito and our relationship with Koito, and our business and prospects will be materially and adversely affected if GM's development or launch plans for the multiple vehicle models in which our products are expected to be deployed are significantly scaled back or terminated.

Our growth plans are substantially dependent on our series production award as part of GM's ADAS program. We are the supplier of lidar to Koito for GM's next generation ADAS program. Sales to Koito accounted for over 43% and 68% of our total revenues for the years ended December 31, 2022 and 2021, respectively. There can be no assurance that we will be able to maintain our relationship with GM or Koito and secure orders from Koito for GM programs. If GM terminates or significantly alters or delays its next generation ADAS program and/or alters its relationship with us or with Koito in a manner that is adverse to us, our business would be materially adversely affected. Similarly, if we are unable to maintain our relationship with Koito, or the terms of our arrangement with Koito with respect to the GM series production award differ from our expectations, including with respect to volume, pricing and timing, then our business and prospects would be materially adversely affected. In addition, our stock price could be materially adversely affected.

The period of time from engagement to a series production award and then to implementation is long, typically spanning several years, especially in the Automotive market, and our customer arrangements are subject to cancellation or postponement of contracts or unsuccessful implementation.

Our customers generally must make significant commitments of resources to test and validate our products and confirm that they can integrate with other technologies before including them in any particular system, product or vehicle model. We, in turn, spend significant time and resources to have our products selected by our customers and their suppliers for use in a particular system, product or vehicle model, which is known as a series production award. The development cycles of our products with new customers varies widely depending on the application, market, customer and the complexity of the product. In the Automotive market, this development cycle can be five to seven years, including the period from series production award to production, which can be three to four years. In the Smart Infrastructure market, this development cycle can be one to two years. Further, even after obtaining a series production award with a customer, we are subject to the risk that such customer cancels or postpones implementation of our technology, as well as that we will not be able to integrate our technology successfully into a larger system with other sensing modalities. Further, our revenue could be less than forecasted if the system, product or vehicle model that includes our lidar products is unsuccessful, including for reasons unrelated to our technology. Long development cycles and product cancellations or postponements may adversely affect our business, prospects, results of operations and financial condition.

We may experience difficulties in managing our growth and expanding our operations.

We expect to experience significant growth in the scope and nature of our operations. Our ability to manage our operations and future growth will require us to continue to improve our operational, financial and management controls, compliance programs and reporting systems. We are currently in the process of strengthening our compliance programs, including our compliance programs related to export controls, privacy, cybersecurity and anti-corruption. We may not be able to implement improvements in an efficient or timely manner and may discover deficiencies in existing controls, programs, systems and procedures, which could have an adverse effect on our business, reputation and financial results.

We rely on third-party suppliers and, because some of the raw materials and key components in our products come from limited or single-source suppliers, we are susceptible to supply shortages, long lead times for components, and supply changes, any of which could disrupt our supply chain, could delay or prevent deliveries of our products to customers, and could adversely affect our business, financial condition and results of operations.

While the components that go into the manufacture of our solutions are generally built from modular, commonly available materials, they are sourced from third-party suppliers. To date, we have produced our products in relatively limited quantities. Although we have limited experience in managing our supply chain to manufacture and deliver our products at scale, our future success will depend on our ability to manage our supply chain to manufacture and deliver our products at scale. Some of the key components used to manufacture our products come from limited or single source suppliers. We are therefore subject to the risk of shortages and long lead times in the supply of these components and the risk that our suppliers discontinue or modify components used in our products. We have a global supply chain, and the COVID-19 pandemic and other health epidemics and outbreaks and ongoing geopolitical conflicts and macroeconomic challenges have adversely affected, and may in the future adversely affect our ability to source components in a timely or cost effective manner from our third-party suppliers due to, among other things, work stoppages or interruptions. Additionally, our lidar uses laser diodes. Any shortage of these laser diodes could materially and adversely affect our ability to manufacture our solutions. In addition, the lead times associated with certain components are lengthy and preclude rapid changes in quantities and delivery schedules. We may in the future experience material component shortages and price fluctuations of certain key components and materials, and the predictability of the availability and pricing of these components may be limited. In the event of a component shortage, supply interruption or material pricing change from suppliers of these components, we may not be able to develop alternate sources in a timely manner or at all in the case of sole or limited sources. Developing alternate sources of supply for these components may be time-consuming, difficult, and costly and we may not be able to source these components on terms that are acceptable to us, or at all, which may undermine our ability to meet our requirements or to fill customer orders in a timely manner. Any interruption or delay in the supply of any of these parts or components, or the inability to obtain these parts or components from alternate sources at acceptable prices and within a reasonable amount of time, would adversely affect our ability to meet our scheduled product deliveries to our customers. This could adversely affect our relationships with our customers and channel partners and could cause delays in shipment of our products and adversely affect our operating results. In addition, increased component costs could result in lower gross margins. Even where we are able to pass increased component costs along to our customers, there may be a lapse of time before we are able to do so such that we must absorb the increased cost. If we are unable to buy these components in quantities sufficient to meet our requirements on a timely basis, we will not be able to deliver products to our customers, which may result in such customers using competitive products instead of ours.

Because our sales have been primarily to customers engaged in development of ADAS deployments in consumer vehicles and pilot projects in the Smart Infrastructure segment and our orders are project-based, we expect our results of operations to fluctuate on a quarterly and annual basis.

Our quarterly results of operations have fluctuated in the past and may fluctuate significantly in the future. As such, historical comparisons of our operating results may not be meaningful. In particular, because our sales to date have primarily been to customers making purchases for development of ADAS deployments in consumer vehicles, sales in any given quarter can fluctuate based on the timing and success of our customers' projects. Accordingly, the results of any one quarter should not be relied upon as an indication of future performance. Our quarterly financial results may fluctuate as a result of a variety of factors, many of which are outside of our control and may not fully reflect the underlying performance of our business. These fluctuations could adversely affect our ability to meet our expectations or those of securities analysts, ratings agencies or investors. If we do not meet these expectations for any period, the value of our business and our securities could decline significantly. Factors that may cause these quarterly fluctuations include, but are not limited to:

- the timing and magnitude of orders and shipments of our products in any quarter;
- the timing and magnitude of sales returns and warranty claims of our products in any quarter;
- the timing and magnitude of development revenue in any quarter;
- pricing changes we may adopt to drive market adoption or in response to competitive pressure;
- the ability to retain our existing customers and attract new customers;

- the ability to develop, introduce, manufacture and ship in a timely manner products that meet customer requirements;
- disruptions in our sales channels or termination of our relationship with important channel partners;
- delays in customers' purchasing cycles or deferments of customers' purchases in anticipation of new products or updates from us or our competitors;
- fluctuations in demand pressures for our products;
- the mix of products sold in any quarter;
- the duration of macroeconomic challenges and the time it takes for economic recovery;
- the timing and rate of broader market adoption of autonomous systems utilizing our solutions across the automotive and other market sectors;
- market acceptance of lidar and further technological advancements by our competitors and other market participants;
- the ability of our customers to commercialize systems that incorporate our products;
- any change in the competitive dynamics of our markets, including consolidation of competitors, regulatory developments and new market entrants;
- the ability to effectively manage our inventory;
- changes in the source, cost, availability of and regulations pertaining to materials we use;
- adverse litigation, judgments, settlements or other litigation-related costs, or claims that may give rise to such costs; and
- general economic, industry and market conditions, including trade disputes and geopolitical tensions and conflicts and related supply chain and other disruptions.

Our transition to an outsourced manufacturing business model may not be successful, which could harm our ability to deliver products and recognize revenue.

We are transitioning from a manufacturing model in which we primarily manufactured and assembled our products at our San Jose, California location, to one where we rely on third-party manufacturers and tier 1 partners in Japan and potentially other foreign and domestic locations. As we transition manufacturing to third-party manufacturers and tier 1 partners, we plan to maintain certain levels of in-house manufacturing capabilities for new product introduction, prototyping, and small quantity order fulfillment. We believe the use of third-party manufacturers and tier 1 partners will have future benefits, but in the near term, while we begin manufacturing with new partners, we may lose revenue, incur increased costs and potentially harm our customer relationships.

Reliance on third-party manufacturers reduces our control over the manufacturing process, including reduced control over quality, product costs and product supply and timing. We may experience delays in shipments or issues concerning product quality from our third-party manufacturers. If any of our third-party manufacturers experience interruptions, delays or disruptions in supplying our products, including by natural disasters, geopolitical conflicts or tensions (such as the ongoing conflict in Ukraine), health epidemics and outbreaks, or work stoppages or capacity constraints, our ability to ship products to distributors and customers would be delayed. In addition, unfavorable economic conditions could result in financial distress among third-party manufacturers upon which we rely, thereby increasing the risk of disruption of supplies necessary to fulfill our production requirements and meet customer demands. Additionally, if any of our third-party manufacturers experience quality control problems in their manufacturing operations and our products do not meet customer or regulatory requirements, we could be required to cover the cost of repair or replacement of any defective products. These delays or product quality issues could have an immediate and material adverse effect on our ability to fulfill orders and could have a negative effect on our operating results. In addition, such delays or issues with product quality could adversely affect our reputation and our relationship with our channel partners. If third-party manufacturers experience financial, operational, manufacturing capacity or other difficulties, or experience shortages in required components, or if they are otherwise unable or unwilling to continue to manufacture our products in required volumes or at all, our supply may be disrupted, we may be required to seek alternate manufacturers and we may be required to re-design our products. It would be time-consuming, and could be costly and impracticable, to begin to use new manufacturers and designs, and such changes could cause significant interruptions in supply and could have an adverse effect on our ability to meet our scheduled product deliveries and may subsequently lead to the loss of sales. While we take measures to protect our trade secrets, the use of third-party manufacturers may also risk disclosure of our innovative and proprietary manufacturing methodologies, which could adversely affect our business.

If we further expand our international manufacturing operations, we may face risks associated with manufacturing operations outside the United States.

We expect to maintain manufacturing at our headquarters in San Jose, California for product development and small amounts of fulfillment. If we were to begin manufacturing on our own outside the United States, such activity would be subject to several inherent risks, including:

- foreign currency fluctuations;
- local economic conditions;
- political instability;
- import or export requirements;
- failure by us, our collaborators or our distributors to obtain regulatory clearance, authorization or approval for the use of our products and services in various countries;
- foreign government regulatory requirements;
- reduced protection for intellectual property rights in some countries;
- regulatory and compliance risks that relate to maintaining accurate information and control over sales and distributors' activities that may fall within the purview of the Foreign Corrupt Practices Act of 1977 (the "FCPA"), our books and records provisions, or our anti-bribery provisions or laws similar to the FCPA in other jurisdictions in which we may in the future operate, such as the United Kingdom's Bribery Act of 2010 and anti-bribery requirements of member states in the European Union;
- tariffs and other trade barriers and restrictions; and
- potentially adverse tax consequences.

If we further expand our limited manufacturing operations outside the United States, we may be subject to these risks. Such risks could increase our costs and decrease our profit margins.

Even though many of the components in our lidars are modular and can be built using readily available materials, we, our outsourcing partners and our suppliers rely on complex machinery for production, which involves a significant degree of risk and uncertainty in terms of operational performance and costs. We, our outsourcing partners and our suppliers may also rely on highly-skilled labor for production, and if such highly-skilled labor is unavailable, our business could be adversely affected

We, our outsourcing partners and our suppliers rely on complex machinery for the production, assembly and installation of our lidar solutions, which will involve a significant degree of uncertainty and risk in terms of operational performance and costs. Our production facilities and the facilities of our outsourcing partners and suppliers consist of large-scale machinery combining many components. These components may suffer unexpected malfunctions from time to time and will depend on repairs and spare parts to resume operations, which may not be available when needed. Unexpected malfunctions of these components may significantly affect the intended operational efficiency. In addition, we and our outsourcing partners and our suppliers may also rely on highly-skilled labor for assembly and production. If such highly-skilled labor is unavailable, our business could be adversely affected. Operational performance and costs can be difficult to predict and are often influenced by factors outside of our control, such as, but not limited to, scarcity of natural resources, environmental hazards and remediation, costs associated with decommissioning of machines, labor disputes and strikes, difficulty or delays in obtaining governmental permits, damages or defects in electronic systems, industrial accidents, fire, seismic activity and natural disasters. Should operational risks materialize, it may result in the personal injury to or death of workers, the loss of production equipment, damage to production facilities, monetary losses, delays and unanticipated fluctuations in production, environmental damage, administrative fines, increased insurance costs and potential legal liabilities, all which could have a material adverse effect on our business, prospects, financial condition or operating results.

As part of growing our business, we may make acquisitions. If we fail to successfully select, execute or integrate our acquisitions, then our business, results of operations and financial condition could be materially adversely affected.

From time to time, we may undertake acquisitions to add new products and technologies, acquire talent, gain new sales channels or enter into new markets or sales territories. In addition to possible stockholder approval, we may need approvals and licenses from relevant government authorities for the acquisitions and to comply with any applicable laws and regulations, which could result in increased delays and costs, and may disrupt our business strategy if we fail to do so. Certain acquisitions will also require Koito's consent. Furthermore, acquisitions and the subsequent integration of new assets, businesses, key personnel, customers, vendors and suppliers require significant attention from our management and could result in a diversion of resources from our existing business, which in turn could have an adverse effect on our operations. Acquired assets or businesses may not generate the financial results we expect. Acquisitions could result in the use of substantial amounts of cash, potentially dilutive issuances of equity securities, the occurrence of significant goodwill impairment charges, amortization expenses for other intangible assets and exposure to potential unknown liabilities of the acquired business. Moreover, the costs of identifying and consummating acquisitions may be significant.

To date, we have little to no experience with acquisitions and the integration of acquired technology and personnel. Failure to successfully identify, complete, manage and integrate acquisitions could materially and adversely affect our business, financial condition and results of operations and could cause our stock price to decline.

Changes in our product mix may impact our financial performance.

Our financial performance can be affected by the mix of products we sell during a given period. If our sales include more of the lower gross margin products than higher gross margin products, our results of operations and financial condition may be adversely affected. There can be no guarantees that we will be able to successfully alter our product mix so that we are selling more of our high gross margin products. If actual results vary from our projected product mix of sales, our results of operations and financial condition could be adversely affected.

Our sales and operations in international markets expose us to operational, financial and regulatory risks.

International sales comprise a significant amount of our overall revenue. Sales to international customers accounted for 68% and 84% of our revenue for the years ended December 31, 2022 and 2021, respectively. We are committed to growing our international sales, and while we have committed resources to expanding our international operations and sales channels, these efforts may not be successful. International operations are subject to a number of other risks, including, but not limited to:

- exchange rate fluctuations;
- political and economic instability, international terrorism, geopolitical tensions and conflicts, and anti-American sentiment, particularly in emerging markets;
- global or regional health crises, such as COVID-19 or other health epidemics and outbreaks;
- potential for violations of anti-corruption laws and regulations, such as those related to bribery and fraud;
- preference for locally branded products, and laws and business practices favoring local competition;
- increased difficulty in managing inventory;
- delayed revenue recognition;
- less effective protection of intellectual property;

- stringent regulation of the autonomous or other systems or products using our products and stringent consumer protection and product compliance regulations, including but not limited to the General Data Protection Regulation in the European Union, European competition law;
- the Restriction of Hazardous Substances Directive, the Waste Electrical and Electronic Equipment Directive and the European Ecodesign Directive that are costly to comply with and may vary from country to country;
- difficulties and costs of staffing and managing foreign operations;
- import and export laws and the impact of tariffs;
- changes in local tax and customs duty laws or changes in the enforcement, application or interpretation of such laws; and
- U.S. government restrictions on certain technology transfer to certain countries of concern.

The occurrence of any of these risks could negatively affect our international business and consequently our business, operating results and financial condition.

The complexity of our products and the limited visibility into the various environmental and other conditions under which our customers use the products could result in unforeseen delays or expenses from undetected defects, errors or reliability issues in hardware or software which could reduce the market adoption of our new products, damage our reputation with current or prospective customers, expose us to product liability and other claims and adversely affect our operating costs.

Our products are highly technical and very complex and require high standards to manufacture and have in the past and will likely in the future experience defects, errors or reliability issues at various stages of development. We may be unable to timely release new products, manufacture existing products, correct problems that have arisen or correct such problems to our customers' satisfaction. Additionally, undetected errors, defects or security vulnerabilities, especially as new products are introduced or as new versions are released, could result in serious injury to the end users of technology incorporating our products, or those in the surrounding area. This could also result in our customers never being able to commercialize technology incorporating our products, litigation against us, negative publicity and other consequences. These risks are particularly prevalent in the highly competitive autonomous driving and ADAS markets. Some errors or defects in our products may only be discovered after they have been tested, commercialized and deployed by customers. If that is the case, we may incur significant additional development costs and product recall, repair or replacement costs. These problems may also result in claims, including class actions, against us by our customers or others. Our reputation or brand may be damaged as a result of these problems and customers may be reluctant to buy our products, which could adversely affect our ability to retain existing customers and attract new customers and could adversely affect our financial results.

In addition, we could face material legal claims for breach of contract, product liability, fraud, tort or breach of warranty as a result of these problems. Defending a lawsuit, regardless of its merit, could be costly and may divert management's attention and adversely affect the market's perception of us and our products. In addition, our business liability insurance coverage could prove inadequate with respect to a claim and future coverage may be unavailable on acceptable terms or at all. These product-related issues could result in claims against us and our business could be adversely affected.

We may be subject to product liability, warranty, or marketing-related claims that could result in significant direct or indirect costs, which could adversely affect our business and operating results.

Our customers use our solutions in autonomous driving, ADAS and other automotive applications, which present the risk of significant injury, including fatalities. We may be subject to claims if a product using our lidar technology is involved in an accident and persons are injured or purport to be injured, and we may be subject to marketing-related claims on safety and other topics even if our lidar technology is not involved in an accident, injuries or fatalities. Any insurance that we carry may not be sufficient or it may not apply to all situations. Similarly, our customers could be subjected to claims as a result of such accidents and may bring legal claims against us to attempt to hold us liable. In addition, if lawmakers or governmental agencies were to determine that the use of our products or autonomous driving or certain ADAS applications increased the risk of injury to all or a subset of our customers, they may pass laws or adopt regulations that limit the use of our products or increase our liability associated with the use of our products or that regulate the use of or delay the deployment of autonomous driving and ADAS technology. In addition, new or evolving laws in safety, product liability and the above areas may increase such risks or lead to new risks. Any of these events could adversely affect our brand, relationships with customers, operating results or financial condition.

We typically provide a limited-time warranty on our products. The occurrence of any material defects in our products could make us liable for damages and warranty claims. In addition, we could incur significant costs to correct any defects, warranty claims or other problems, including costs related to product recalls. Any negative publicity related to the perceived quality of our products could affect our brand image, partner and customer demand, and adversely affect our operating results and financial condition. Also, warranty, recall and product liability claims may result in litigation, including class actions, the occurrence of which could be costly, lengthy and distracting and adversely affect our business, operating and financial results.

If we or our suppliers do not maintain sufficient inventory or do not adequately manage inventory, we could lose sales or incur higher inventory-related expenses, which could negatively affect our operating and financial results.

To ensure adequate inventory supply, we and our suppliers must forecast inventory needs and expenses, place orders sufficiently in advance with suppliers and manufacturing partners and manufacture products based on our estimates of future demand for particular products. Fluctuations in the adoption of lidar products may affect our ability to forecast our future operating results, including revenue, gross margins, cash flows and profitability. Our ability to accurately forecast demand for our products could be affected by many factors, including the rapidly changing nature of the Automotive and Smart Infrastructure markets in which we operate, the uncertainty surrounding the market acceptance and commercialization of lidar technology, the emergence of new markets, an increase or decrease in customer demand for our products or for products and services of our competitors, product introductions by competitors, health epidemics and outbreaks, and any associated work stoppages or interruptions, geopolitical tensions or conflicts, unanticipated changes in general market conditions and the weakening of economic conditions or consumer confidence in future economic conditions, and other macroeconomic conditions such as inflation and rising interest rates. If our lidar products are commercialized in industries that are quickly growing, including autonomous driving and ADAS applications, both of which are currently experiencing rapid growth in demand, we may face challenges acquiring adequate supplies to manufacture our products and/or we and our manufacturing partners may not be able to manufacture our products at a rate necessary to satisfy the levels of demand, which would negatively affect our revenue. This risk may be exacerbated by the fact that we may not carry or be able to obtain for our manufacturers a significant amount of inventory to satisfy short-term demand increases. If we fail to accurately forecast customer demand, we may experience excess inventory levels or a shortage of products available for sale.

Inventory levels in excess of customer demand may result in inventory write-downs or write-offs and the sale of excess inventory at discounted prices, which would adversely affect our financial results, including our gross margin, and have a negative effect on our brand. Conversely, if we underestimate customer demand for our products, we, or our manufacturing partners, may not be able to deliver products to meet our requirements, and this could result in damage to our brand and customer relationships and adversely affect our revenue and operating results.

The average selling prices of our products could decrease rapidly over the life of the product, which may negatively affect our revenue and gross margin. In addition, the selling prices we are able to ultimately charge in the future for the products we are currently developing or commercializing may be less than what we currently project, which may cause our actual operating results to differ materially from our projections.

We may experience declines in the average selling prices of our products generally as our customers seek to commercialize autonomous systems at prices low enough to achieve market acceptance. In order to sell products that have a falling average unit selling price and maintain margins at the same time, we will need to continually reduce product and manufacturing costs. To manage manufacturing costs, we must engineer the most cost-effective design for our products. In addition, we continuously drive initiatives to reduce labor cost, improve worker efficiency, reduce the cost of materials, use fewer materials and further lower overall product costs by carefully managing component prices, inventory, shipping costs, and labor costs. We also need to continually introduce new products with higher sales prices and gross margin in order to maintain our overall gross margin. If we are unable to manage the cost of older products or successfully introduce new products with higher gross margin, our revenue and overall gross margin would likely decline. In addition, the selling prices we are able to ultimately charge in the future for the products we are currently developing or commercializing may be less than what we currently project, which may cause our actual operating results to differ materially from our forecasts and projections.

Adverse conditions in the automotive industry or the global economy more generally could have adverse effects on our results of operations.

While we make our strategic planning decisions based on the assumption that the markets we are targeting will grow, our business is dependent, in large part on, and directly affected by, business cycles and other factors affecting the global automobile industry and the global economy generally. Automotive production and sales are highly cyclical and depend on general economic conditions and other factors, including consumer spending and preferences, changes in interest rates and credit availability, consumer confidence, fuel costs, fuel availability, inflationary pressures, environmental impact, governmental incentives and regulatory requirements, and political volatility, especially in energy-producing countries and growth markets. In addition, automotive production and sales can be affected by our automotive OEM customers' ability to continue operating in response to challenging economic conditions and in response to labor relations issues, regulatory requirements, trade agreements and other factors. The global volume of automotive production has fluctuated, sometimes significantly, from year to year, and we expect such fluctuations to give rise to fluctuations in the demand for our products. Any significant adverse change in any of these factors may result in a reduction in automotive sales and production by our automotive OEM customers and could have a material adverse effect on our business, results of operations and financial condition.

Potential or actual adverse conditions in the global economy, including inflationary pressures, volatile financial markets, and economic downturn, could have adverse effects on our results of operations, financial condition and stock price. In addition, current macroeconomic conditions have caused turmoil in the banking sector. For example, on March 10, 2023, Silicon Valley Bank ("SVB"), one of our banking partners, was closed by the California Department of Financial Protection and Innovation, which appointed the Federal Deposit Insurance Corporation (the "FDIC") as receiver. At the time of the closure, we maintained a depository relationship with SVB. On March 12, 2023, federal regulators announced that the FDIC would complete its resolution of SVB in a manner that fully protects all depositors. While we were able to regain full access to our deposits on March 13, 2023 and have taken steps to diversify our banking relationships since then, we may be impacted by other disruptions to the U.S. banking system caused by the recent developments involving SVB, including potential delays in our ability to transfer funds, make payments, or receive funds whether held with SVB or other banks.

The discontinuation, lack of commercial success, or loss of business with respect to a particular vehicle model or other customer solution for which we are a significant supplier to, could reduce our sales and adversely affect our profitability.

If we are able to secure series production awards and our solutions are included in these autonomous driving and ADAS products, we expect to enter into supply agreements with the relevant customer. Market practice suggests that these supply agreements typically require a supplier to supply a customer's requirements for a particular vehicle model or autonomous driving or ADAS product, rather than supply a set number of products. These contracts can have short terms and/or can be subject to renegotiation, sometimes as frequently as annually, all of which may affect product pricing, and may be terminated by our customers at any time. Therefore, even if we are successful in obtaining series production awards and the systems into which our products are built are commercialized, the discontinuation of, the loss of business with respect to, or a lack of commercial success of a particular vehicle model or technology package for which we are a significant supplier could mean that the expected sales of our products will not materialize, materially and adversely affecting our business.

Since many of the markets in which we compete are new to lidar and rapidly evolving, it is difficult to forecast mid-to-long-term end-customer adoption rates and demand for our products.

We are pursuing opportunities in markets that are undergoing rapid changes, including technological and regulatory changes, and it is difficult to predict the timing and size of these opportunities. For example, autonomous driving and lidar-based ADAS applications require complex technology. Because these automotive systems depend on technology from many companies, commercialization of autonomous driving or ADAS products could be delayed or impaired on account of certain technological components of ours or others not being ready to be deployed in vehicles. Although GM has planned to release several vehicles using our products, others may not be able to commercialize this technology immediately, or at all. Regulatory, safety or reliability developments, many of which are outside of our control, could also cause delays or otherwise impair commercial adoption of these new technologies, which will adversely affect our growth. Our future financial performance will depend on our ability to make timely investments in the correct market opportunities. If one or more of these markets experience a shift in customer or prospective customer demand, our products may not compete as effectively, if at all, and they may not be designed into commercialized products. Given the evolving nature of the markets in which we operate, it is difficult to predict customer demand or adoption rates for our products or the future growth of the markets in which we operate. As a result, the financial projections in this report necessarily reflect various estimates and assumptions that may not prove accurate and these projections could differ materially from actual results due to the risks included in this "*Risk Factors*" section, among others. If demand does not develop or if we cannot accurately forecast customer demand, the size of our markets, inventory requirements or our future financial results, our business, results of operations and financial condition will be adversely affected.

We target many customers that are large companies with substantial negotiating power and potentially competitive internal solutions. If we are unable to sell our products to these customers, our prospects and results of operations will be adversely affected.

Many of our customers and potential customers are large, multinational companies with substantial negotiating power relative to us and, in some instances, may have internal solutions that are competitive to our products. These large, multinational companies also have significant resources, which may allow them to acquire or develop competitive technologies either independently or in partnership with others. Accordingly, even after investing significant resources to develop a product, we may not secure a series production award or, even after securing a series production award, may not be able to commercialize a product on profitable terms. If our products are not selected by these large companies or if these companies develop or acquire competitive technology or negotiate terms that are disadvantageous to us, it will have an adverse effect on our business and prospects.

Our business could be materially and adversely affected if we lost any of our largest customers or if they were unable to pay their invoices.

Although we have and continue to pursue a broad customer base, we are dependent on a collection of large customers with strong purchasing power. For the year ended December 31, 2022, our top ten customers represented 92% of our revenue, and three customers accounted for more than 10% of our revenue. For the year ended December 31, 2021, our top ten customers represented 93% of our revenue, and one customers accounted for more than 10% of our annual revenue. The loss of business from any of our major customers (whether by lower overall demand for our products, cancellation of existing contracts or product orders or the failure to design in our products or award us new business) could have a material adverse effect on our business.

To the extent autonomous vehicle and ADAS systems become accepted by major automotive OEMs, we expect that we will rely increasingly on tier 1 suppliers through which automotive OEMs procure components for our revenue. We expect that these tier 1 suppliers will be responsible for certain hardware and software configuration activities specific to each OEM, and they may not exclusively carry our solutions and may develop or acquire competing solutions.

There is also a risk that one or more of our major customers could be unable to pay our invoices as they become due or that a customer will simply refuse to make such payments if we experience financial difficulties. If a major customer were to enter into bankruptcy proceedings or similar proceedings whereby contractual commitments are subject to stay of execution and the possibility of legal or other modifications, we could be forced to record a substantial loss.

If we are unable to establish and maintain confidence in our long-term business prospects among customers and analysts and within our industry or are subject to negative publicity, then our financial condition, operating results, business prospects and access to capital may suffer materially.

Customers may be less likely to purchase our lidar solutions if they are not convinced that our business will succeed or that our service and support and other operations will continue in the long term. Similarly, suppliers and other third parties will be less likely to invest time and resources in developing business relationships with us if they are not convinced that our business will succeed. Accordingly, in order to build and maintain our business, we must maintain confidence among customers, suppliers, analysts, ratings agencies and other parties in our products, long-term financial viability and business prospects. Maintaining such confidence may be particularly complicated by certain factors including those that are largely outside of our control, such as customer unfamiliarity with our lidar solutions, any delays in scaling production, delivery and service operations to meet demand, competition and uncertainty regarding the future of autonomous vehicles or our other products and services, our production and sales performance compared with market expectations, our financial resources, and macroeconomic conditions.

Our investments in educating our customers and potential customers about the advantages of lidar and our applications may not result in sales of our products.

Educating our prospective customers, and to a lesser extent, our existing customers, about lidar, our advantages over other sensing technologies and lidar's ability to convey value in different industries and deployments is an integral part of developing new business and the lidar market generally. If prospective customers have a negative perception of, or experience with, lidar or a competitor's lidar products they may be reluctant to adopt lidar in general or specifically our products. Adverse statements about lidar by influential market participants may also deter adoption. Some of our competitors have significant financial or marketing resources that may allow them to engage in public marketing campaigns about their alternative technology, lidar or our solutions. Our efforts to educate potential customers and the market generally and to counter any adverse statements made by competitors or other market participants will require significant financial and personnel resources. These educational efforts may not be successful and we might not offset the costs of such efforts with revenue from the new customers. If we are unable to acquire new customers to offset these expenses or if the market accepts such adverse statements, our financial condition will be adversely affected.

Certain of our strategic, development, production partner and supply arrangements could be terminated or may not materialize into long-term contract partnership arrangements.

We have arrangements with strategic, development, production and supply partners and collaborators. Some of these arrangements are evidenced by memorandums of understandings and others like our arrangement with Koito with respect to the GM series production program are supplier onboarding arrangements, both of which will require further negotiation at later stages of development to include additional terms relating to pricing, volume and payment terms, or replacement by production or master agreements that have yet to be implemented under separately negotiated statements of work, each of which could be terminated or might not materialize into next-stage contracts or long-term contract partnership arrangements. If these arrangements are terminated or if we are unable to enter into next-stage contracts or long-term operational contracts, our business, prospects, financial condition and operating results may be materially adversely affected. Additionally, market practice suggests that contracts with auto OEMs typically require suppliers to fulfill a customer's requirements for a particular vehicle model's autonomous driving or ADAS features, rather than supply a set number of products. These contracts can be subject to renegotiation, which may affect product pricing, and may be terminated by our customers at any time. Therefore, even if we are successful in obtaining series production awards and the systems into which our products are built are commercialized, the discontinuation of, the loss of business with respect to, or a lack of commercial success of a particular vehicle model or technology package for which we are a significant supplier could mean that the expected sales of our products will not materialize, materially and adversely affecting our business and prospects.

We operate in a highly competitive market and some market participants have substantially greater resources. We compete against a large number of both established competitors and new market entrants.

The markets for sensing technology applicable to autonomous solutions in the automobile industry are highly competitive. Our future success will depend on our ability to remain a leader in our targeted markets by continuing to develop and protect from infringement advanced lidar technology in a timely manner and to stay ahead of existing and new competitors. Our competitors are numerous and they compete with us directly by offering lidar products and indirectly by attempting to solve some of the same challenges with different technology. We face competition from camera and radar companies, other developers of lidar products, tier 1 suppliers and other technology and automotive supply companies, some of which have significantly greater resources than we have. Some examples of our competitors include Aeva Technologies, Inc. (Nasdaq: AEVA), Ouster, Inc. (Nasdaq: OUST), Hesai Group, Luminar Technologies Inc. (Nasdaq: LAZR) and Innoviz Technologies, Inc. (Nasdaq: INVZ). In the Automotive market, our competitors have attempted to commercialize both lidar and non-lidar-based ADAS technology that may achieve market adoption, strong brand recognition and may continue to improve. Other competitors are working towards commercializing autonomous driving technology and either by themselves, or with a publicly announced partner, have substantial financial, marketing, R&D and other resources. Some of our customers in the autonomous vehicle and ADAS markets have announced development efforts or made acquisitions directed at creating their own lidar-based or other sensing technologies, which would compete with our solutions. In markets outside of the automotive industry, our competitors, like us, seek to develop new sensing applications across industries. Even in these emerging markets, we face substantial competition from numerous competitors seeking to prove the value of their technology.

Additionally, increased competition may result in pricing pressure and reduced margins and may impede our ability to increase the sales of our products or cause us to lose market share, any of which will adversely affect our business, results of operations and financial condition.

The markets in which we compete are characterized by rapid technological change, which requires us to continue to develop new products and product innovations and could adversely affect market adoption of our products.

While we intend to invest substantial resources to remain on the forefront of technological development, continuing technological changes in sensing technology, lidar and the markets for these products, including the ADAS and autonomous driving industries, could adversely affect adoption of lidar and/or our products, either generally or for particular applications. Our future success will depend upon our ability to develop and introduce a variety of new capabilities and innovations to our existing product offerings, as well as introduce a variety of new product offerings, to address the changing needs of the markets in which we offer our products. We are currently working on developing our directional lidar and perception software for both the Automotive and non-Automotive markets. We cannot guarantee that such products will be released in a timely manner, or at all, or achieve market acceptance. For example, some of our key suppliers were affected by the COVID-19 pandemic, which resulted in supply chain disruptions and a delay in customers' orders and production schedules. Future public health crises could have a similar impact. Any delays in delivering new products that meet customer requirements could damage our relationships with customers and lead them to seek alternative sources of supply.

In addition, our success to date has been based on the delivery of our solutions to R&D programs in which developers are investing substantial capital to develop new systems. Our continued success relies on the success of the development phase of these customers as they expand their market share through the commercialization of new products. As ADAS and autonomous technology reach the stage of large-scale commercialization, we will be required to develop and deliver solutions at price points that enable wider and ultimately mass-market adoption. Delays in introducing products and innovations, the failure to choose correctly among technical alternatives or the failure to offer innovative products or configurations at competitive prices may cause existing and potential customers to purchase our competitors' products or turn to alternative sensing technology.

If we are unable to devote adequate resources to develop products or cannot otherwise successfully develop products or system configurations that meet customer requirements on a timely basis or remain competitive with technological alternatives, our products could lose market share, our revenue will decline, we may experience operating losses and our business and prospects will be adversely affected.

Developments in alternative technology may adversely affect the demand for our lidar technology.

Significant developments in alternative technologies, such as cameras and radar, may materially and adversely affect our business, prospects, financial condition and operating results in ways we do not currently anticipate. Existing and other camera and radar technologies may emerge as customers' preferred alternative to our solutions. Any failure by us to develop new or enhanced technologies or processes, or to react to changes in existing technologies, could materially delay our development and introduction of new and enhanced products in the autonomous vehicle industry, which could result in the loss of competitiveness of our lidar solutions, decreased revenue and a loss of market share to competitors. Our R&D efforts may not be sufficient to adapt to changes in technology. As technologies change, we plan to upgrade or adapt our lidar solutions with the latest technology. However, our solutions may not compete effectively with alternative systems if we are not able to source and integrate the latest technology into our existing lidar solutions.

Because lidar is new in most of the markets we are seeking to enter, forecasts of market growth and our growth in this report may not materialize as anticipated.

Industry trends and catalysts discussed in this report are subject to significant uncertainty and are based on assumptions and estimates that may not materialize as anticipated and may prove to be inaccurate. Even if these industry trends materialize as described in this Report, we may not grow our business at similar rates, or at all. Our future growth is subject to many factors, including market adoption of our products, which is subject to many risks and uncertainties. Accordingly, the industry trends and catalysts discussed in this Report should not be taken as indicative of our future growth.

We may need to raise additional capital in the future in order to execute our business plan, which may not be available on terms acceptable to us, or at all.

In the future, we may require additional capital to respond to technological advancements, competitive dynamics or technologies, customer demands, business opportunities, challenges, acquisitions or unforeseen circumstances and we may determine to engage in equity or debt financings or enter into credit facilities for other reasons. In order to further business relationships with current or potential customers or partners, we may issue equity or equity-linked securities to such current or potential customers or partners. The proceeds from the sale of the Preferred Stock are expected to provide sufficient capital for our near-term needs but may not fulfill our long-term capital needs, however, the Preferred Stock and the rights granted to Koito in connection therewith may limit our ability to engage in future equity or debt financings or enter into credit facilities even after we have utilized the proceeds from the sale of the Preferred Stock. Because the exercise price of the Public Warrants and Private Placement Warrants substantially exceeds the current trading price of our common stock, holders are unlikely to exercise such warrants in the near future, if at all, and as a result our Public Warrants and Private Placement Warrants may not provide any additional capital. We may not be able to timely secure additional debt or equity financing on favorable terms, or at all. If we raise additional funds through the issuance of equity or convertible debt or other equity-linked securities or if we issue equity or equity-linked securities to current or potential customers to further business relationships, our existing stockholders could experience significant dilution. Any such issuance could also result in anti-dilution adjustments under the Preferred Stock, which could create additional dilution. Any debt financing obtained by us in the future could involve restrictive covenants relating to our capital raising activities and other financial and operational matters, which may make it more difficult for us to obtain additional capital and to pursue business opportunities, including potential acquisitions. If we are unable to obtain adequate financing or financing on terms satisfactory to us, when we require it, our ability to continue to grow or support our business and to respond to business challenges could be significantly limited.

If we fail to maintain an effective system of internal controls, our ability to produce timely and accurate financial statements or comply with applicable regulations could be adversely affected.

As a result of the Business Combination, we are subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, the Sarbanes-Oxley Act of 2002 (the "Sarbanes-Oxley Act") and the rules and regulations of Nasdaq. We expect that the requirements of these rules and regulations will continue to increase our legal, accounting and financial compliance costs, make some activities more difficult, time-consuming and costly, and place significant strain on our personnel, systems and resources.

The Sarbanes-Oxley Act requires, among other things, that we maintain effective disclosure controls and procedures and internal control over financial reporting. We are continuing to develop and refine our disclosure controls, internal control over financial reporting and other procedures that are designed to ensure that information required to be disclosed by us in the reports that we will file with the SEC is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, and that information required to be disclosed in reports under the Exchange Act is accumulated and communicated to our principal executive and financial officers.

Our current controls and any new controls that we develop may be inadequate because of changes in conditions in our business. Further, additional weaknesses in our internal controls may be discovered in the future. Any failure to develop or maintain effective controls, or any difficulties encountered in their implementation or improvement, could adversely affect our operating results or cause us to fail to meet our reporting obligations and may result in a restatement of our financial statements for prior periods. Any failure to implement and maintain effective internal controls also could adversely affect the results of periodic management evaluations and annual independent registered public accounting firm attestation reports regarding the effectiveness of our internal control over financial reporting that we are required to include in our periodic reports we will file with the SEC under Section 404 of the Sarbanes-Oxley Act. Ineffective disclosure controls and procedures and internal control over financial reporting could also cause investors to lose confidence in our reported financial and other information.

In order to maintain and improve the effectiveness of our disclosure controls and procedures and internal control over financial reporting, we have expended and anticipate that we will continue to expend significant resources, including accounting-related costs, and provide significant management oversight. Any failure to maintain the adequacy of our internal controls, or consequent inability to produce accurate financial statements on a timely basis, could increase our operating costs and could materially and adversely affect our ability to operate our business. If our internal controls are perceived as inadequate or as unable to produce timely or accurate financial statements, investors may lose confidence in our operating results and our stock price could decline.

Our independent registered public accounting firm is not required to formally attest to the effectiveness of our internal control over financial reporting until after we are no longer an emerging growth company. At such time, our independent registered public accounting firm may issue a report that is adverse in the event it is not satisfied with the level at which our controls are documented, designed or operating. Any failure to maintain effective disclosure controls and internal control over financial reporting could have a material and adverse effect on our business and operating results.

Changes in tax laws or exposure to additional income tax liabilities could affect our future profitability.

Factors that could materially affect our future effective tax rates include but are not limited to:

- changes in tax laws or the regulatory environment;
- changes in accounting and tax standards or practices;
- changes in the composition of operating income by tax jurisdiction; and
- our operating results before taxes.

Because we do not have a long history of operating at our present scale and we have significant expansion plans, our effective tax rate may fluctuate in the future. Future effective tax rates could be affected by operating losses in jurisdictions where no tax benefit can be recorded under GAAP, changes in the composition of earnings in countries with differing tax rates, changes in deferred tax assets and liabilities, or changes in tax laws.

On December 22, 2017, the Tax Cuts and Jobs Act of 2017 (the “Tax Act”), was signed into law making significant changes to the Internal Revenue Code of 1986, as amended (the “Code”). In particular, sweeping changes were made to the U.S. taxation of foreign operations. Changes include, but are not limited to, a permanent reduction to the corporate income tax rate, limiting interest deductions, adopting elements of a territorial tax system, assessing a repatriation tax or “toll-charge” on undistributed earnings and profits of U.S.-owned foreign corporations, and introducing certain anti-base erosion provisions, including a new minimum tax on global intangible low-taxed income and base erosion and anti-abuse tax. The new legislation had no effect on our provision for income taxes because we incurred losses in the U.S. in the years since the Tax Act was enacted, and the management set up a full valuation allowance against our U.S. federal and states deferred tax assets.

Additionally, in August 2022, the U.S. government enacted the Inflation Reduction Act of 2022 (the “IRA”) which includes changes to the U.S. corporate income tax system, a 15% book minimum tax on corporations with three-year average annual adjusted financial statement income exceeding $1.0 billion, which will become effective in fiscal year 2024, and a 1% excise tax on share repurchases after December 31, 2022.

In addition to the impact of the Tax Act and the IRA on our federal taxes, the Tax Act and the IRA may impact our taxation in other jurisdictions, including with respect to state income taxes. There is uncertainty as to how the laws will apply in the various state jurisdictions. Additionally, other foreign governing bodies may enact changes to their tax laws that could result in changes to our global tax position and materially adversely affect our business, results of operations and financial condition. Additionally, the IRS and several foreign tax authorities have increasingly focused attention on intercompany transfer pricing with respect to sales of products and services and the use of intangibles. Tax authorities could disagree with our future intercompany charges, cross-jurisdictional transfer pricing or other matters and assess additional taxes. If we do not prevail in any such disagreements, our profitability may be affected. Furthermore, member states of the Organization for Economic Co-Operation and Development are continuing discussions surrounding fundamental changes to the taxing rights of governments and allocation of profits among tax jurisdictions in which companies do business, including proposed rules on the implementation of a global minimum tax. Although it is uncertain if some or all of these proposals will be enacted, a significant change in U.S. tax law, or that of other countries where we operate or have a presence, may materially and adversely impact our income tax liability, provision for income taxes and effective tax rate. We regularly assess all of these matters to determine the adequacy of our income tax provision, which is subject to judgment.

Our ability to use our net operating loss carryforwards and certain other tax attributes may be limited.

As of December 31, 2022, we had $119.8 million of U.S. federal and $46.4 million of state net operating loss carryforwards available to reduce future taxable income. Of the $119.8 million in U.S. federal net operating loss carryforwards, $117.4 million post-2017 Federal net operating loss carryover will be carried forward indefinitely for U.S. federal tax purposes and $2.4 million pre-2018 Federal net operating loss carryover will begin to expire in 2037. $46.4 million of our U.S. state net operating loss carryforwards will begin to expire in 2037. It is possible that we will not generate taxable income in time to use these net operating loss carryforwards before their expiration or at all. Under legislative changes made in December 2017, U.S. federal net operating losses incurred in 2018 and in future years may be carried forward indefinitely, but the deductibility of such net operating losses is limited. It is uncertain if and to what extent various states will conform to the newly enacted federal tax law. In addition, the federal and state net operating loss carryforwards and certain tax credits may be subject to significant limitations under Section 382 and Section 383 of the Code, respectively, and similar provisions of state law. Under those sections of the Code, if a corporation undergoes an "ownership change," the corporation's ability to use its pre-change net operating loss carryforwards and other pre-change attributes, such as research tax credits, to offset its post-change income or tax may be limited. In general, an "ownership change" will occur if there is a cumulative change in our ownership by "5-percent shareholders" that exceeds 50 percentage points over a rolling three-year period. Similar rules may apply under state tax laws. We have not yet undertaken an analysis of whether the Business Combination constituted or whether the Transaction may constitute an "ownership change" for purposes of Section 382 and Section 383 of the Code. In addition, certain U.S. states have imposed additional limitations on the use of net operating loss carryforwards not otherwise imposed on the use of U.S. federal net operating loss carryforwards and may impose additional limitations in the future.

Our business depends substantially on the efforts of our co-founder and Chief Executive Officer, Dr. Jun Pei, and our other executive officers and highly skilled personnel, and our operations may be severely disrupted if we lost their services.

We are highly dependent on Dr. Jun Pei, our Chief Executive Officer. Dr. Pei is deeply involved in our business. The loss of Dr. Pei would adversely affect our business because the loss could make it more difficult to, among other things, compete with other market participants, manage our R&D activities and retain existing customers or cultivate new ones. Negative public perception of, or negative news related, to Dr. Pei may adversely affect our brand, relationship with customers or standing in the industry.

Further, competition for highly-skilled personnel is often intense, especially in San Jose, California, where we are headquartered, and we may incur significant costs to attract highly-skilled personnel. We may not be successful in attracting, integrating, or retaining qualified personnel to fulfill our current or future needs. We have, from time-to-time, experienced, and we expect to continue to experience, difficulty in hiring and retaining highly skilled employees with appropriate qualifications. In addition, job candidates and existing employees often consider the value of the equity awards they receive in connection with their employment. If the perceived value of our equity or equity awards declines, this may adversely affect our ability to retain highly skilled employees. If we fail to attract new personnel or fail to retain and motivate our current personnel, our business and future growth prospects could be adversely affected.

Unanticipated changes in effective tax rates or adverse outcomes resulting from examination of our income or other tax returns could adversely affect our financial condition and results of operations.

We are subject to income taxes in the United States and other jurisdictions, and our tax liabilities will be subject to the allocation of expenses in differing jurisdictions. Our future effective tax rates could be subject to volatility or adversely affected by a number of factors, including:

- changes in the valuation of our deferred tax assets and liabilities;
- expected timing and amount of the release of any tax valuation allowances;
- tax effects of stock-based compensation;

- costs related to intercompany restructurings;
- changes in tax laws, regulations, or interpretations thereof; or
- lower than anticipated future earnings in jurisdictions where we have lower statutory tax rates and higher than anticipated future earnings in jurisdictions where we have higher statutory tax rates.

In addition, we may be subject to audits of our income, sales and other transaction taxes by taxing authorities. Outcomes from these audits could have an adverse effect on our financial condition and results of operations.

Our business has been, and may continue to be, adversely affected by the ongoing COVID-19 pandemic or other health epidemics and outbreaks.

The ongoing COVID-19 pandemic, and preventative measures taken to contain or mitigate it, have caused, and may continue to cause, a material adverse impact on our business. The emergence of another pandemic, epidemic or infectious disease outbreak could have a similar effect. The impacts of such health crises may include: reduction or suspension of operations in the U.S. or other areas in which we, our suppliers or our customers operate; supply chain disruptions, delayed order fulfillment and delayed or reduced revenue recognition; reduced access to the financial and credit markets or other adverse macroeconomic conditions. The extent of the impact of such events on our business and financial results cannot be predicted and our business, results of operations and ability to raise capital may be materially and adversely affected.

Our business is subject to the risks of earthquakes, fire, floods and other natural catastrophic events, global pandemics, and interruptions by man-made problems, such as terrorism and war. Material disruptions of our business or information systems resulting from these events could adversely affect our operating results.

A significant natural disaster, such as an earthquake, fire, flood, hurricane or significant power outage or other similar events, such as infectious disease outbreaks or pandemic events, including the ongoing COVID-19 pandemic, could have an adverse effect on our business and operating results. The ongoing COVID-19 pandemic may have the effect of heightening many of the other risks described in this "*Risk Factors*" section, such as the demand for our products, our ability to achieve or maintain profitability and our ability to raise additional capital in the future. Our corporate headquarters and R&D and manufacturing base are located in the San Francisco Bay Area of California, a region known for seismic activity. In addition, natural disasters, acts of terrorism or war could cause disruptions in our remaining manufacturing operations, or in our customers' or channel partners', or our suppliers' businesses, or the economy as a whole. We also rely on information technology systems to communicate among our workforce and with third parties. Any disruption to our communications, whether caused by a natural disaster or by manmade problems, such as power disruptions or cybersecurity problems, could adversely affect our business. We do not have a formal disaster recovery plan or policy in place and do not currently require that our suppliers' partners have such plans or policies in place. To the extent that any such disruptions result in delays or cancellations of orders or impede our suppliers' ability to timely deliver product components, or the deployment of our products, our business, operating results, and financial condition would be adversely affected.

Interruption or failure of our information technology and communications systems could impact our ability to effectively provide our services.

We plan to include in-vehicle services and functionality that utilize data connectivity to monitor performance and timely capture opportunities to enhance performance and functionality. The availability and effectiveness of our services depend on the continued operation of information technology and communications systems. Our systems will be vulnerable to damage or interruption from, among others, physical theft, fire, terrorist attacks, natural disasters, power loss, war, telecommunications failures, viruses, denial or degradation of service attacks, ransomware, social engineering schemes, insider theft or misuse or other attempts to harm our systems. We utilize reputable third-party service providers or vendors for all of our data other than our source code, and these providers could also be vulnerable to harms similar to those that could damage our systems, including sabotage and intentional acts of vandalism causing potential disruptions. Some of our systems will not be fully redundant, and our disaster recovery planning cannot account for all eventualities. Any problems with our third-party cloud hosting providers could result in lengthy interruptions in our business. In addition, our in-vehicle services and functionality are highly technical and include complex technology that may contain errors or vulnerabilities that could result in interruptions in our business or the failure of our systems.

We are subject to cybersecurity risks to operational systems, security systems, infrastructure, integrated software in our lidar solutions and customer data processed by us or third-party vendors or suppliers and any material failure, weakness, interruption, cyber event, incident or breach of security could prevent us from effectively operating our business and subject us to regulatory actions or litigation.

We are at risk for interruptions, outages and breaches of: operational systems, including business, financial, accounting, product development, data processing or production processes, owned by us or our third-party vendors or suppliers; facility security systems, owned by us or our third-party vendors or suppliers; in-product technology owned by us or our third-party vendors or suppliers; the integrated software in our lidar solutions; or customer or driver data that we process or our third-party vendors or suppliers process on our behalf. Such cyber incidents could materially disrupt our operational systems; result in loss of intellectual property, trade secrets or other proprietary or competitively sensitive information; compromise certain information of customers, employees, suppliers, drivers or others; jeopardize the security of our facilities; or affect the performance of in-product technology and the integrated software in our lidar solutions. A cyber incident could be caused by disasters, insiders (through inadvertence or with malicious intent) or malicious third parties (including nation-states or nation-state supported actors) using sophisticated, targeted methods to circumvent firewalls, encryption and other security defenses, including hacking, fraud, trickery or other forms of deception. The techniques used by cyber attackers change frequently and may be difficult to detect for long periods of time. Although we maintain information technology measures designed to protect us against intellectual property theft, data breaches and other cyber incidents, such measures will require updates and improvements, and we cannot guarantee that such measures will be adequate to detect, prevent or mitigate cyber incidents. The implementation, maintenance, segregation and improvement of these systems requires significant management time, support and cost. Moreover, there are inherent risks associated with developing, improving, expanding and updating current systems, including the disruption of our data management, procurement, production execution, finance, supply chain and sales and service processes. These risks may affect our ability to manage our data and inventory, procure parts or supplies or produce, sell, deliver and service our solutions, adequately protect our intellectual property or achieve and maintain compliance with, or realize available benefits under, applicable laws, regulations and contracts. We cannot be sure that the systems upon which we rely, including those of our third-party vendors or suppliers, will be effectively implemented, maintained or expanded as planned. If we do not successfully implement, maintain or expand these systems as planned, our operations may be disrupted, our ability to accurately and timely report our financial results could be impaired, and deficiencies may arise in our internal control over financial reporting, which may impact our ability to certify our financial results. Moreover, our proprietary information or intellectual property could be compromised or misappropriated and our reputation may be adversely affected. If these systems do not operate as we expect them to, we may be required to expend significant resources to make corrections or find alternative sources for performing these functions.

A significant cyber incident could impact production capability, harm our reputation, cause us to breach our contracts with other parties or subject us to regulatory actions or litigation, any of which could materially affect our business, prospects, financial condition and operating results. In addition, our insurance coverage for cyber-attacks may not be sufficient to cover all the losses we may experience as a result of a cyber incident.

We have identified a material weakness in our internal control over financial reporting. If our remediation of this material weakness is not effective, or if we experience additional material weaknesses in the future or otherwise fail to maintain an effective system of internal controls in the future, we may not be able to accurately or timely report our financial condition or results of operations, which may adversely affect investor confidence in us and, as a result, the value of our common stock.

Prior to the consummation of the Business Combination, we were a private company with limited accounting personnel and other resources with which to address our internal control over financial reporting. In connection with the preparation of our consolidated financial statements as of December 31, 2021, we identified a material weakness in our internal control over financial reporting, as described in Item 9A. *Controls and Procedures* in this Report, which continued to exist with respect to our internal control over financial reporting as of December 31, 2022.

We cannot assure you that additional significant deficiencies or material weaknesses in our internal control over financial reporting will not be identified in the future. Any failure to maintain or implement required new or improved controls, or to implement our remediation plans or any difficulties we encounter in our implementation thereof, could result in additional significant deficiencies or material weaknesses or result in material misstatements in our financial statements. If we are unable to assert that our internal control over financial reporting is effective, or if our independent registered public accounting firm is unable to express an opinion as to the effectiveness of our internal control over financial reporting when required, lenders and investors may lose confidence in the accuracy and completeness of our financial reports.

This material weakness, if not remediated, could result in misstatements of accounts or disclosures that would result in a material misstatement to the annual or interim consolidated financial statements that would not be prevented or detected.

Our management anticipates that our internal control over financial reporting will not be effective until the above material weakness is remediated. If our remediation of this material weakness is not effective, or we experience additional material weaknesses in the future or otherwise fail to maintain an effective system of internal control over financial reporting in the future, the accuracy and timing of our financial reporting may be adversely affected, we may be unable to maintain compliance with securities law requirements regarding timely filing of periodic reports in addition to the Nasdaq listing requirements, investors may lose confidence in our financial reporting, and the price of our common stock may decline as a result. In addition, we may be unable to sell shares of common stock to Lincoln Park pursuant to the Purchase Agreement at prices we consider to be reasonable or at all and we may face restricted access to various sources of financing in the future.

We hired additional accounting staff during the year ended December 31, 2022 and we will continue to evaluate our accounting and financial needs in light of the material weakness described above. While we have made progress to enhance our internal control over financial reporting and will continue to devote effort in control remediation, additional time is required to complete implementation and to assess and ensure the sustainability of these procedures. Accordingly, the material weakness cannot be considered remediated until the applicable controls operate for a sufficient period of time and management has concluded, through testing, that these controls are operating effectively.

We are currently operating in a period of economic uncertainty and capital markets disruption, which has been significantly impacted by geopolitical instability due to the ongoing military conflict between Russia and Ukraine. Our business, financial condition and results of operations could be materially adversely affected by any negative impact on the global economy and capital markets resulting from the conflict in Ukraine or any other geopolitical tensions.

U.S. and global markets are experiencing volatility and disruption following the escalation of geopolitical tensions and the start of the military conflict between Russia and Ukraine. Although the length and impact of the ongoing military conflict is highly unpredictable, the conflict in Ukraine has caused, and could continue to cause, market disruptions, including significant volatility in commodity prices, credit and capital markets, as well as supply chain interruptions. We are continuing to monitor the situation in Ukraine and globally and assessing its potential impact on our business.

Additionally, the military conflict in Ukraine has led to sanctions and other penalties being levied by the United States, European Union and other countries against Russia. Additional potential sanctions and penalties have also been proposed and/or threatened. Russian military actions and the resulting sanctions could adversely affect the global economy and financial markets and lead to instability and lack of liquidity in capital markets, potentially making it more difficult for us to obtain additional funds.

It is impossible to predict the extent to which our operations, or those of our suppliers and manufacturers, will be impacted in the short and long term, or the ways in which the conflict may impact our business. The extent and duration of the military action, sanctions and resulting market disruptions are impossible to predict, but could be substantial. Any such disruptions may also magnify the impact of other risks described herein.

Legal and Regulatory Risks Related to Our Business

We are subject to governmental export and import control laws and regulations. Our failure to comply with these laws and regulations could have an adverse effect on our business, prospects, financial condition and results of operations.

Our products and solutions are subject to export control and import laws and regulations, including the U.S. Export Administration Regulations, U.S. Customs regulations and various economic and trade sanctions regulations administered by the U.S. Treasury Department's Office of Foreign Assets Controls and other agencies. U.S. export control laws and regulations and economic sanctions prohibit the shipment of certain products and services to

U.S. embargoed or sanctioned countries, governments and persons. In addition, complying with export control and sanctions regulations for a particular sale may be time-consuming and result in the delay or loss of sales opportunities. Exports of our products and technology must be made in compliance with these laws and regulations. If we fail to comply with these laws and regulations, we and certain of our employees could be subject to substantial civil or criminal penalties, including the possible loss of export or import privileges and fines, which may be imposed on us and responsible employees or managers and, in extreme cases, the incarceration of responsible employees or managers.

Changes to trade policy, tariffs and import/export regulations may have a material adverse effect on our business, financial condition and results of operations.

Changes in global political, regulatory and economic conditions or in laws and policies governing foreign trade, manufacturing, development and investment in the territories or countries where we may purchase our components, sells our products or conducts our business could adversely affect our business. The U.S. has recently instituted or proposed changes in trade policies that include the negotiation or termination of trade agreements, the imposition of higher tariffs on imports into the U.S., economic sanctions on individuals, corporations or countries, and other government regulations affecting trade and investments between the U.S. and other countries where we conduct our business.

A number of other nations have proposed or instituted similar measures directed at trade with the United States in response. As a result of these developments, there may be greater restrictions and economic disincentives on international trade that could adversely affect our business. For example, such changes could adversely affect the Automotive market, our ability to access key components or raw materials needed to manufacture our products (including, but not limited to, rare-earth metals), our ability to sell our products to customers outside of the U.S. and the demand for our products. It may be time-consuming and expensive for us to alter our business operations to adapt to or comply with any such changes, and any failure to do so could have a material adverse effect on our business, financial condition and results of operations.

We have in the past and may become involved in legal and regulatory proceedings and commercial or contractual disputes, which could have an adverse effect on our profitability and consolidated financial position.

We may, from time to time, be involved in litigation, regulatory proceedings and commercial or contractual disputes that may be significant. These matters may include, without limitation, disputes with our suppliers and customers, intellectual property claims, stockholder litigation, securities litigation, government investigations, class action lawsuits, personal injury claims, environmental issues, customs and value-added tax disputes and employment and tax issues.

In addition, we may, from time to time, be involved in a variety of labor and employment claims, which could include but are not limited to general discrimination, wage and hour, privacy, ERISA or disability claims. In such matters, government agencies or private parties may seek to recover from us very large, indeterminate amounts in penalties or monetary damages (including, in some cases, treble or punitive damages) or seek to limit our operations in some way. These types of lawsuits could require significant management time and attention or could involve substantial legal liability, adverse regulatory outcomes, and/or substantial expenses to defend. Often these cases raise complex factual and legal issues and create risks and uncertainties. No assurances can be given that any proceedings and claims will not have a material adverse impact on our operating results and consolidated financial position or that our established reserves or our available insurance will mitigate this impact.

We are subject to, and must remain in compliance with, numerous laws and governmental regulations across various jurisdictions concerning the manufacturing, use, distribution and sale of our products. Some of our customers also require that we comply with their own unique requirements relating to these matters. These could impose substantial costs upon us and materially impact our ability to fulfill certain business opportunities.

We manufacture and sell products that contain electronic components, which may contain materials that are subject to government regulation in both the locations where we manufacture and assemble our products, as well as the locations where we sell our products. For example, certain regulations limit the use of lead in electronic components. Since we operate on a global basis, this is a complex process which requires continual monitoring of regulations and an ongoing compliance process to ensure that we and our suppliers and distributors are in compliance with existing regulations in each market where we operate. If there is an unanticipated new regulation that significantly impacts our use and sourcing of various components or requires more expensive components, that regulation could materially adversely affect our business, results of operations and financial condition by subjecting substantial costs upon us and impeding our ability to fulfill certain business opportunities. Our products are used for autonomous driving and ADAS applications, which are subject to complicated regulatory schemes that vary from jurisdiction to jurisdiction. These are rapidly evolving areas where new regulations could impose limitations on the use of lidar generally or our products specifically. If we fail to adhere to these new regulations or fail to continually monitor the updates, we may be subject to litigation, loss of customers or negative publicity and our business, results of operations and financial condition will be adversely affected.

We are subject to various environmental laws and regulations that could impose substantial costs upon us.

Concerns over environmental pollution and climate change have produced significant legislative and regulatory efforts on a global basis, and we believe this will continue both in scope and in the number of countries participating. In addition, as climate change issues become more prevalent, foreign, federal, state and local governments and our customers have been responding to these issues. The increased focus on environmental sustainability may result in new regulations and customer requirements, or changes in current regulations and customer requirements, which could materially adversely impact our business, results of operations and financial condition. If we are unable to effectively manage real or perceived issues, including concerns about environmental impacts or similar matters, sentiments toward us or our products could be negatively impacted, and our business, results of operations or financial condition could suffer.

Our operations are and will be subject to international, federal, state and local environmental laws and regulations, and such laws and regulations could directly increase the cost of energy, which may have an effect on the way we manufacture products or utilize energy to produce our products. In addition, any new environmental laws or regulations might increase the cost of raw materials or key components we use in our products. Environmental regulations require us to reduce product energy usage, monitor and exclude an expanding list of restricted substances and to participate in required recovery and recycling of our products. Environmental and health and safety laws and regulations can be complex, and we have limited experience complying with them. Capital and operating expenses needed to comply with environmental laws and regulations can be significant, and violations may result in substantial fines and penalties, third-party damages, suspension of production or a cessation of our operations.

Contamination at properties we operate, we formerly operated or to which hazardous substances were sent by us, may result in liability for us under environmental laws and regulations, including, but not limited to, the Comprehensive Environmental Response, Compensation and Liability Act, which can impose liability for the full amount of remediation-related costs without regard to fault, for the investigation and cleanup of contaminated soil and ground water, for building contamination and impacts to human health and for damages to natural resources. The costs of complying with environmental laws and regulations and any claims concerning noncompliance, or liability with respect to contamination in the future, could have a material adverse effect on our financial condition or operating results. We may face unexpected delays in obtaining the required permits and approvals in connection with our planned production facilities that could require significant time and financial resources and delay our ability to operate these facilities, which would adversely impact our business, prospects, financial condition and operating results.

We are subject to U.S. and foreign anti-corruption and anti-money laundering laws and regulations. We can face criminal liability and other serious consequences for violations, which can harm our business.

We are subject to the U.S. Foreign Corrupt Practices Act of 1977, as amended, the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the U.S. Travel Act, the USA PATRIOT Act and possibly other anti-bribery and anti-money laundering laws in countries in which we conduct activities. Anti-corruption laws are interpreted broadly and prohibit companies and their employees, agents, contractors and other collaborators from authorizing, promising, offering or providing, directly or indirectly, improper payments or anything else of value to recipients in the public or private sector. We can be held liable for the corrupt or other illegal activities of our employees, agents, contractors and other collaborators, even if we do not explicitly authorize or have actual knowledge of such activities. Any violations of the laws and regulations described above may result in substantial civil and criminal fines and penalties, imprisonment, the loss of export or import privileges, debarment, tax reassessments, breach of contract and fraud litigation, reputational harm and other consequences.

Our business may be adversely affected by changes in automotive and laser safety regulations or concerns that drive further regulation of the automotive and laser markets.

Government product safety regulations are an important factor for our business. Historically, these regulations have imposed ever-more stringent safety regulations for vehicles and laser products. These safety regulations often require, or customers demand that, vehicles have more safety features per vehicle and more advanced safety products.

While we believe increasing automotive and laser safety standards will present a market opportunity for our products, government safety regulations are subject to change based on a number of factors that are not within our control, including, among others, new scientific or technological data, adverse publicity regarding the industry recalls and safety risks of autonomous driving and ADAS, accidents involving our products, domestic and foreign political developments or considerations, and litigation relating to our products and our competitors' products. Changes in automotive, lidar sensor and safety government regulations, especially in the autonomous driving and ADAS industries, could adversely affect our business. If government priorities shift and we are unable to adapt to changing regulations, our business may be materially and adversely affected.

Federal and local regulators impose more stringent compliance and reporting requirements in response to product recalls and safety issues in the automotive and laser industry. We are subject to existing stringent requirements under the National Traffic and Motor Vehicle Safety Act of 1966 (the "Vehicle Safety Act"), including a duty to report, subject to strict timing requirements, safety defects with our products. The Vehicle Safety Act imposes potentially significant civil penalties for violations including the failure to comply with such reporting actions. We are also subject to the existing U.S. Transportation Recall Enhancement, Accountability and Documentation Act ("TREAD"), which requires equipment manufacturers, such as us, to comply with "Early Warning" requirements by reporting certain information to the National Highway Traffic Safety Administration ("NHTSA"), such as information related to defects or reports of injury related to our products. TREAD imposes criminal liability for violating such requirements if a defect subsequently causes death or bodily injury. In addition, the National Traffic and Motor Vehicle Safety Act authorizes NHTSA to require a manufacturer to recall and repair vehicles that contain safety defects or fail to comply with U.S. federal motor vehicle safety standards. Sales into foreign countries may be subject to similar regulations. If we cannot rapidly address any safety concerns or defects with our products, our business, results of operations and financial condition may be adversely affected.

The U.S. Department of Transportation issued regulations in 2016 that require manufacturers of certain autonomous vehicles to provide documentation covering specific topics to regulators, such as how automated systems detect objects on the road, how information is displayed to drivers, what cybersecurity measures are in place and the methods used to test the design and validation of autonomous driving systems. As cars that carry our sensors go into production, the obligations of complying with safety regulations could increase and it could require increased resources and adversely affect our business.

Autonomous and ADAS features may be delayed in adoption by OEMs, and our business impacted, as additional safety requirements are imposed on vehicle manufacturers.

The ADAS market is fast evolving and there is generally a lack of an established regulatory framework. Vehicle regulators globally continue to consider new and enhanced emissions requirements, including electrification, to meet environmental and economic needs as well as pursue new safety standards to address emerging traffic risks. To control new vehicle prices, among other concerns, OEMs may need to dedicate technology and cost additions to new vehicle designs to meet these emissions and safety requirements and postpone the consumer cost pressures of new autonomous and ADAS features. As additional safety requirements are imposed on vehicle manufacturers, our business may be materially impacted.

Our business may be adversely affected if it fails to comply with the regulatory requirements under the Federal Food, Drug, and Cosmetic Act or the Food and Drug Administration.

As a lidar technology company, we, as well as any potential collaborative partners such as distributors, are subject to the Electronic Product Radiation Control Provisions of the Federal Food, Drug, and Cosmetic Act, which includes regulations of laser technology. These requirements are enforced by the FDA. Regulations governing these products are intended to protect the public from hazardous or unnecessary exposure. Manufacturers are required to certify in product labeling and reports to the FDA that their products comply with applicable performance standards as well as maintain manufacturing, testing, and distribution records for their products. Our, or any of our potential collaborative partners such as distributors', failure to comply with these requirements could result in enforcement action by the FDA, which could require us to cease distribution of our products, recall or remediate products already distributed to customers, or subject us to FDA enforcement.

We are subject to data privacy and cybersecurity risks to operational systems, security systems, infrastructure, integrated software in our lidar solutions and customer data processed by us or third-party vendors or suppliers and any material failure, weakness, interruption, cyber event, incident or breach of security could prevent us from effectively operating our business and subject us to regulatory actions or litigation.

Our current and potential future operations and sales subject us to laws and regulations addressing privacy and the collection, use, storage, disclosure, transfer and protection of a variety of types of data. For example, the European Commission has adopted the General Data Protection Regulation and California recently enacted the California Consumer Privacy Act of 2018, both of which provide for potentially material penalties for non-compliance. These regimes may, among other things, impose data security requirements, disclosure requirements, and restrictions on data collection, uses, and sharing that may impact our operations and the development of our business. While, generally, we do not have access to, collect, store, process, or share certain information collected by our solutions unless our customers choose to proactively provide such information to us, our products may evolve both to address potential customer requirements or to add new features and functionality. Therefore, the full impact of these privacy regimes on our business is rapidly evolving across jurisdictions and remains uncertain at this time.

We may also be affected by cyber-attacks and other means of gaining unauthorized access to our products, systems, and data. For instance, cyber criminals or insiders may target us or third parties with which it has business relationships to obtain data, or in a manner that disrupts our operations or compromises our products or the systems into which our products are integrated.

Since privacy and data security regimes are evolving, uncertain and complex, especially for a global business like ours, it may need to update or enhance our compliance measures as our products, markets and customer demands further develop, and these updates or enhancements may require implementation costs. In addition, we may not be able to monitor and react to all developments in a timely manner. The compliance measures we do adopt may prove ineffective. Any failure, or perceived failure, by us to comply with current and future regulatory or customer-driven privacy, data protection, and information security requirements, or to prevent or mitigate security breaches, cyber-attacks, or improper access to, use of, or disclosure of data, or any security issues or cyber-attacks affecting us, could result in significant liability, costs (including the costs of mitigation and recovery), and a material loss of revenue resulting from the adverse impact on our reputation and brand, loss of proprietary information and data, disruption to our business and relationships, and diminished ability to retain or attract customers and business partners. Such events may result in governmental enforcement actions and prosecutions, private litigation, fines and penalties or adverse publicity, and could cause customers and business partners to lose trust in us, which could have an adverse effect on our reputation and business.

Regulations related to conflict minerals may cause us to incur additional expenses and could limit the supply and increase the costs of certain metals used in the manufacturing of our products.

We are subject to the requirements under the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the "Dodd-Frank Act") that will require us to determine, disclose and report whether our products contain conflict minerals. The implementation of these requirements could adversely affect the sourcing, availability and pricing of the materials used in the manufacture of components used in our products. In addition, we will incur additional costs to comply with the disclosure requirements, including costs related to conducting diligence procedures to determine the sources of conflict minerals that may be used in or necessary to the production of our products and, if applicable, potential changes to products, processes or sources of supply as a consequence of such verification activities. It is also possible that our reputation may be adversely affected if we determine that certain of our products contain minerals not determined to be conflict-free or if we are unable to alter our products, processes or sources of supply to avoid use of such materials.

Risks Related to Our Intellectual Property

Despite the actions we are taking to defend and protect our intellectual property, we may not be able to adequately protect or enforce our intellectual property rights or prevent unauthorized parties from copying or reverse engineering our solutions. Our efforts to protect and enforce our intellectual property rights and prevent third parties from violating our rights may be costly.

The success of our products and our business depend in part on our ability to obtain patents and other intellectual property rights and maintain adequate legal protection for our products in the United States and other international jurisdictions. We rely on a combination of patent, service mark, trademark and trade secret laws, as well as confidentiality procedures and contractual restrictions, to establish and protect our proprietary rights, all of which provide only limited protection.

We cannot assure you that any patents will be issued with respect to our currently pending patent applications or that any trademarks will be registered with respect to our currently pending applications in a manner that gives us adequate defensive protection or competitive advantages, if at all, or that any patents issued to us or any trademarks registered by us will not be challenged, invalidated or circumvented. We have filed for patents and trademarks in the United States and in certain international jurisdictions, but such protections may not be available in all countries in which we operate or in which we seek to enforce our intellectual property rights, or may be difficult to enforce in practice. Our currently-issued patents and trademarks and any patents and trademarks that may be issued or registered, as applicable, in the future with respect to pending or future applications may not provide sufficiently broad protection or may not prove to be enforceable in actions against alleged infringers. Our foreign intellectual property portfolio is not as comprehensive as our U.S. intellectual property portfolio and may not protect our intellectual property in some countries where our products are sold or may be sold in the future. We cannot be certain that the steps we have taken will prevent unauthorized use of our technology or the reverse engineering of our technology. Moreover, others may independently develop technologies that are competitive to us or infringe our intellectual property.

Protecting against the unauthorized use of our intellectual property, products and other proprietary rights is expensive and difficult, particularly internationally. We believe that our patents are foundational in the area of lidar products and intend to enforce the intellectual property portfolio we have built over the years. Unauthorized parties may attempt to copy or reverse engineer our lidar technology or certain aspects of our solutions that we consider proprietary. Litigation may be necessary in the future to enforce or defend our intellectual property rights, to prevent unauthorized parties from copying or reverse engineering our solutions, to determine the validity and scope of the proprietary rights of others or to block the importation of infringing products into the United States.

Any such litigation, whether initiated by us or a third party, could result in substantial costs and diversion of management resources, either of which could adversely affect our business, operating results and financial condition. Even if we obtain favorable outcomes in litigation, we may not be able to obtain adequate remedies, especially in the context of unauthorized parties copying or reverse engineering our solutions.

Further, many of our current and potential competitors have the ability to dedicate substantially greater resources to defending intellectual property infringement claims and to enforcing their intellectual property rights than we have. Attempts to enforce our rights against third parties could also provoke these third parties to assert their own intellectual property or other rights against us or result in a holding that invalidates or narrows the scope of our rights, in whole or in part. Effective patent, trademark, service mark, copyright and trade secret protection may not be available in every country in which our products are available, and competitors based in other countries may sell infringing products in one or more markets. Failure to adequately protect our intellectual property rights could result in our competitors offering similar products, potentially resulting in the loss of some of our competitive advantage and a decrease in our revenue, which would adversely affect our business, operating results, financial condition and prospects.

Third-party claims that we are infringing intellectual property, whether successful or not, could subject us to costly and time-consuming litigation or expensive licenses, and our business could be adversely affected.

Although we hold key patents related to our products, a number of companies, both within and outside of the lidar industry, hold other patents covering aspects of lidar products. In addition to these patents, participants in this industry typically also protect their technology, especially embedded software, through copyrights and trade secrets.

As a result, there is frequent litigation based on allegations of infringement, misappropriation or other violations of intellectual property rights. We have received, and in the future may receive, inquiries from other intellectual property holders and may become subject to claims that we infringe their intellectual property rights, particularly as we expand our presence in the market, expand to new use cases and face increasing competition. In addition, parties may claim that the names and branding of our products infringe their trademark rights in certain countries or territories. If such a claim were to prevail, we may have to change the names and branding of our products in the affected territories, and we could incur other costs.

We currently have a number of agreements in effect pursuant to which we have agreed to defend, indemnify and hold harmless our customers, suppliers, and channel partners and other partners from damages and costs which may arise from the infringement by our products of third-party patents or other intellectual property rights. The scope of these indemnity obligations varies, but may, in some instances, include indemnification for damages and expenses, including attorneys' fees. Our insurance may not cover all intellectual property infringement claims. A claim that our products infringe a third party's intellectual property rights, even if untrue, could adversely affect our relationships with our customers, may deter future customers from purchasing our products and could expose us to costly litigation and settlement expenses. Even if we are not a party to any litigation between a customer and a third party relating to infringement by our products, an adverse outcome in any such litigation could make it more difficult for us to defend our products against intellectual property infringement claims in any subsequent litigation in which we are a named party. Any of these results could adversely affect our brand and operating results.

We may in the future need to initiate infringement claims or litigation in order to try to protect our intellectual property rights. In addition to litigation where we are a plaintiff, our defense of intellectual property rights claims brought against us or our customers, suppliers and channel partners, with or without merit, could be time-consuming, expensive to litigate or settle, divert management resources and attention and force us to acquire intellectual property rights and licenses, which may involve substantial royalty or other payments and may not be available on acceptable terms or at all. Further, a party making such a claim, if successful, could secure a judgment that requires us to pay substantial damages or obtain an injunction, and we may also lose the opportunity to license our technology to others or to collect royalty payments. An adverse determination also could invalidate or narrow our intellectual property rights and adversely affect our ability to offer our products to our customers and may require that we procure or develop substitute products that do not infringe, which could require significant effort and expense. Any of these events could adversely affect our business, reputation, operating results, financial condition and prospects.

Our intellectual property applications for registration may not issue or be registered, which may have a material adverse effect on our ability to prevent others from commercially exploiting products similar to ours.

We cannot be certain that we are the first inventor of the subject matter to which we have filed a particular patent application, or if we are the first party to file such a patent application. If another party has filed a patent application to the same subject matter as we have, we may not be entitled to the protection sought by the patent application. We also cannot be certain whether the claims included in a patent application will ultimately be allowed in the applicable issued patent or the timing of any approval or grant of a patent application. Further, the scope of protection of issued patent claims is often difficult to determine. As a result, we cannot be certain that the patent applications that we file will issue, or that our issued patents will afford protection against competitors with similar technology. In addition, our competitors may design around our issued patents, which may adversely affect our business, prospects, financial condition and operating results.

In addition to patented technology, we rely on our unpatented proprietary technology, trade secrets, designs, experiences, work flows, data, processes, software and know-how.

We rely on proprietary information (such as trade secrets, designs, experiences, work flows, data, know-how and confidential information) to protect intellectual property that may not be patentable or subject to copyright, trademark, trade dress or service mark protection, or that we believe is best protected by means that do not require public disclosure. We generally seek to protect this proprietary information by entering into confidentiality agreements, or consulting, services or employment or other agreements with our employees, consultants, contractors and third parties. However, we may fail to enter into the necessary agreements, and even if entered into, these agreements may be breached or may otherwise fail to prevent disclosure, third-party infringement or misappropriation of our proprietary information, may be limited as to their term and may not provide an adequate remedy in the event of unauthorized disclosure or use of proprietary information. There are risks we might have limited control over the protection of trade secrets used by our current or future manufacturing partners and suppliers and could lose future trade secret protection if any unauthorized disclosure of such information occurs. In addition, our proprietary information may otherwise become known or be independently developed by our competitors or other third parties. To the extent that our employees, consultants, contractors, advisors and other third parties use intellectual property owned by others in their work for us, disputes may arise as to the rights in related or resulting know-how and inventions. Costly and time-consuming litigation could be necessary to enforce and determine the scope of our proprietary rights, and failure to obtain or maintain protection for our proprietary information could adversely affect our competitive business position. Furthermore, laws regarding trade secret rights in certain markets where we operate may afford little or no protection to our trade secrets.

We also rely on physical and electronic security measures to protect our proprietary information, but we cannot provide assurance that these security measures will not be breached or provide adequate protection for our property. There is a risk that third parties may obtain and improperly utilize our proprietary information to our competitive disadvantage. We may not be able to detect or prevent the unauthorized use of such information or take appropriate and timely steps to enforce our intellectual property rights.

We may be subject to damages resulting from claims that we or our current or former employees have wrongfully used or disclosed alleged trade secrets of our employees' former employers. We may be subject to damages if our current or former employees wrongfully use or disclose trade secrets.

We may be subject to claims that we or our current or former employees have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of a current or former employee's former employers. Litigation may be necessary to defend against these claims. If we fail in defending such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. A loss of key personnel or their work product could hamper or prevent our ability to commercialize our products, which could severely harm our business. Even if we are successful in defending against these claims, litigation could result in substantial costs and demand on management resources.

Risks Related to Being a Public Company

We will incur increased costs as a result of operating as a public company, and our management will devote substantial time to compliance with our public company responsibilities and corporate governance practices.

We will incur significant legal, accounting and other expenses as a result of being a public company that we did not incur as a private company, and these expenses may increase even more after we are no longer an emerging growth company, as defined in Section 2(a) of the Securities Act. As a public company, we are subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act, and the Dodd-Frank Act, as well as rules adopted, and to be adopted, by the SEC and Nasdaq, and other applicable securities rules and regulations, which impose various requirements on public companies, including the establishment and maintenance of effective disclosure and financial controls and changes in corporate governance practices. Our management and other personnel will need to devote a substantial amount of time to these public company requirements. Moreover, we expect these rules and regulations to substantially increase our legal and financial compliance costs and to make some activities more time-consuming and costly. The increased costs will increase our net loss. We may need to hire additional legal, accounting and financial staff with appropriate public company experience and technical accounting knowledge and maintain an internal audit function.

In addition, changing laws, regulations, and standards relating to corporate governance and public disclosure are creating uncertainty for public companies, increasing legal and financial compliance costs, and making some activities more time consuming. These laws, regulations, and standards are subject to varying interpretations and may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices. We intend to invest resources to comply with evolving laws, regulations, and standards, and this investment may result in increased general and continuing administrative expenses and a diversion of management's time and attention from revenue-generating activities to compliance activities. If our efforts to comply with new laws, regulations, and standards differ from the activities intended by regulatory or governing bodies due to ambiguities related to their application and practice, regulatory authorities may initiate legal proceedings against us, and our business may be adversely affected.

The rules and regulations applicable to public companies make it more expensive for us to obtain and maintain director and officer liability insurance, and we may be required to accept reduced coverage or incur substantially higher costs to obtain coverage. These factors could also make it more difficult for us to attract and retain qualified members of our board of directors, particularly to serve on our audit committee and compensation committee, and qualified executive officers.

We cannot predict or estimate the amount or timing of additional costs we may incur to respond to these requirements. The impact of these requirements could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, our board committees or as executive officers.

Our management team has limited experience managing a public company.

Most of the members of our management team have limited to no experience managing a publicly traded company, interacting with public company investors and complying with the increasingly complex laws pertaining to public companies. Our management team has not worked together at prior companies that were publicly traded. Our management team may not successfully or efficiently manage in their new roles and responsibilities.

Our transition to being a public company subjects us to significant regulatory oversight and reporting obligations under the federal securities laws and the continuous scrutiny of securities analysts and investors. These new obligations and constituents will require significant attention from our senior management and could divert their attention away from the day-to-day management of our business, which could adversely affect our business, financial condition, and operating results.

Risks Related to Ownership of Our Shares and Warrants

Koito has significant influence over us and may prevent other stockholders from influencing significant corporate decisions, and Koito may have interests that conflict with those of our other stockholders.

On October 27, 2022, we entered into an investment agreement with Koito, for the issuance and sale to Koito of 100,000 shares of Preferred Stock for a purchase price of $100.0 million. The sale of the Preferred Stock and related matters were approved by our stockholders on January 11, 2023, and the issuance and sale of the Preferred Stock was completed on January 19, 2023. The Preferred Stock will be convertible, beginning on January 19, 2024, into shares of our common stock at an approximate initial conversion price of $2.585 per share (subject to adjustment).

The Preferred Stock is initially convertible into shares of our common stock at a conversion price of $2.585 per share (subject to adjustment). On an as-converted basis, the Preferred Stock represented approximately 30% of our issued and outstanding common stock immediately following the closing. As a result, Koito is our largest stockholder. In addition, the terms of the Preferred Stock may prevent us from entering into certain acquisition or strategic transactions with a competitor of Koito unless Koito consents to such acquisitions or strategic transaction.

As of the date of this Report, Koito is entitled to have two designees appointed to our board of directors, and is also entitled to have such designees appointed to the Nominating and Corporate Governance Committee and Compensation Committee of our board of directors, subject to satisfaction of applicable committee membership requirements.

On January 19, 2023, we and Koito entered into an Investor Rights Agreement (the "Investor Rights Agreement"), pursuant to which, among other things, we are obligated to take all necessary action (to the extent not prohibited by law) to cause our board of directors to nominate for election that number of individuals designated by Koito that is proportional to the Koito's beneficial ownership interest in our common stock, provided, however, that Koito is not entitled to nominate for election a number of individuals that would constitute a majority of our board of directors. In addition, Koito's designation rights will be reduced to one director at such time as Koito ceases to beneficially own at least 10% of the outstanding shares of our common stock (on an as-converted basis) and Koito will no longer have any rights to designate a nominee to serve on our board of directors at such time as Koito ceases to beneficially own at least 5% of the outstanding shares of our common stock (on an as-converted basis).

Pursuant to the terms of the Investor Rights Agreement, the prior written consent of Koito (the "Investor Consent Rights") is now required for us to effect or validate certain enumerated actions in the Investor Rights Agreement for so long as Koito beneficially owns a number of shares of our common stock representing at least 75% of the number of shares of our common stock held by Koito as of the closing of the Preferred Stock issuance (after giving effect thereto and including the shares of common stock issuable upon conversion of the Preferred Stock), including, but not limited to: (i) issuing securities that are senior or pari passu to the Preferred Stock, (ii) declaring or paying dividends, (iii) acquiring, redeeming or repurchasing capital stock, (iv) incurring debt or liens for borrowed money in excess of specified amounts, (v) entering into related party transactions, (vi) amending our charter or bylaws, (vii) changing the size of our board of directors, (viii) adopting a poison pill (unless it grandfathers in Koito), (ix) making acquisitions in excess of specified amounts, (x) selling, leasing or transferring assets or properties, or incurring liens (other than certain permitted liens) in excess of specified amounts, (xi) increasing the number of shares of our common stock reserved for issuance under our existing equity incentive plans beyond automatic annual increases currently provided for under such plans, (xii) transfers or abandonment of, or incurrence of liens on, our material intellectual property and (xiii) capital expenditures in excess of specified amounts.

As a result, Koito may now be able to influence corporate matters and transactions. Koito's interests may not always coincide with our interests or the interests of our other stockholders, and Koito's ownership interest, together with the voting rights, director designation rights and consent rights described above, may be perceived negatively by other investors and, as a result, may adversely affect the market price of our common stock and may delay, deter or prevent acts that would be favored by our other stockholders.

The Preferred Stock will cause dilution to our current stockholders, which may negatively affect the market price of our common stock. Future sales by Koito or other holders may also negatively impact the price of our common stock.

As stated above, the Preferred Stock is initially convertible into shares of our common stock, at a conversion price of $2.585 per share (subject to adjustment). On an as-converted basis, the Preferred Stock represented approximately 20% of our issued and outstanding common stock immediately following the closing of the Preferred Stock issuance. As a result, Koito is our largest stockholder. This could have the effect of depressing the market price of our common stock. In addition, Koito and certain subsequent holders of Preferred Stock are and will be entitled to registration rights with respect to the underlying common stock and any sale of shares of Preferred Stock (or any shares of common stock issuable upon conversion thereof), or the anticipation of the possibility of such sales, could create downward pressure on the market price of our common stock. Furthermore, our current stockholders may decide to reduce their investment in us due to the changes to our investment profile as a result of Koito's influence and the rights granted to Koito, and may sell large amounts of common stock in the future. Such sales of our common stock could have the effect of depressing the market price for our common stock.

Our Amended and Restated Certificate of Incorporation requires, to the fullest extent permitted by law, that derivative actions brought in our name against our directors, officers, other employees or stockholders for breach of fiduciary duty and other similar actions may be brought only in the Court of Chancery in the State of Delaware, which may have the effect of discouraging lawsuits against our directors, officers, other employees or stockholders, as applicable.

Our Second Amended and Restated Certificate of Incorporation of the Company (the "Amended and Restated Certificate of Incorporation") requires, to the fullest extent permitted by law, that derivative actions brought in our name against our directors, officers, other employees or stockholders for breach of fiduciary duty and other similar actions may be brought only in the Court of Chancery in the State of Delaware or, if the Court of Chancery does not have subject matter jurisdiction, in the federal district court of the State of Delaware. This exclusive forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us, or any of our directors, officers, other employees or stockholders, which may discourage lawsuits with respect to such claims, although our stockholders will not be deemed to have waived their compliance with federal securities laws and the rules and regulations thereunder. However, there is no assurance that a court would enforce the choice of forum provision contained in our Amended and Restated Certificate of Incorporation. If a court were to find such provision to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could harm our business, operating results and financial condition.

Our Amended and Restated Certificate of Incorporation provides that the exclusive forum provision will be applicable to the fullest extent permitted by applicable law. Our Amended and Restated Certificate of Incorporation also provides that to the fullest extent permitted by applicable law, the federal district courts of the United States will be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act.

The exclusive forum provision will not apply to suits brought to enforce any duty or liability created by the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction. Section 27 of the Exchange Act creates exclusive federal jurisdiction over all suits brought to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder. As a result, federal courts will have exclusive jurisdiction over suits brought to enforce any duty or liability created by the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction. Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder. Accordingly, both state and federal courts have jurisdiction to entertain such claims. As noted above, our Amended and Restated Certificate of Incorporation provides that the federal district courts of the United States will be, to the fullest extent permitted by applicable law, the exclusive forum for the resolution of any complaint asserting a cause of action under the Securities Act. Due to the concurrent jurisdiction for federal and state courts created by Section 22 of the Securities Act over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder, there is uncertainty as to whether a court would enforce the exclusive form provision. Investors also cannot waive compliance with the federal securities laws and the rules and regulations thereunder.

Anti-takeover provisions contained in our Amended and Restated Certificate of Incorporation and the Bylaws, as well as provisions of Delaware law, could impair a takeover attempt.

Our Amended and Restated Certificate of Incorporation and the Bylaws of the Company (the "Bylaws") contain provisions that could have the effect of delaying or preventing changes in control or changes in our management without the consent of our board of directors. These provisions include:

- no cumulative voting in the election of directors, which limits the ability of minority stockholders to elect director candidates;
- the exclusive right of our board of directors to elect a director to fill a vacancy created by the expansion of the board of directors or the resignation, death, or removal of a director with or without cause by stockholders, which prevents stockholders from being able to fill vacancies on our board of directors;
- the ability of our board of directors to determine whether to issue shares of our preferred stock and to determine the price and other terms of those shares, including preferences and voting rights, without stockholder approval, which could be used to significantly dilute the ownership of a hostile acquirer;
- a prohibition on stockholder action by written consent, which forces stockholder action to be taken at an annual or special meeting of our stockholders;
- the requirement that a special meeting of stockholders may be called only by the board of directors, which may delay the ability of our stockholders to force consideration of a proposal or to take action, including the removal of directors;
- limiting the liability of, and providing indemnification to, our directors and officers;
- controlling the procedures for the conduct and scheduling of stockholder meetings;
- providing for a staggered board, in which the members of the board of directors are divided into three classes to serve for a period of three years from the date of their respective appointment or election;
- granting the ability to remove directors with cause by the affirmative vote of 66 ⅔% in voting power of the outstanding shares of common stock entitled to vote thereon;
- requiring the affirmative vote of at least 66 ⅔% of the voting power of the outstanding shares of our capital stock entitled to vote generally in the election of directors, voting together as a single class, to amend the Bylaws or Articles V, VI, VII, VIII, IX and X of our Amended and Restated Certificate of Incorporation; and
- advance notice procedures that stockholders must comply with in order to nominate candidates to our board of directors or to propose matters to be acted upon at a stockholders' meeting, which may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of us.

These provisions, alone or together, could delay hostile takeovers and changes in control of us or changes in our board of directors and our management.

As a Delaware corporation, we are also subject to provisions of Delaware law, including Section 203 of the General Corporation Law of the State of Delaware, as amended ("DGCL"), which prevents some stockholders holding more than 15% of our outstanding common stock from engaging in certain business combinations without approval of the holders of substantially all of our common stock. Any provision of our Amended and Restated Certificate of Incorporation, the Bylaws or Delaware law that has the effect of delaying or deterring a change in control could limit the opportunity for our stockholders to receive a premium for their shares of common stock and could also affect the price that some investors are willing to pay for common stock.

Claims for indemnification by our directors and officers may reduce our available funds to satisfy successful third-party claims against us and may reduce the amount of money available to us.

The Bylaws provide that we will indemnify our directors and officers, in each case to the fullest extent permitted by Delaware law. In addition, as permitted by Section 145 of the DGCL, the Bylaws and the indemnification agreements that we have entered into or will enter into with our directors and officers provide that:

- we will indemnify our directors and officers for serving the Company in those capacities or for serving other business enterprises at our request, to the fullest extent permitted by Delaware law. Delaware law provides that a corporation may indemnify such person if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the registrant and, with respect to any criminal proceeding, had no reasonable cause to believe such person's conduct was unlawful;

- we may, in our discretion, indemnify employees and agents in those circumstances where indemnification is permitted by applicable law;

- we are required to advance expenses, as incurred, to our directors and officers in connection with defending a proceeding, except that such directors or officers shall undertake to repay such advances if it is ultimately determined that such person is not entitled to indemnification;

- we are not obligated pursuant to the Bylaws to indemnify a person with respect to proceedings initiated by that person against us or our other indemnities, except with respect to proceedings authorized by our board of directors or brought to enforce a right to indemnification; and

- the rights conferred in the Bylaws are not exclusive, and we are authorized to enter into indemnification agreements with our directors, officers, employees and agents and to obtain insurance to indemnify such persons.

Our only significant asset is the ownership of 100% of Legacy Cepton's common stock, and we do not currently intend to pay dividends on our common stock and, consequently, your ability to achieve a return on your investment will depend on appreciation in the price of our common stock.

We have no direct operations and no significant assets other than the ownership of 100% of Legacy Cepton's common stock. We depend on Legacy Cepton's distributions, loans and other payments to generate the funds necessary to meet our financial obligations, including our expenses as a publicly-traded company, and to pay any dividends with respect to our common stock. Applicable state law and contractual restrictions, including in agreements governing our and/or Legacy Cepton's current and future indebtedness, as well as the financial condition and operating requirements of Legacy Cepton, may limit our ability to obtain cash from Legacy Cepton. In addition, pursuant to the Investor Rights Agreement entered into at the closing of the issuance of the Preferred Stock on January 19, 2023, Koito is entitled to consent rights over the declaration and payment of dividends. Thus, we do not expect to pay cash dividends on our common stock. Any future dividend payments are within the absolute discretion of our board of directors and will depend on, among other things, our results of operations, working capital requirements, capital expenditure requirements, financial condition, level of indebtedness, contractual restrictions with respect to payment of dividends (including pursuant to the terms of the Preferred Stock and the consent rights to be granted to Koito in connection therewith), business opportunities, anticipated cash needs, provisions of applicable law and other factors that our board of directors may deem relevant. As a result, you may not receive any return on an investment in our common stock or warrants unless you sell those securities, as applicable, for a price greater than that which you paid for it. In addition, in the event that our board of directors and stockholders were to approve a sale of all of our common stock holdings of Legacy Cepton, your equity interest would be in a holding company with no material assets other than those assets and other consideration received in such transaction.

If securities or industry analysts do not publish or cease publishing research or reports about us, our business, or our market, or if they change their recommendations regarding our securities adversely, the price and trading volume of our securities could decline.

The trading market for our securities will be influenced by the research and reports that industry or securities analysts may publish about us, our business, market or competitors. Certain securities and industry analysts do not currently, and may never, publish research on us. If any of the analysts who cover us change their recommendation regarding our common stock adversely, or provide more favorable relative recommendations about our competitors, the price of shares of our common stock would likely decline. If any analyst who covers us were to cease coverage of us or fail to regularly publish reports on us, we could lose visibility in the financial markets, which in turn could cause our share price or trading volume to decline.

Future issuances of debt securities and equity securities may adversely affect us, including the market price of our common stock and may be dilutive to existing stockholders.

In the future, we may incur debt or issue equity securities ranking senior to our common stock. Those securities will generally have priority upon liquidation. Such securities also may be governed by an indenture or other instrument containing covenants restricting our operating flexibility. Additionally, any convertible or exchangeable securities that we issue in the future, may have rights, preferences and privileges more favorable than those of our common stock. Because our decision to issue debt or equity in the future will depend on market conditions and other factors beyond our control, we cannot predict or estimate the amount, timing, nature or success of our future capital raising efforts. As a result, future capital raising efforts may reduce the market price of our common stock and be dilutive to existing stockholders. Further, the terms of the Preferred Stock and the consent rights to be granted to Koito in connection therewith may limit our ability to issue, or prevent us from issuing, debt or equity securities that rank senior to our common stock in the future, subject to certain exceptions and/or Koito's consent.

Pursuant to the Purchase Agreement, Lincoln Park agreed to purchase from us a total of up to $100.0 million of our common stock from time to time over a 36-month period (any such shares, the "Purchased Shares"). We generally have the right to control the timing and amount of any future sales of our common stock to Lincoln Park. Additional sales of our common stock, if any, to Lincoln Park will depend upon market conditions and other factors to be determined by us. We may ultimately decide to sell to Lincoln Park all, some or none of the shares of our common stock that may be available for us to sell pursuant to the Purchase Agreement. If and when we do sell shares of our common stock to Lincoln Park, after Lincoln Park has acquired such shares, Lincoln Park may resell all or any portion of such shares at any time or from time to time in its discretion, subject to compliance with securities laws. Therefore, sales to Lincoln Park by us could result in substantial dilution to the interests of other holders of our common stock. Additionally, the sale of a substantial number of shares of our common stock to Lincoln Park, or the anticipation of such sales, could make it more difficult for us to sell equity or equity-related securities in the future at a time and at a price that we might otherwise wish to effect sales.

An active market for our securities may not be sustained, which would adversely affect the liquidity and price of our securities.

The price of our securities may vary significantly due to factors specific to us as well as to general market or economic conditions. Furthermore, an active trading market for our securities may not be sustained. Holders of our securities may be unable to sell their securities unless an active market can be sustained.

The market price of our securities has been, and may continue to be, volatile.

The market values of our securities have varied significantly from their prices on the closing date of the Business Combination and may continue to be volatile in the future.

Fluctuations in the price of our securities could contribute to the loss of all or part of your investment. If an active market for our securities continues, the trading price of our securities could be volatile and subject to wide fluctuations in response to various factors, some of which are beyond our control. Any of the factors discussed in this

"*Risk Factors*" section or elsewhere in this report, including those listed below, could have a material adverse effect on your investment in our securities and our securities may trade at prices significantly below the price you paid for them. In such circumstances, the trading price of our securities may not recover and may experience a further decline.

The market price of our common stock may decline for a number of reasons including:

- if investors react negatively to the prospects of our business;
- actual or anticipated fluctuations in our quarterly financial results or the quarterly financial results of companies perceived to be similar to us;
- changes in the market's expectations about our operating results;
- success of competitors;
- changes in financial estimates and recommendations by securities analysts concerning us or the transportation industry in general;
- operating and share price performance of other companies that investors deem comparable to us;
- our ability to market new and enhanced products and technologies on a timely basis;
- changes in laws and regulations affecting our business;
- our ability to meet compliance requirements;
- commencement of, or involvement in, litigation involving us;
- changes in our capital structure, such as future issuances of securities or the incurrence of additional debt;
- the volume of our shares of common stock available for public sale; or
- any major change in our board of directors or management.

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

The sale of shares of our common stock in the public market, or the perception that such sales could occur, could harm the prevailing market price of shares of our common stock. These sales, or the possibility that these sales may occur, also might make it more difficult for us to sell equity securities in the future at a time and at a price that we deem appropriate.

All shares issued in the Business Combination to Legacy Cepton stockholders are freely tradable without registration under the Securities Act, and without restriction by persons other than our "affiliates" (as defined under Rule 144 of the Securities Act, "Rule 144"), including our directors, executive officers and other affiliates. We have a registration statement (File No. 333-262668) on file with the SEC which registers for resale shares and warrants issued in connection with, or prior to, the Business Combination and shares issuable upon exercise of the Private Placement Warrants and the Public Warrants. The lock-up periods under the Confidentiality and Lock-Up Agreements and Unpaid Expenses and Lock-Up Agreements have expired and, while such registration statement is effective, such shares and warrants are eligible to be sold into the public markets pursuant to such registration statement.

Any Purchased Shares will also be eligible for sale in the public market pursuant to the registration statement (File No. 333-262667), while such registration statement is effective. In addition, the 15,123,142 shares of our common stock reserved for issuance under the 2022 Plan and 3,080,960 shares reserved for further issuance under the ESPP have been registered on a registration statement on Form S-8 (File No. 333-264302) and will become eligible for sale in the public market once those shares are issued, subject to any applicable vesting requirements and other restrictions imposed by law. We are expected to file one or more registration statements on Form S-8 under the Securities Act to register the annual increases, if any, of shares of common stock or securities convertible into or exchangeable for shares of common stock issued pursuant to the 2022 Plan and ESPP. Any such Form S-8 registration statements will automatically become effective upon filing. Accordingly, shares registered under such registration statements will be available for sale in the open market.

In addition, we have granted Koito registration rights and are obligated to file a registration statement to register the shares of common stock underlying the Preferred Stock. In the future, we may also issue our securities in connection with investments or acquisitions. The amount of shares of our common stock issued in connection with an investment or acquisition could constitute a material portion of the then-outstanding shares of our common stock. Any issuance of additional securities in connection with investments or acquisitions may result in additional dilution to our stockholders.

Our failure to meet the continued listing requirements of Nasdaq could result in a delisting of our securities.

If we fail to satisfy the continued listing requirements of Nasdaq such as the corporate governance requirements or the minimum closing bid price requirement, Nasdaq may take steps to delist our securities. Such a delisting would have a negative effect on the price of the securities and would impair your ability to sell or purchase the securities when you wish to do so. In the event of a delisting, we can provide no assurance that any action taken by us to restore compliance with listing requirements would allow our securities to become listed again, stabilize the market price or improve the liquidity of our securities, prevent our securities from dropping below the Nasdaq minimum bid price requirement or prevent future non-compliance with Nasdaq's listing requirements. Additionally, if our securities are not listed on, or become delisted from, Nasdaq for any reason, and are quoted on the OTC Bulletin Board, an inter-dealer automated quotation system for equity securities that is not a national securities exchange, the liquidity and price of our securities may be more limited than if we were quoted or listed on Nasdaq or another national securities exchange. You may be unable to sell your securities unless a market can be established or sustained.

We qualify as an "emerging growth company" as well as a smaller reporting company within the meaning of the Securities Act, and if we take advantage of certain exemptions from disclosure requirements available to emerging growth companies or smaller reporting companies, this could make our securities less attractive to investors and may make it more difficult to compare our performance with other public companies.

We qualify as an "emerging growth company" within the meaning of the Section 2(a)(19) of the Securities Act, as modified by the JOBS Act. As such, we may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies for as long as we continue to be an emerging growth company, including, but not limited to, (i) not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, (ii) reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements and (iii) exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. As a result, our stockholders may not have access to certain information they may deem important. We will remain an emerging growth company until the earlier of: (1) the last day of the fiscal year (a) ending December 31, 2026, (b) in which we have total annual gross revenue of at least $1.235 billion, or (c) in which we are deemed to be a large accelerated filer, which means the market value of our common stock that is held by non-affiliates exceeds $700 million as of the end of the prior fiscal year's second fiscal quarter; and (2) the date on which we have issued more than $1.0 billion in non-convertible debt during the prior three-year period. Investors may find our securities less attractive because we will rely on these exceptions. We cannot predict whether investors will find our securities less attractive because we will rely on these exemptions. If some investors find our securities less attractive as a result of our reliance on these exemptions, the trading prices of our securities may be lower than they otherwise would be, there may be a less active trading market for our securities and the trading prices of our securities may be more volatile.

Further, Section 102(b)(1) of the JOBS Act exempts emerging growth companies from being required to comply with new or revised financial accounting standards until private companies (that is, those that have not had a Securities Act registration statement declared effective or do not have a class of securities registered under the Exchange Act) are required to comply with the new or revised financial accounting standards. The JOBS Act provides that a company can elect to opt out of the extended transition period and comply with the requirements that apply to non-emerging growth companies but any such an election to opt out is irrevocable. We have elected not to opt out of such extended transition period, which means that when a standard is issued or revised and it has different application dates for public or private companies, we, as an emerging growth company, can adopt the new or revised standard at the time private companies adopt the new or revised standard. This may make it difficult or impossible to compare our financial results with financial results of another public company that is either not an emerging growth company or is an emerging growth company that has chosen not to take advantage of the extended transition period exemptions because of the potential differences in accounting standards used.

Additionally, we qualify as a "smaller reporting company" as defined in Item 10(f)(1) of Regulation S-K. Smaller reporting companies may take advantage of certain reduced disclosure obligations, including, among other things, providing only two years of audited financial statements. We will remain a smaller reporting company until the last day of the fiscal year in which (i) the market value of our common stock held by non-affiliates exceeds $250 million as of the prior June 30, or (ii) our annual revenues exceeded $100 million during such completed fiscal year and the market value of our common stock held by non-affiliates exceeds $700 million as of the prior June 30. To the extent we take advantage of such reduced disclosure obligations, we may also make comparison of our financial statements with other public companies difficult or impossible.

We may redeem your unexpired Public Warrants prior to their exercise at a time that is disadvantageous to you, thereby making your Public Warrants worthless.

We have the ability to redeem outstanding Public Warrants at any time after they become exercisable and prior to their expiration, at a price of $0.01 per warrant, provided that the last reported sales price of our common stock equals or exceeds $18.00 per share for any 20 trading days within a 30-trading day period ending on the third trading day prior to the date we give notice of redemption. If and when the Public Warrants become redeemable by us, we may exercise our redemption right even if it is unable to register or qualify the underlying securities for sale under all applicable state securities laws. Redemption of the outstanding Public Warrants could force you to: (i) exercise your Public Warrants and pay the exercise price therefor at a time when it may be disadvantageous for you to do so, (ii) sell your Public Warrants at the then-current market price when you might otherwise wish to hold your Public Warrants or (iii) accept the nominal redemption price which, at the time the outstanding Public Warrants are called for redemption, is likely to be substantially less than the market value of your Public Warrants. Because the $18.00 trading price referred to above substantially exceeds the current trading price of our common stock and we have registered for resale a substantial number of shares of our common stock, the sale of which could cause the price of our common stock to decrease, we may be unable to redeem the Public Warrants and the Public Warrants may expire worthless.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our headquarters is located in San Jose, California, where we lease approximately 92,842 square foot facility. The San Jose facility provides business development, general and administrative, research and development and manufacturing functions. Additionally, the Company leases an approximately 6,000 square foot facility primarily for research and development and testing in Santa Clara, California, and an approximately 4,800 square foot facility for business development in Troy, Michigan. We believe our facilities are adequate and suitable for our current needs and that should it be needed, suitable additional or alternative space will be available to accommodate our operations.

Item 3. Legal Proceedings

From time to time, the Company may be involved in various legal claims, litigation and other matters that arise in the normal course of its operations. Although there can be no assurances and the outcome of these matters is not determinable, the Company currently believes that none of these claims, actions or proceedings are likely to have a material adverse effect on the Company's financial position.

Item 4. Mine Safety Disclosures

Not applicable.

Part II

Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Market Information

Our common stock and warrants are listed on The Nasdaq Global Select Market under the symbol “CPTN” and “CPTNW”, respectively, since we started trading on the public markets following the close of the Business Combination on February 10, 2022.

Holders

As of March 1, 2023, we had approximately 37 holders of record of our common stock and thousands of additional beneficial holders. Because many of our shares of common stock are held by brokers and other institutions on behalf of stockholders, we are unable to estimate the total number of stockholders represented by these record holders.

Dividend Policy

We have never declared or paid any cash dividends on our common stock. We currently intend to retain any future earnings and do not expect to pay any dividends in the foreseeable future. Any future determination to declare cash dividends will be made at the discretion of our board of directors, subject to applicable laws, and will depend on a number of factors, including our financial condition, results of operations, capital requirements, contractual restrictions, including any restrictions under the Investment Agreement with Koito, general business conditions and other factors that our board of directors may deem relevant.

Item 6. [Reserved]

Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations

Unless otherwise indicated, references in this section to “we,” “our,” “us,” and “Cepton” generally refer to Cepton Technologies, Inc. and its consolidated subsidiaries prior to the Business Combination and to Cepton, Inc. and its consolidated subsidiaries after giving effect to the Business Combination. The following discussion and analysis of our results of operations and financial condition should be read in conjunction with the consolidated financial statements included in this Report. This discussion contains forward-looking statements based upon our current expectations, estimates and projections that involve risks and uncertainties. Actual results could differ materially from those anticipated in these forward-looking statements due to, among other considerations, the matters discussed under “Risk Factors” and “Cautionary Note Regarding Forward-Looking Statements” herein.

Certain amounts that appear in this Management’s Discussion and Analysis of Financial Condition and Results of Operations (“MD&A”) may not sum due to rounding. Percentage amounts included in this MD&A have not in all cases been calculated on the basis of such rounded figures, but on the basis of such amounts prior to rounding. For this reason, percentage amounts in this MD&A may vary from those obtained by performing the same calculations using the figures in our consolidated financial statements included elsewhere in this Report. Terms used but not defined in this MD&A shall have the meanings ascribed to such terms in this Report.

Business Overview

Cepton is focused on the deployment of high performance, mass-market lidar solutions to deliver safety and autonomy across the Automotive and Smart Infrastructure markets. By adopting our solutions, our customers can enable safety and autonomy applications across a broad range of end-markets including our primary market, ADAS in consumer and commercial vehicles, which we believe represents not just the largest market opportunity for lidar applications over the next decade, but also the market with the best potential for near term mass-market commercialization.

Since the inception of our company in 2016, building lidars for broad market adoption has been our guiding principle. Mass-market deployment guided not just our end-market focus, but also our product design choices, our areas of technological innovation, and our approach to manufacturing, and our go-to-market strategy and partnerships. To pursue mass-market adoption, our value proposition has focused on developing a lidar that achieves high performance with automotive grade reliability at competitive prices. Our thesis was that lidar would gain broad based adoption only when solutions strike the right balance across three key facets of performance, cost and reliability.

Based on this approach, we have gained acceptance for our technology in the Automotive market. In 2019, following approximately three years of rigorous engagement and working alongside our automotive tier 1 partner, Koito, we were awarded a significant ADAS lidar series production award from GM through Koito. This award includes multiple platforms and vehicle models, with an estimated production start in 2023.

As a Silicon Valley-based company led by recognized technical experts in the optical field, technology innovation is at the core of our company. We developed a comprehensive lidar platform consisting of proprietary components including our breakthrough imaging technology and our system-on-a-chip lidar engine application-specific integrated circuit, a portfolio of automotive grade and industrial grade long-range and near-range lidars, a software layer enabling the integration of automotive functions, and feature rich perception software capabilities.

Business Combination

On February 10, 2022, the Business Combination was consummated and as a result, a subsidiary of Growth Capital Acquisition Corp., GCAC Merger Sub Inc., merged with and into Cepton Technologies, Inc. GCAC changed its name to Cepton, Inc., and the Company is now listed on the Nasdaq under the symbol “CPTN”. Legacy Cepton is deemed to be the accounting predecessor and Cepton, Inc. is the successor registrant with the U.S. Securities and Exchange Commission (“SEC”), which means that Legacy Cepton’s financial statements for previous periods will be disclosed in Cepton, Inc.’s future periodic reports filed with the SEC.

The Business Combination was accounted for as a reverse recapitalization. Under this method of accounting, GCAC is treated as the acquired company for financial statement reporting purposes. This determination is primarily based on Legacy Cepton stockholders comprising a majority of the voting power of the combined entity and having the ability to nominate the majority of the governing body of the combined entity, Legacy Cepton’s senior management comprising the senior management of the combined entity, and Legacy Cepton’s operations comprising the ongoing operations of the combined entity. For accounting purposes, the combined entity represents a continuation of the financial statements of Legacy Cepton and the Business Combination is treated as the equivalent of Legacy Cepton issuing stock for the net assets of GCAC, accompanied by a recapitalization. See Note 2 to the consolidated financial statements in this Report for further information regarding the Business Combination.

As a result of our having become a publicly traded company, we have hired, and will need to hire additional personnel and implement procedures and processes to address public company regulatory requirements and customary practices. We have incurred, and expect to continue to incur, additional annual expenses as a public company for, among other things, directors’ and officers’ liability insurance, director fees and additional internal and external accounting and legal and administrative resources, including increased audit and legal fees.

Market Conditions

The global economy, including the financial and credit markets, has recently experienced significant volatility and disruptions including increases in inflation rates, the ongoing conflict in Ukraine and rising fuel prices, rising interest rates, declines in consumer confidence, declines in economic growth, and uncertainty about economic stability. The severity and duration of the impact of broader macroeconomic conditions on our business is dynamic and cannot be predicted.

For more information on our operations and risks related to our macroeconomic environment, please see the section entitled “*Risk Factors*.”

Key Factors Affecting Our Operating Results

We believe that our future performance and success depends, to a substantial extent, on our ability to capitalize on the following opportunities, which in turn is subject to significant risks and challenges, including those discussed below and in the section entitled “*Risk Factors*.”

Series production awards in the Automotive market

An important part of our mission is to deploy high performance, mass-market lidar in the Automotive market. Within the Automotive market, we believe that passenger car ADAS applications represent the largest opportunity but also have the most stringent requirements for reliability, cost, and performance. Major automotive OEMs typically undergo several years of planning, technology selection, and vehicle integration work before introducing new and important technologies in their vehicle offerings. We anticipate that lidar, as a new sensor that improves safety and enhances autonomy, will undergo the same technology introduction and validation process as similar technologies in the past, such as anti-lock braking systems or stability control systems. The number of vehicle platforms and vehicle models that will be equipped with lidar will depend on OEM product planning, vehicle integration, and marketing schedules. Once a lidar supplier is chosen, the number of awarded vehicle platforms and vehicle models is likely to increase over time. This is because the development efforts of integrating lidar into the OEM's product offerings is leveraged across multiple vehicle classes and platforms to maximize the OEM's return on investment.

For example, our series production award through Koito for GM's ADAS program initially included four vehicle models and was subsequently updated to include nine vehicle models spanning different classes of vehicles from luxury sedans to mid-level passenger cars to SUVs and trucks. These vehicles include traditional internal combustion engine types as well as electric drive train types. We expect additional vehicle models to be added to this series production award over time, with an anticipated start of production in 2023 and significant volume increase anticipated in the following years. However, if the targets of this series production award are not realized, or if GM were to terminate or significantly alter or delay its GM series production award and/or alter its relationship with the Company or with Koito in a manner that is adverse to us or GM would delay the introduction of the vehicle models that are part of the series production award, our business would be materially adversely affected. Similarly, if we are unable to maintain our relationship with Koito, or the terms of our arrangement with Koito with respect to the GM program differs from our expectations, including with respect to volume, pricing, and timing, then our business and prospects would be materially adversely affected.

Adoption of lidar solutions in Automotive and Smart Infrastructure markets

In an endless pursuit of safety and product differentiation, many leading automotive OEMs have decided to include lidar in their next generation of vehicles for increased safety and higher levels of autonomy. The speed of lidar adoption depends on many factors, including sensor performance, reliability, and cost, as well as the time it takes to win large series production awards. Large automotive series production awards usually take a number of years to secure but once awarded, the production award typically covers the entire duration of a typical vehicle model period of five to seven years for consumer vehicles. In the case of trucking applications, the production period of a typical model may exceed seven years in many cases. We are currently engaged in discussions with all of the top 10 global automotive OEMs based on vehicle production volume rankings for 2019 according to IHS Markit, a leading independent third-party industry analytics and information provider. We believe that our current series production award from GM through Koito is a validation of our technology leadership, product maturity, and potential for scalability that favorably positions us for additional series production awards at other large global OEMs.

While lidar adoption in the Automotive market may take multiple years to materialize, smart infrastructure end markets could adopt lidar solutions at a more rapid pace. Applications within smart infrastructure vary widely from tolling to security, to delivery and logistics. These applications are typically project based and require certain levels of customization to deliver an end-to-end solution. To address opportunities in the smart infrastructure space, we partner with system integrators who leverage our lidar hardware as well as our Helius® perception software to provide solutions unique to each opportunity. We expect to grow our system integrator partnership network to further drive the adoption of lidar in smart infrastructure applications.

We expect our revenue to increase as lidar adoption increases in the automotive and smart infrastructure markets; however, the rate of adoption may vary due to many factors, including but not limited to competing technologies, time to market, changes in macroeconomic conditions, including rising inflation and interest rates, geopolitical conflicts and tensions, any of which may impact the pace and magnitude of lidar adoption and our revenues.

Product Cost and Margins

To drive mass-market adoption of lidar in automotive applications, product cost must be controlled. As such, cost is one of the primary design criteria that we focused on from the very beginning. Design choices were carefully evaluated to create products with the best overall balance between performance, reliability, and cost. Working with our partners, we expect to continue driving costs down as volumes increase and we achieve higher margin unit economics in the future.

In the case of our series production award from GM through Koito, we are working with our tier 1 partner, Koito, on manufacturing in order to effectively manage supply chain, component costs, and manufacturing costs to meet margin expectations at scale. Pursuant to our arrangement with Koito, we license our technology and sell components to Koito, who can manufacture and sell lidars using our technology. We expect our gross margin to rapidly increase as material costs decrease and fixed manufacturing overhead costs are absorbed over larger production volumes and as other economies of scale are achieved.

In the smart infrastructure space, the average selling price of a lidar solution may be higher than that in the automotive space due to a number of reasons, such as unit volume, level of customization, and additional software content. At the same time, the cost of production is also higher due to lower production volumes and higher levels of system integration requirements.

Due to recent supply chain shortages, lead times for some of our products are increasing, which may lead to a significant mismatch between supply and demand, giving rise to product shortages for us and our customers, making our demand forecast more uncertain. During fiscal year 2022, we made continued efforts in broadening our supply base to support our growth and better serve customer demand. Recent market conditions, including the impacts from the ongoing COVID-19 pandemic, inflation and rising interest rates have strained global supply chains and could result in a shortage of key materials that our suppliers require to satisfy our needs. We expect continued supply constraints for some of our products, to persist into fiscal year 2023. We have placed orders for certain supply in advance of our historical lead times, paid premiums to secure future supply and capacity, and may need to continue to do so in the future. Placing orders in advance of our historical lead times to secure supply in a constrained environment may result in excess inventory, cancellation penalties, or other charges if there is a partial or complete reduction in long-term demand for our products. These actions may also increase our product costs and decrease gross margin, in addition to increased overall costs as a result of rising inflation. Increased costs for components, logistics and other supply chain expenses, driven in part by inflation and supply chain shortages, have negatively impacted, and may continue to negatively impact, our gross margin.

If we cannot generate our expected revenues, margins or income from operations, we may be required to raise additional debt or equity capital, which may not be available or may only be available on terms that are onerous to our stockholders.

End Market Concentration

We believe that the Automotive market represents a large portion of the total addressable market and large global automotive OEMs represent the majority of unit volume demand as well as leaders in active safety and autonomy. To drive mass-market commercialization of our lidar solutions, we have focused on top automotive OEMs and are currently engaged with all of the top 10 global automotive OEMs based on vehicle production volume rankings for 2019. Series production awards from top OEMs tend to be large and long-term in nature. While we continue to expand our system integrator partnership network to address opportunities in the smart infrastructure markets, program awards tend to be smaller and short-term in nature as compared to those in the automotive end-markets. As such, we expect a large portion of our future revenue to come from the automotive end-market.

Components of Results of Operations

Revenue

We categorize our revenue as (1) lidar sensor and prototype revenue and (2) development revenue.

Lidar sensor and prototype revenue is primarily derived from the sale of components and license of technologies to tier 1 suppliers for mass market ADAS applications in the Automotive market and the sale of lidar sensors directly to end-user customers in the Smart Infrastructure markets. We anticipate strong revenue growth in the foreseeable future as we continue to form strategic partnerships and as the primary source of revenue shifts from prototype sales to sales of commercialized production-ready lidar sensors.

Development revenue represents arrangements with tier 1 suppliers focused on the specific customization of our proprietary lidar capabilities to the customers' applications, typically involving development of customized lidar sensor prototypes for those customers. The timing of revenue recognition for development contracts is determined for each performance obligation based on the unique facts and circumstances within each development arrangement, which generally results in recognition at a point in time. This assessment is made at the outset of the arrangement for each performance obligation.

Revenue is primarily derived from the sale of components and license of technologies to tier 1 suppliers for mass market ADAS applications in the Automotive market and the sale of lidar sensors directly to end-user customers in the Smart Infrastructure markets. Our lidar sensors are used in applications such as advanced driver assistance systems, autonomous vehicles, and intelligent transportation systems. Our customers include leading original equipment manufacturers and suppliers within the automotive and smart infrastructure industries.

Cost of Revenue

Cost of revenue includes the manufacturing cost of our lidar sensors and components, which primarily consists of personnel-related costs directly associated with our manufacturing organization, and amounts paid to our third-party contract manufacturers and vendors. Our cost of revenue also includes cost of component inventory, product testing costs, an allocated portion of overhead costs, warranty expense, excess and obsolete inventory, and shipping costs. We expect cost of revenue to increase in absolute dollars in future periods, in particular as we begin series production as part of GM's ADAS program. Increased costs for components, logistics and other supply chain expenses, driven in part by inflation and supply chain shortages, have negatively impacted, and may continue to negatively impact, our cost of revenue.

Gross Margin

Our gross margin in future periods will depend on a variety of factors including market conditions that may impact our pricing; product mix changes between established products and new products; excess and obsolete inventories; our cost structure for manufacturing operations, including third-party manufacturers, relative to volume. Our gross margin varies by product. We expect our gross margins to fluctuate over time, depending on the factors described above. Increased costs for components, logistics and other supply chain expenses, driven in part by inflation and supply chain shortages, have negatively impacted, and may continue to negatively impact, our gross margin. As we begin series production as part of GM's ADAS program, we expect gross margin to decrease initially, followed by an increase in gross margin as unit volumes increase.

Operating Expenses

Research and Development Expenses

Research and development expenses consist primarily of personnel-related costs, material expenses, permits, licenses, and professional services costs directly associated with our research and development activities. The remainder primarily relates to the allocated portion of overhead costs. Our research and development 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. We expense research and development costs as incurred. We expect our research and development expenses to increase in absolute dollars as we increase our investment in software development to broaden the capabilities of our solutions and introduce new products and features.

Selling, General and Administrative Expenses

Our selling, general and administrative expenses consist primarily of personnel-related costs, professional services costs, and advertising expenses directly associated with our sales and general and administrative activities. The remainder primarily relates to the allocated portion of overhead costs. We expect our selling expenses will increase in absolute dollars over time as we hire additional sales personnel, increase our marketing activities, grow our domestic and international operations, and build brand awareness. We expect to incur additional general and administrative expenses as a result of operating as a public company, including expenses related to compliance with the rules and regulations of the SEC and stock exchange listing standards, additional insurance expenses (including directors' and officers' insurance), investor relations activities, and other administrative and professional services costs. We also expect to increase the size of our general and administrative function to support the foregoing as well as the growth of our business.

Gain on Change in Fair Value of Earnout and Warrant Liabilities

The change in fair value of earnout and warrant liabilities consists of the change in fair value of earnout and warrant liabilities assumed in connection with the Business Combination as well as the change in fair value of other warrant liability. We expect continued financial statement volatility from the fair value adjustments at the end of each reporting period or until the Earnout Shares are issued upon the attainment of common share price milestones or through the exercise of the warrants.

Foreign Currency Transaction Loss, Net

We incur transaction gains and losses resulting from transactions denominated in currencies other than the functional currency of the Company.

(Loss) Gain on Extinguishment of Debt

(Loss) gain on extinguishment of debt represents the loss associated with the repayment of the Trinity Loan Agreement (as defined below) and the gain from the forgiveness of the 2020 Promissory Note. See Note 9 to our consolidated financial statements included elsewhere in this Report for further information.

Other Expense, Net

Other expense, net consists primarily of foreign currency transaction gains and losses related to the impact of transactions denominated in a foreign currency other than the U.S. dollar and gains or losses related to the extinguishment of debt and issuance of common stock under the Lincoln Park Agreement.

Interest (Expense) Income, Net

Interest (expense) income, net consists primarily of interest earned on our cash equivalents and short-term investments in commercial paper, corporate debt securities, and available-for-sale securities. These amounts will vary based on our cash, cash equivalents and short-term investment balances, and also with market rates. Our interest income is fully offset by interest expense from our debt financings as well as accretion expense from our short-term investments.

Provision for Income Taxes

Our provision for income taxes consists of federal, state, and foreign current and deferred income taxes. As we expand the scale and scope of our international business activities, any changes in the United States and foreign taxation of such activities may increase our overall provision for income taxes in the future.

We have a full valuation allowance for net deferred tax assets, including federal and state net operating loss carryforwards and research and development credit carryforwards. We expect to maintain this valuation allowance until it becomes more likely than not that the benefit of our federal and state deferred tax assets are realizable by way of expected future taxable income.

We believe that we have adequately reserved for our uncertain tax positions, although we can provide no assurance that the final outcome of these matters will not be materially different. To the extent that the final outcome of these matters is different than the amounts recorded, such differences will affect the provision for income taxes in the period in which such determination is made and could have a material impact on our financial condition and results of operations.

Results of Operations for the years ended December 31, 2022 and 2021

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

	Year Ended December 31, 2022	Year Ended December 31, 2021	Change $	Change %
	(dollars in thousands)			
Lidar sensor and prototype revenue	$ 5,616	$ 2,919	$ 2,697	92%
Development revenue	1,810	1,583	227	14%
Total revenue	7,426	4,502	2,924	65%
Lidar sensor and prototype cost of revenue	6,383	3,952	2,431	62%
Development cost of revenue	849	442	407	92%
Total cost of revenue	7,232	4,394	2,838	65%
Gross profit	194	108	86	80%
Operating expenses:				
Research and development	33,013	24,158	8,855	37%
Selling, general and administrative	28,629	14,286	14,343	100%
Total operating expenses	61,642	38,444	23,198	60%
Operating loss	(61,448)	(38,336)	(23,112)	60%
Other income (expense):				
Gain on change in fair value of earnout liability	74,078	—	74,078	NA
Gain on change in fair value of warrant liability	2,875	—	2,875	NA
Foreign currency transaction loss, net	(2,168)	—	(2,168)	NA
(Loss) gain on extinguishment of debt	(958)	1,121	(2,079)	NM
Other expense, net	(472)	(22)	(450)	NM
Interest (expense) income, net	(2,511)	15	(2,526)	NM
Income (loss) before income taxes	9,396	(37,222)	46,618	NM
Provision for income taxes	(16)	(20)	4	(20)%
Net income (loss)	$ 9,380	$ (37,242)	$ 46,622	NM

NA: Not applicable
NM: Not meaningful

Comparison of the years ended December 31, 2022 and 2021

Revenue

Lidar sensor and prototype revenue increased by approximately $2.7 million, or 92%, to $5.6 million for the year ended December 31, 2022, from $2.9 million for the year ended December 31, 2021. Approximately $2.4 million of the increase related to an increase in lidar sensor sales volume and approximately $0.6 million related to new products sold during the period. The increase was partially offset by a $0.4 million decrease driven by decreased average sales prices for lidar sensors. The decrease in the average sales price for lidar sensors was driven by customer projects maturing from proof-of-concept phase to deployment phase.

Development revenue increased by approximately $0.2 million, or 14% to $1.8 million for the year ended December 31, 2022, from $1.6 million for the year ended December 31, 2021. The increase relates to the timing and size of milestones achieved by the Company under various development projects.

Cost of revenue

Lidar sensor and prototype cost of revenue increased by $2.4 million, or 62%, to $6.4 million for the year ended December 31, 2022, from $4.0 million for the year ended December 31, 2021. The increase resulted primarily from an increase in sales volume of $1.7 million and standard costing adjustments of $0.8 million.

Development cost of revenue increased by $0.4 million, or 92%, to $0.8 million for the year ended December 31, 2022, from $0.4 million for the year ended December 31, 2021. The increase resulted primarily from the achievement of milestones and related cost inputs defined under different development work order projects.

Operating expenses

Research and development expense increased by $8.9 million, or 37%, to $33.0 million for the year ended December 31, 2022, from $24.2 million for the year ended December 31, 2021, resulting primarily from a $4.7 million increase in personnel related costs, a $1.9 million increase in professional services fees, a $1.3 million increase in expensed materials used in research and development, a $0.5 million increase in facilities, software and equipment related expenses and a $0.4 million increase in permits and license fees.

Selling, general, and administrative expense increased by $14.3 million, or 100%, to $28.6 million for the year ended December 31, 2022, from $14.3 million for the year ended December 31, 2021, resulting primarily from a $4.8 million increase in personnel related costs, a $3.8 million increase in directors and officers insurance related costs, a $2.7 million increase in transaction costs related to the Business Combination attributable to liability-classified instruments, a $1.0 million increase in professional services fees, and a $2.1 million increase in other general and administrative costs.

Gain on change in fair value of earnout and warrant liabilities

The earnout liability was assumed in connection with the Business Combination. The fair value of the earnout liability decreased by $74.1 million resulting in the recognition of an unrealized gain for the year ended December 31, 2022. This is primarily due to a decrease in the Company's common share price from February 10, 2022 to December 31, 2022.

The fair value of the warrant liability decreased by $2.9 million for the year ended December 31, 2022 resulting from a $2.1 million unrealized gain due to the mark-to-market adjustment on private placement warrants and $0.7 million realized gain due to the exercise of certain liability classified warrants in connection with the Business Combination.

Foreign currency transaction loss, net

Foreign currency transaction loss of $2.2 million is comprised of a $4.3 million foreign currency exchange rate loss on the Japanese Yen denominated Secured Term Loan with Koito, offset by a $2.2 million foreign currency exchange rate gain on the Company's bank deposits denominated in Japanese Yen which were comprised of proceeds received from the Secured Term Loan with Koito.

(Loss) gain on extinguishment of debt

(Loss) gain on extinguishment of debt decreased by $2.1 million resulting primarily from a $1.0 million loss on repayment of borrowings under the Trinity Loan Agreement (as defined below) during the year ended December 31, 2022 compared to a $1.1 million gain from the forgiveness of our loan issued pursuant to the Paycheck Protection Program from the U.S. Small Business Administration ("PPP Loan") during the year ended December 31, 2021.

Other expense, net

Other expense, net increased by $0.5 million resulting primarily from a $0.2 million increase in expense on issuance of common stock to Lincoln Park for the year ended December 31, 2022.

Interest (expense) income, net

Interest (expense) income, net increased by $2.5 million, resulting primarily an increase in interest expense of $2.5 million related to borrowings under the Trinity Loan Agreement and Secured Term Loan Agreement (as defined below).

Income Taxes

Our provision for income taxes remained consistent for the years ended December 31, 2022 and 2021. We provided a full valuation allowance on our net U.S. federal and state deferred tax assets for the years ended December 31, 2022 and 2021. For the year ended December 31, 2022, we had U.S. federal and state tax-effected net operating loss carryforwards available to reduce future taxable income, of which post-2017 Federal net operating loss will be carried forward indefinitely and pre-2017 Federal net operating loss carryover and state net operating loss carryover and state net operating loss carryover will expire on varying dates.

Liquidity and Capital Resources

Sources of Liquidity

As of December 31, 2022, we had cash, cash equivalents, and short-term investments totaling $35.7 million, comprised of money market funds, U.S. government agency securities, and corporate debt securities held for working capital purposes. We believe that our current cash position, along with the proceeds from the sale of the Preferred Stock and the Purchase Agreement with Lincoln Park, will be sufficient to satisfy our foreseeable liquidity needs and capital expenditure requirements, including for at least the next twelve months from the date of this Report.

On November 24, 2021, we entered into a Purchase Agreement with Lincoln Park, pursuant to which Lincoln Park has agreed to purchase up to $100.0 million of common stock (subject to certain limitations contained in the Purchase Agreement) from time to time over a 36-month period after the consummation of the Business Combination and certain other conditions set forth in the Purchase Agreement. On May 11, 2022, the S-1 registration statement related to the Lincoln Park Purchase Agreement became effective and the other terms and conditions of the Purchase Agreement were satisfied, which enabled us to begin selling common stock to Lincoln Park as a source of funds. To date, we have raised approximately $1.7 million through sales of common stock to Lincoln Park pursuant to the Purchase Agreement.

On January 4, 2022, we entered into the Loan Agreement with Trinity Capital Inc. (the "Trinity Loan Agreement") to borrow up to $25.0 million at a floating per annum rate equal to the greater of (i) 10.75% or (ii) the prime rate plus 7.0%. In connection with the Loan Agreement, we issued a warrant to purchase 96,998 shares of common stock with an exercise price of $16.89 per share. On January 4, 2022, we borrowed 10.0 million (the "Initial Advance") under the terms of the Trinity Loan Agreement. In 2021, we incurred approximately $0.2 million of issuance costs related to the Trinity Loan Agreement. Immediately prior to the consummation of the Business Combination, the warrant was net exercised and subsequently converted into 73,741 shares of Class A common stock. On November 7, 2022, we repaid all outstanding principal and accrued interest under and terminated the Trinity Loan Agreement with borrowings under a new Secured Term Loan Agreement entered into with Koito (the "Secured Term Loan Agreement"). See Note 9 to our consolidated financial statements included elsewhere in this Report for further information.

Following the approval of the Business Combination, on February 10, 2022, we received net cash proceeds of $47.1 million from the Business Combination and PIPE Investment (as defined below), net of certain transaction costs.

On October 27, 2022, we entered into an Investment Agreement (the "Investment Agreement") with Koito, pursuant to which, among other things, at the closing of the transactions, and based on the terms and subject to the conditions set forth therein, we issued and sold to Koito, 100,000 shares of Preferred Stock for a purchase price of $100.0 million. The issuance and sale of the Preferred Stock and related matters were approved by our stockholders on January 11, 2023, and the Preferred Stock was issued to Koito on January 19, 2023. The Preferred Stock will be convertible, beginning on January 19, 2024, into shares of our common stock at an approximate initial conversion price of $2.585 per share (subject to adjustment).

Concurrently with the execution of the Investment Agreement, we entered into the Secured Term Loan Agreement to borrow Japanese Yen ¥5.8 billion ($39.4 million), the proceeds of which were used to repay amounts outstanding under the Trinity Loan Agreement and for working capital and general corporate purposes. On January 24, 2023, we used the proceeds from the sale of the Preferred Stock to repay all outstanding principal and accrued interest under the Secured Term Loan Agreement with Koito. See Note 21 to our consolidated financial statements included elsewhere in this Report for further information.

We have incurred negative cash flows from operating activities and operating losses in the past as reflected in our accumulated deficit of $86.1 million as of December 31, 2022. For the year ended December 31, 2022, we had negative cash flows from operating activities of $58.0 million. Although much of the negative cash flow resulted from an increase in engineering services and expensed materials for research and development, and continuing administrative expenses related to becoming a publicly traded company, we expect to continue to invest in research and development and generate operating losses in the future. In addition, our future capital requirements will depend on many factors, including our lidar sales volume, the timing and extent of spending to support our research and development efforts in lidar technology, the expansion of sales and marketing activities, market adoption of new and enhanced products and features, and increased spending due to inflation and supply chain shortages. 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 common stockholders. For example, the sale of Preferred Stock to Koito involves the issuance of preferred equity securities that rank senior to our common stock in the event of liquidation and include other rights and preferences senior to those of our common stock. In addition, the Preferred Stock is convertible into shares of our common stock and, upon conversion, will result in dilution to our stockholders. If we raise funds by issuing debt securities, these debt securities would have rights, preferences, and privileges senior to those of common stockholders. Our ability to raise additional funds through the issuance of debt or equity securities may be subject to Koito's consent pursuant to the Investor Rights Agreement. For information regarding our cash requirements from lease obligations and contractual obligations, see Notes 16 and 17 to the consolidated financial statements included in this Report.

We are subject to risks and uncertainties frequently encountered by early-stage companies including, but not limited to, the uncertainty of successfully developing products, securing certain contracts, building a customer base, successfully executing business and marketing strategies, and hiring appropriate personnel.

To date, we have been funded primarily by equity financings, convertible promissory notes, and the net proceeds we received through the Business Combination, PIPE Investment, and private placements of the Legacy Cepton convertible preferred stock. Failure to generate sufficient revenues, achieve planned gross margins and operating profitability, control operating costs, or secure additional funding may require us to modify, delay, or abandon some of our planned future expansion or development, or to otherwise enact operating cost reductions available to management, which could have a material adverse effect on our business, operating results, financial condition, and ability to achieve our intended business objectives.

The Company maintains depository relationships with Silicon Valley Bank ("SVB"). On March 10, 2023, SVB was closed by the California Department of Financial Protection and Innovation, which appointed the Federal Deposit Insurance Corporation (the "FDIC") as receiver. On March 12, 2023, federal regulators announced that the FDIC would complete its resolution of SVB in a manner that fully protects all depositors. As a result, the Company has not experienced and does not anticipate any losses with respect to its funds deposited with SVB.

Cash Flow Summary — Years Ended December 31, 2022 and 2021

	Year Ended December 31,	
	2022	**2021**
	(dollars in thousands)	
Net cash provided by (used in):		
Operating activities	$ (57,997)	$ (36,759)
Investing activities	(1,551)	28,683
Financing activities	88,550	439

Operating Activities

For the year ended December 31, 2022, our operating activities used $58.0 million in cash. We recorded net income of $9.4 million; however, this was offset by $62.1 million of non-cash adjustments consisting primarily of gains from the change in fair value of earnout and warrant liabilities of $77.0 million. These non-cash income items were partially offset by stock-based compensation expense of $8.2 million, foreign currency transaction loss of $2.2 million, other amortization of $1.6 million, amortization of right-of-use assets of $1.4 million, and loss on extinguishment of debt of $1.0 million. For the year ended December 31, 2022, we used net cash of $5.3 million from changes in our operating assets and liabilities resulting primarily from a $1.9 million increase in prepaid expenses and other current assets due to increases in prepaid insurance offset by decreases in deferred transaction costs in connection with the closing of the Business Combination, a $1.6 million decrease in operating lease liabilities, a $0.8 million increase in accounts receivable, and a $0.7 million decrease in accounts payable due to timing of payments.

For the year ended December 31, 2021, our operating activities used $36.8 million in cash. We recorded a net loss of $37.2 million, which was partially offset by $4.4 million of non-cash expenses consisting primarily of $5.0 million of stock-based compensation expense, $0.3 million of amortization and accretion of short-term investments, and $0.2 million of depreciation and amortization. These amounts were partially offset by a gain of $1.1 million related to the PPP loan forgiveness. For the year ended December 31, 2021, we used net cash of $3.9 million from changes in our operating assets and liabilities resulting primarily from a $5.8 million increase in prepaid expenses and other current assets, a $1.1 million decrease in other long-term liabilities, a $0.2 million increase in other long-term assets, and a $0.2 million increase in accounts receivable. This was partially offset by a $1.2 million increase in accrued expenses due to timing of payments, a $0.9 million decrease in inventories due to increased sales volume of lidar sensors, and a $1.3 million increase in accounts payable due to timing of payments.

Investing Activities

For the year ended December 31, 2022, our investing activities used $1.6 million in cash, resulting primarily from purchases of short-term investments of $32.4 million and purchases of property and equipment of $0.8 million, partially offset by proceeds from the sales and maturities of short-term investments of $31.6 million.

For the year ended December 31, 2021, our investing activities provided $28.7 million in cash, resulting primarily from the sales and maturities of short-term investments of $37.4 million, which was partially offset by purchases of short-term investments of $8.5 million and purchases of property and equipment of $0.3 million.

Financing Activities

For the year ended December 31, 2022, our financing activities provided $88.6 million consisting primarily of $47.1 million of net proceeds from the Business Combination and PIPE Investment, $49.2 million of proceeds from the issuance of debt and warrants, $1.7 million from proceeds from issuance of common stock, and $1.0 million from proceeds from common stock option exercises, which was partially offset by repayment of debt of $10.4 million

For the year ended December 31, 2021, our financing activities provided $0.4 million of cash consisting primarily of proceeds from exercises of common stock options.

Critical Accounting Policies and Estimates

We prepare our consolidated financial statements in accordance with U.S. GAAP. The preparation of these consolidated financial statements requires us to make estimates, assumptions and judgments that can significantly impact the amounts we report as assets, liabilities, revenue, costs and expenses and the related disclosures. We base our estimates on historical experience and other assumptions that we believe are reasonable under the circumstances. Our actual results could differ significantly from these estimates under different assumptions and conditions. We believe that the accounting policies discussed below are critical to understanding our historical and future performance as these policies involve a greater degree of judgment and complexity.

Revenue

We primarily recognize revenues from the sale of lidar sensors and prototypes. Revenue represents the amount of expected consideration we are entitled to receive upon the transfer of promised goods or services in the ordinary course of business and is recorded net of sales taxes. We recognize revenue when performance obligations are satisfied by transferring control of a promised good or service to a customer. For performance obligations satisfied at a point in time, we consider the following indicators to assess whether control of a promised good or service is transferred to the customer: (i) right of payment, (ii) legal title, (iii) physical possession, (iv) significant risks and rewards of ownership, and (v) acceptance of the good or service. For performance obligations satisfied over time, we recognize revenue over time by measuring the progress toward complete satisfaction of a performance obligation.

The application of various accounting principles related to the measurement and recognition of revenue requires us to make judgments and estimates. Specifically, complex arrangements with nonstandard terms and conditions may require relevant contract interpretation to determine the appropriate accounting treatment, including whether the promised goods and services specified in a multiple element arrangement should be treated as separate performance obligations. When a contract involves multiple performance obligations, the Company accounts for individual products and services separately if the customer can benefit from the product or service on its own or with other resources that are readily available to the customer and the product or service is separately identifiable from other promises in the arrangement.

Changes in judgments with respect to these assumptions and estimates could impact the timing or amount of revenue recognition.

Stock-Based Compensation

We recognize stock-based awards granted to our employees and directors based on the estimated grant-date fair value of the awards. Compensation expense is recognized on a straight-line basis over the requisite service period, which is generally the vesting period of the respective award. We estimate the fair value of options using the Black-Scholes option-pricing model, which requires objective and subjective assumptions such as the option's expected term, the fair value of underlying share, risk-free interest rate, expected dividend yield, expected term, and expected volatility of our ordinary shares. The fair value of performance-based stock units with market conditions are measured at the valuation date using the Monte Carlo method. Our assumptions may differ from those used in prior periods. Changes to the estimates we make from time to time may have a significant impact on our stock-based compensation expense and could materially impact our results of operations.

The grant date fair value of our common stock, prior to the closing of the Business Combination was determined using valuation methodologies that utilize certain assumptions, including probability weighting of events, volatility, time to liquidation, risk-free interest rate, and an assumption for a discount for lack of marketability. Subsequent to the Business Combination, the valuation of our common stock is determined using the publicly traded closing price as reported on Nasdaq.

Change in Fair Value of Earnout Liability

We concluded the Earnout Shares meet the criteria for liability classification due to the existence of contingent settlement provisions that could result in holders receiving differing amounts of shares depending on the our stock price or the price paid in a change of control. Because the settlement is not solely determined by the share price of our stock (that is, the share price observed in or implied by a qualifying change-in-control event), but also by the occurrence of a qualifying change-in-control event, this causes the Earnout Shares to not be indexed to our own shares, resulting in liability classification. The fair value of the earnout liability was determined using a Monte Carlo valuation model that utilizes significant assumptions, including expected volatility, expected term, and risk-free rate, to determine the probability of achieving the common share price milestones.

The following table summarizes the assumptions used in estimating the fair value of the earnout liability at each of the relevant dates:

	December 31, 2022	**February 10, 2022 (Closing Date)**
Stock price	$ 1.27	$ 7.99
Expected volatility	79.0%	77.5%
Risk-free interest rate	4.42%	1.80%
Expected term	2.1 years	3.0 years
Expected dividend yield	0%	0%

Emerging Growth Company Status

Section 102(b)(1) of the JOBS Act exempts emerging growth companies from being required to comply with new or revised financial accounting standards until private companies are required to comply with the new or revised financial accounting standards. The JOBS Act provides that a company can choose not to take advantage of the extended transition period and comply with the requirements that apply to non-emerging growth companies, and any such election to not take advantage of the extended transition period is irrevocable.

We are an "emerging growth company" as defined in Section 2(a) of the Securities Act and have elected to take advantage of the benefits of the extended transition period for new or revised financial accounting standards. Following the consummation of the Business Combination, we expect to remain an emerging growth company at least through the end of the 2023 fiscal year and to continue to take advantage of the benefits of the extended transition period, although we may decide to early adopt such new or revised accounting standards to the extent permitted by such standards. This may make it difficult or impossible to compare our financial results with the financial results of another public company that is either not an emerging growth company or is an emerging growth company that has chosen not to take advantage of the extended transition period exemptions because of the potential differences in accounting standards used.

Subject to certain conditions set forth in the JOBS Act, if, as an emerging growth company, we intend to rely on such exemptions, we are not required to, among other things: (i) provide an auditor's attestation report on our system of internal controls over financial reporting pursuant to Section 404(b) of the Sarbanes-Oxley Act; (ii) provide all of the compensation disclosure that may be required of non-emerging growth public companies under the Dodd-Frank Wall Street Reform and Consumer Protection Act; (iii) comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements (auditor discussion and analysis); and (iv) disclose certain executive compensation-related items such as the correlation between executive compensation and performance and comparisons of the Chief Executive Officer's compensation to median employee compensation.

We will remain an emerging growth company until the earlier of: (1) the last day of the fiscal year (a) ending December 31, 2026, (b) in which we have total annual gross revenue of at least $1.235 billion, or (c) in which we are deemed to be a large accelerated filer, which means the market value of our common stock that is held by non-affiliates exceeds $700 million as of the end of the prior fiscal year's second fiscal quarter; and (2) the date on which we have issued more than $1.0 billion in non-convertible debt during the prior three-year period. References herein to "emerging growth company" shall have the meaning associated with it in the JOBS Act.

Recent Accounting Pronouncements

See Note 1 to our consolidated financial statements included elsewhere in this Report for recently adopted accounting pronouncements and recently issued accounting pronouncements not yet adopted as of the date of this Report.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We are exposed to market risks 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 rates and prices. Our market risk exposure is primarily the result of fluctuations in foreign currency exchange rates and interest rates.

We do not believe that inflation has had a material effect on our business, financial condition or results of operations. Nonetheless, if our costs were to become subject to significant inflationary pressures, we may not be able to fully offset such higher costs. Our inability or failure to do so could harm our business, financial condition or results of operations.

Interest Rate Risk

As of December 31, 2022, we had cash, cash equivalents and short-term investments of $35.7 million, which consisted of commercial paper, U.S. treasury securities, U.S. government agency securities, and corporate debt securities. The short-term investments carry a degree of interest rate risk. A hypothetical 10% change in interest rates would not have a material impact on our financial condition or results of operations due to the short-term nature of our investment portfolio. In addition, as of December 31, 2022, the principal amount outstanding under the Secured Term Loan Agreement was $42.6 million. This loan bore interest at a fixed interest rate of 1% and was not subject to interest rate risk. The Secured Term Loan Agreement was repaid in full in January 2023. Following repayment of the borrowings under the Secured Term Loan Agreement, we did not have any indebtedness outstanding. As such, a hypothetical 10% change in interest rates would not have a material impact on our financial condition or results of operations due to the short-term nature of our term loan.

Foreign Currency Exchange Risk

Our results of operations and cash flows are subject to fluctuations due to changes in foreign currency exchange rates. Substantially 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 to a lesser extent in Canada and Germany. Our results of operations and cash flows are, therefore, subject to fluctuations due to changes in foreign currency exchange rates and may be adversely affected in the future due to changes in foreign exchange rates. Borrowings under the Secured Term Loan Agreement were denominated in Japanese Yen and exposed us to foreign currency exchange rate risk. Following repayment of the borrowings under the Secured Term Loan Agreement, we did not have any indebtedness or cash or cash equivalents denominated in Japanese Yen. 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 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 our risk relating to fluctuations in currency rates.

Item 8. Financial Statements and Supplementary Data

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors
Cepton, Inc.:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Cepton, Inc. and subsidiaries (the Company) as of December 31, 2022 and December 31, 2021, the related consolidated statements of operations and comprehensive income (loss), convertible preferred stock and stockholders' equity (deficit), and cash flows for the years then ended, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and December 31, 2021, and the results of its operations and its cash flows for the years then ended, in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ KPMG LLP

We have served as the Company's auditor since 2020.

Santa Clara, California
March 20, 2023

CEPTON, INC. AND SUBSIDIARIES
Consolidated Balance Sheets
(In thousands, except share data)

	December 31, 2022	December 31, 2021
ASSETS		
Current assets:		
Cash and cash equivalents	$ 31,953	$ 3,654
Short-term investments	3,703	2,836
Accounts receivable, net of allowance for doubtful accounts of $0 and $0, respectively	1,301	500
Inventories	2,985	2,523
Right-of-use assets	121	—
Prepaid expenses and other current assets	6,151	6,998
Total current assets	46,214	16,511
Property and equipment, net	982	480
Restricted cash	2,565	—
Other assets	555	293
Total assets	$ 50,316	$ 17,284
LIABILITIES, CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' EQUITY (DEFICIT)		
Current liabilities:		
Accounts payable	$ 1,979	$ 2,547
Operating lease liabilities	211	—
Accrued expenses and other current liabilities	2,265	2,777
Short-term debt	42,587	—
Total current liabilities	47,042	5,324
Warrant liability	440	—
Earnout liability	920	—
Other long-term liabilities	281	23
Total liabilities	48,683	5,347
Commitments and contingencies (Note 17)		
Convertible preferred stock:		
Convertible preferred stock – Par value $0.00001 per share – No shares authorized at December 31, 2022; 22,806,009 shares authorized at December 31, 2021; No shares issued and outstanding at December 31, 2022; 21,671,491 shares issued and outstanding at December 31, 2021; aggregate liquidation preference of $96.7 million at December 31, 2021	—	99,470
Stockholders' equity (deficit):		
Preferred stock – Par value $0.00001 per share – 5,000,000 shares authorized at December 31, 2022; No shares authorized at December 31, 2021; No shares issued and outstanding at December 31, 2022 or 2021	—	—
Common stock – Par value $0.00001 per share – 350,000,000 and 75,000,000 shares authorized at December 31, 2022 and 2021, respectively; 156,747,708 and 67,645,189 shares issued and outstanding at December 31, 2022 and 2021, respectively	2	—
Class F stock – Par value $0.0001 per share – No shares of Class F stock authorized at December 31, 2022; 8,402,000 shares authorized at December 31, 2021; No shares of Class F stock issued and outstanding at December 31, 2022; 8,372,143 shares issued and outstanding at December 31, 2021	—	—
Additional paid-in capital	88,056	7,949
Accumulated other comprehensive income	(366)	(43)
Accumulated deficit	(86,059)	(95,439)
Total stockholders' equity (deficit)	1,633	(87,533)
Total liabilities, convertible preferred stock and stockholders' equity (deficit)	$ 50,316	$ 17,284

See accompanying notes to the consolidated financial statements

CEPTON, INC. AND SUBSIDIARIES
Consolidated Statements of Operations and Comprehensive Income (Loss)
(In thousands, except share and per share data)

	Year Ended December 31,	
	2022	2021
Lidar sensor and prototype revenue	$ 5,616	$ 2,919
Development revenue	1,810	1,583
Total revenue	7,426	4,502
Lidar sensor and prototype cost of revenue	6,383	3,952
Development cost of revenue	849	442
Total cost of revenue	7,232	4,394
Gross profit	194	108
Operating expenses:		
Research and development	33,013	24,158
Selling, general and administrative	28,629	14,286
Total operating expenses	61,642	38,444
Operating loss	(61,448)	(38,336)
Other income (expense):		
Gain on change in fair value of earnout liability	74,078	—
Gain on change in fair value of warrant liability	2,875	—
Foreign currency transaction loss, net	(2,168)	—
(Loss) gain on extinguishment of debt	(958)	1,121
Other expense, net	(472)	(22)
Interest (expense) income, net	(2,511)	15
Income (loss) before income taxes	9,396	(37,222)
Provision for income taxes	(16)	(20)
Net income (loss)	$ 9,380	$ (37,242)
Net income (loss) per share, basic	$ 0.06	$ (0.55)
Net income (loss) per share, diluted	$ 0.06	$ (0.55)
Weighted-average common shares, basic	146,917,925	67,139,289
Weighted-average common shares, diluted	155,728,451	67,139,289
Net income (loss)	$ 9,380	$ (37,242)
Other comprehensive loss, net of tax:		
Changes in unrealized loss on available-for-sale securities	(6)	(4)
Foreign currency translation adjustments	(317)	(21)
Total other comprehensive loss, net of tax	(323)	(25)
Comprehensive income (loss)	$ 9,057	$ (37,267)

See accompanying notes to the consolidated financial statements

CEPTON, INC. AND SUBSIDIARIES

Consolidated Statements of Convertible Preferred Stock and Stockholders' Equity (Deficit)

(In thousands, except share data)

	Convertible Preferred Stock		Preferred Stock		Common Stock		Class F Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount				
Balance – December 31, 2020 (as previously reported)	21,671,491	$ 99,470	—	—	27,184,882	$ —	8,372,143	$ —	$ 2,286	$ (18)	$ (58,197)	$ (55,929)
Retroactive application of exchange ratio	31,407,080	—	—	—	39,397,278	—	12,133,201	—	—	—	—	—
Exercise of stock options	—	—	—	—	1,063,029	—	—	—	620	—	—	620
Stock-based compensation expense	—	—	—	—	—	—	—	—	5,043	—	—	5,043
Unrealized gain/loss on available-for-sale securities, net of tax	—	—	—	—	—	—	—	—	—	(4)	—	(4)
Cumulative translation adjustment	—	—	—	—	—	—	—	—	—	(21)	—	(21)
Net loss	—	—	—	—	—	—	—	—	—	—	(37,242)	(37,242)
Balance – December 31, 2021	53,078,571	99,470	—	—	67,645,189	—	20,505,344	—	7,949	(43)	(95,439)	(87,533)
Conversion of convertible preferred stock to common stock	(53,078,571)	(99,470)	—	—	53,078,571	1	—	—	99,470	—	—	99,471
Conversion of Class F stock to common stock	—	—	—	—	20,505,344	—	(20,505,344)	—	—	—	—	—
Reverse recapitalization, net of transaction costs	—	—	—	—	11,845,943	1	—	—	(33,142)	—	—	(33,141)
Exercise of stock option, release of RSUs, and vesting of early exercised options	—	—	—	—	1,995,631	—	—	—	1,110	—	—	1,110
Issuance of common stock to LPC	—	—	—	—	1,292,505	—	—	—	1,880	—	—	1,880
Exercise of Trinity warrants	—	—	—	—	237,571	—	—	—	547	—	—	547
Exercise of SVB warrants	—	—	—	—	146,954	—	—	—	—	—	—	—
Stock-based compensation expense	—	—	—	—	—	—	—	—	8,258	—	—	8,258
Unrealized gain/loss on available-for-sale securities, net of tax	—	—	—	—	—	—	—	—	—	(6)	—	(6)
Capital contribution from Secured Term Loan Agreement	—	—	—	—	—	—	—	—	1,984	—	—	1,984
Cumulative translation adjustment	—	—	—	—	—	—	—	—	—	(317)	—	(317)
Net income	—	—	—	—	—	—	—	—	—	—	9,380	9,380
Balance – December 31, 2022	—	—	—	—	156,747,708	2	—	—	88,056	(366)	(86,059)	1,633

See accompanying notes to the consolidated financial statements

CEPTON, INC. AND SUBSIDIARIES
Consolidated Statements of Cash Flows
(In thousands)

	Year Ended December 31,	
	2022	2021
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net income (loss)	$ 9,380	$ (37,242)
Adjustments to reconcile net income (loss) to net cash used in operating activities:		
Depreciation and amortization	344	210
Stock-based compensation	8,243	4,995
Amortization of right-of-use asset	1,360	—
Amortization, other	1,641	257
Gain on change in fair value of earnout liability	(74,078)	—
Gain on change in fair value of warrant liability	(2,875)	—
Loss on disposal of property and equipment	—	42
Loss (gain) from extinguishment of debt	958	(1,121)
Foreign currency transaction loss, net	2,168	—
Other	181	—
Changes in operating assets and liabilities:		
Accounts receivable, net	(801)	(215)
Inventories	(448)	919
Prepaid expenses and other current assets	(1,920)	(5,834)
Other long-term assets	(296)	(199)
Accounts payable	(653)	1,333
Accrued expenses and other current liabilities	99	1,214
Operating lease liabilities	(1,611)	—
Other long-term liabilities	311	(1,118)
Net cash used in operating activities	(57,997)	(36,759)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchases of property and equipment	(760)	(276)
Purchases of short-term investments	(32,368)	(8,455)
Proceeds from sales of short-term investments	8,303	8,514
Proceeds from maturities of short-term investments	23,274	28,900
Net cash (used in) provided by investing activities	(1,551)	28,683
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from Business Combination and private offering	76,107	—
Payments of Business Combination and private offering transaction costs	(29,031)	—
Proceeds from issuance of Trinity debt and warrants, net of debt discount	9,724	—
Repayment of Trinity debt	(10,400)	—
Proceeds from issuance of Koito secured term loan	39,442	—
Proceeds from issuance of common stock options	1,008	469
Payment of debt issuance costs	—	(30)
Proceeds from issuance of common stock	1,700	—
Net cash provided by financing activities	88,550	439
Effect of exchange rate changes on cash	1,862	(21)
Net increase (decrease) in cash, cash equivalents and restricted cash	30,864	(7,658)
Cash, cash equivalents and restricted cash, beginning of period	3,654	11,312
Cash, cash equivalents and restricted cash, end of period	$ 34,518	$ 3,654

CEPTON, INC. AND SUBSIDIARIES
Consolidated Statements of Cash Flows — (Continued)
(In thousands)

	Year Ended December 31,	
	2022	2021
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION		
Cash paid for interest	$ 983	$ —
Cash paid for income taxes	$ 24	$ 2
Business Combination transaction costs, accrued but not paid	$ —	$ 1,629
Transaction costs, accrued but not paid	$ 307	$ —
SUPPLEMENTAL DISCLOSURES OF NON-CASH INVESTING AND FINANCING INFORMATION		
Purchases of property and equipment in accounts payable	$ 85	$ —
Vesting of early exercised stock options	$ 101	$ 151
Right-of-use assets obtained in exchange for new operating lease liabilities upon accounting standard adoption	$ 1,827	$ —

See accompanying notes to the consolidated financial statements

Note 1. Description of Business and Summary of Significant Accounting Policies

Description of Business

Cepton, Inc., and its wholly owned subsidiaries, formerly known as Growth Capital Acquisition Corp., was originally incorporated in Delaware on January 4, 2010, under the name PinstripesNYS, Inc. GCAC changed its name to Growth Capital Acquisition Corp. on February 14, 2020. GCAC was a special purpose acquisition company formed for the purpose of effecting a merger, capital stock exchange, asset acquisition, stock purchase, reorganization, or other similar business combination with one or more target businesses. On February 2, 2021, the Company consummated its initial public offering, following which its shares began trading on the Nasdaq National Market. On August 4, 2021, GCAC entered into a Business Combination Agreement with Cepton Technologies, Inc. and GCAC Merger Sub Inc., a wholly owned subsidiary of GCAC. On February 10, 2022, the transactions contemplated by the Merger Agreement were consummated. In connection with the closing of the Business Combination, GCAC changed its name to Cepton, Inc. and its shares and public warrants began trading on the Nasdaq under the symbols “CPTN” and “CPTNW”, respectively. As a result of the Business Combination, Cepton, Inc. became the owner, directly or indirectly, of all of the equity interests of Legacy Cepton and its subsidiaries.

The Company provides state-of-the-art, intelligent, lidar-based solutions for a range of markets such as automotive, smart cities, smart spaces, and smart industrial applications. The Company’s patented lidar technology enables reliable, scalable, and cost-effective solutions that deliver long range, high resolution 3D perception for smart applications. The Company is headquartered in San Jose, California, USA, with a presence in Germany, Canada, Japan, China and India.

Basis of Presentation and Principles of Consolidation

The consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States of America (“U.S. GAAP”). The consolidated financial statements include the accounts of the Company’s wholly owned subsidiaries in Canada, Germany, Japan, China and the United Kingdom. All intercompany balances and transactions have been eliminated in consolidation.

The accompanying consolidated financial statements have been prepared assuming the Company will continue as a going concern. As of December 31, 2022, the Company had cash and cash equivalents of $32.0 million, short-term investment of $3.7 million, and an accumulated deficit of $86.1 million. For the year ended December 31, 2022, the Company incurred an operating loss of $61.4 million and had negative cash flows from operating activities of $58.0 million. Although much of the negative cash flow resulted from an increase in expenses for research and development projects and administrative expenses to support growth of the Company, the Company expects to continue to invest in research and development and generate operating losses in the future.

The Company is subject to risks and uncertainties frequently encountered by early-stage companies including, but not limited to, the uncertainty of successfully developing its products, securing certain contracts, building its customer base, successfully executing its business and marketing strategy and hiring appropriate personnel.

To date, the Company has been funded primarily by equity financings, convertible promissory notes and the net proceeds it received through the Business Combination, PIPE Investment, and private placements of the Legacy Cepton convertible preferred stock. Failure to generate sufficient revenues, achieve planned gross margins and operating profitability, control operating costs, or secure additional funding may require the Company to modify, delay, or abandon some of its planned future expansion or development, or to otherwise enact operating cost reductions available to management, which could have a material adverse effect on the Company’s business, operating results, financial condition, and ability to achieve its intended business objectives. For further information regarding the Company’s financing activities, see Note 21 to the consolidated financial statements.

Concentration of Risk

Financial instruments that subject the Company to concentrations of credit risk consist primarily of cash and cash equivalents, short-term investments, and accounts receivable. The Company maintains a substantial portion of its cash and cash equivalents and short-term investments in money market funds, commercial paper, corporate

Note 1. Description of Business and Summary of Significant Accounting Policies (cont.)

debt securities, and asset backed securities. Management believes that the financial institutions that hold its cash, cash equivalents, and short-term investments are financially sound and, accordingly, represent minimal credit risk. Deposits held with banks may exceed the amount of federal insurance limits provided on such deposits.

As of December 31, 2022 and December 31, 2021, two and three customers, respectively, each accounted for more than 10% of accounts receivable.

Customers with revenue equal to or greater than 10% of total revenue for the periods indicated were as follows:

	Year Ended December 31,	
	2022	2021
Customer A	43%	68%
Customer B	20%	2%
Customer C	12%	—%

Supplier Concentrations

For the year ended December 31, 2022, one supplier vendor accounted for approximately 31% of total accounts payable. For the year ended December 31, 2021, there were no supplier vendors that accounted for a significant portion of accounts payable.

Use of Estimates

The preparation of consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Significant items subject to such estimates and assumptions include, but are not limited to, inventory valuation and reserves, warranty reserves, valuation allowance for deferred tax assets, valuation of earnout and warrant liabilities, stock-based compensation, useful lives of property, plant and equipment, income tax uncertainties, and other loss contingencies. The Company evaluates its estimates and assumptions on an ongoing basis using historical experience and other factors and adjusts those estimates and assumptions when facts and circumstances dictate. Actual results could differ from those estimates, and such differences could be material to the Company's consolidated financial condition and results of operations.

Reclassifications

Certain reclassifications have been made to prior-period amounts to conform to current-period reporting classifications.

Cash Equivalents and Short-Term Investments

The Company considers all highly liquid investments with original maturity of three months or less at the date of purchase to be cash equivalents.

The Company's short-term investments consist of investments and marketable securities that are classified as available-for-sale securities and are carried at fair value, with net unrealized gains or losses, net of tax, reported as a separate component of accumulated other comprehensive loss within stockholders' deficit.

Restricted Cash

Restricted cash of $2.6 million as of December 31, 2022 consists of funds that are contractually restricted as to usage or withdrawal due to a contractual agreement. This restricted cash balance represents a letter of credit with Citibank, N.A. as a security deposit on its headquarters in San Jose, California, pursuant to a new office lease agreement that commenced on February 1, 2023 and continues through April 30, 2028. See Note 17 for further information.

Note 1. Description of Business and Summary of Significant Accounting Policies (cont.)

The Company determines current or non-current classification of restricted cash based on the expected duration of the restriction.

The total cash, cash equivalents and restricted cash shown in the consolidated statements of cash flows consisted of the following as of December 31, 2022 and 2021 (in thousands):

	December 31,	
	2022	2021
Cash and cash equivalents	$ 31,953	$ 3,654
Restricted cash	2,565	—
Total cash, cash equivalents and restricted cash	$ 34,518	$ 3,654

Accounts Receivable

Trade accounts receivable are recorded at the invoiced amount, net of any allowance for doubtful accounts, and do not bear interest. Allowances on accounts receivable are recorded when circumstances indicate collection is doubtful for a particular accounts receivable balance. Receivables are written off if reasonable collection efforts prove unsuccessful. The Company provides for allowances on a specific account basis. As of December 31, 2022, and 2021, the allowance for doubtful accounts was immaterial.

Inventories

Inventories are stated at the lower of cost or estimated net realizable value. Costs are computed under the standard cost method, which approximates actual costs determined on the first-in, first-out basis. The Company records write-downs of inventories which are obsolete based on product life cycle stage, product development plans, and assumptions about future demand and market conditions.

Property and Equipment

Property and equipment are stated at cost, less accumulated depreciation and amortization. The Company depreciates property and equipment using the straight-line method over the estimated useful lives of the assets, generally three to seven years. Leasehold improvements are amortized over the shorter of the asset's useful life or the remaining lease term. When assets are retired or otherwise disposed of, the cost and related accumulated depreciation and amortization are removed from the balance sheet and the resulting gain or loss is reflected in operations in the period realized. Improvements are capitalized and amortized over the remaining term of the estimated useful life of the asset. Maintenance and repairs are charged to operations as incurred.

Foreign Currency

The functional currency of the Company's foreign subsidiaries in Canada, Germany, China, and Japan is the respective local currency whereas the functional currency of the foreign subsidiary in the United Kingdom is the U.S. dollar. For the Canada, Germany, China and Japan entities, assets and liabilities are translated into U.S. dollars at the local current exchange rates in effect at the balance sheet date, and income and expense accounts are translated at the average exchange rates during the period. The resulting translation adjustments are included in accumulated other comprehensive income. Foreign currency translation loss was immaterial for the years ended December 31, 2022 and 2021.

As of December 31, 2022, a portion of the Company's cash and cash equivalents was denominated in Japanese Yen. In addition, borrowings under the Secured Term Loan Agreement (as defined below) were also denominated in Japanese Yen. Monetary assets and liabilities are measuring into U.S. dollars at the local current exchange rates in effect at the balance sheet date. For the year ended December 31, 2022, a net $2.2 million foreign currency transaction loss was recorded in the Company's consolidated statements of operation.

Note 1. Description of Business and Summary of Significant Accounting Policies (cont.)

Convertible Preferred Stock

The Company records all shares of convertible preferred stock at their respective fair values on the dates of issuance, net of issuance costs, if applicable. The convertible preferred stock is recorded outside of permanent stockholders' equity (deficit) because while it is not mandatorily redeemable, it is contingently redeemable into cash upon the occurrence of an event not solely within the Company's control. When it is probable that a convertible preferred share will become redeemable, adjustments are recorded to adjust the carrying values. No adjustments were recorded for the year ended December 31, 2021. Refer to Note 10 for more information on the rights, preferences, privileges, and restrictions associated with the convertible preferred stock.

Revenue Recognition

The Company recognizes revenue from contracts with its customers. A contract with a customer exists when both parties have approved the contract and are committed to perform their respective obligations, each party's rights can be identified, payment terms can be identified, the contract has commercial substance, and it is probable that the Company will collect substantially all of the consideration it is entitled to. Revenue is recognized when, or as, performance obligations are satisfied by transferring control of a promised product or service to a customer.

The Company's revenue is primarily derived from product sales of lidar sensors to direct customers. Revenue is recognized at a point in time when control of the products is transferred to the customer, generally occurring upon shipment in accordance with the terms of the related contract. Amounts billed to customers for shipping and handling are included in the transaction price and are not treated as separate performance obligations as these costs fulfill a promise to transfer the product to the customer. Shipping and handling costs paid by the Company are included in cost of revenue. Taxes collected from customers and remitted to governmental authorities are excluded from revenue on the net basis of accounting.

When a contract involves multiple promises, the Company accounts for individual performance obligations if the customer can benefit from each promise on its own or with other resources that are readily available to the customer and each promise is separately identifiable from other promises in the arrangement. In these situations, the arrangement consideration is allocated between the separate performance obligations in proportion to their estimated standalone selling price. The standalone selling price reflects the price the Company would charge for a specific product if it were sold separately in similar circumstances and to similar customers. If the selling price is not directly observable, the Company may estimate the stand-alone selling price through maximizing the use of observable inputs such as historical discounting, project cost estimates, and targeted margins.

Costs to obtain a contract

The Company generally expenses the incremental costs of obtaining a contract when incurred because the amortization period for these costs would be less than one year. These costs primarily relate to sales commissions and are recognized upon receiving customer payment, at the time of the customer order, or at the time of product shipment. Commission expense were immaterial for the years ended December 31, 2022 and 2021, which was recorded in selling, general and administrative expense in the Company's consolidated statements of operations.

Contract balances

The timing of revenue recognition, billings, and cash collections generally results in accounts receivable recognized on the balance sheet. However, the Company may recognize contract liabilities when consideration is received from a customer prior to transferring goods or services to the customer. Contract liabilities are recognized as revenue after control of the products or services is transferred to the customer and all revenue recognition criteria have been met.

Note 1. Description of Business and Summary of Significant Accounting Policies (cont.)

Customer deposits

The Company may recognize customer deposit liabilities when consideration is received from a customer prior to entering into a contract. Customer deposit liabilities are recognized as revenue when a contract with enforceable rights and obligations exists and all revenue recognition criteria have been met.

Right of return

The Company's general terms and conditions for its contracts do not contain a right of return that allows the customer to return products and receive a credit. Therefore, the Company does not estimate returns and generally recognizes revenue upon shipment.

Significant financing components

The Company may receive payment from a customer either before or after the performance obligation has been satisfied. The expected timing difference between the payment and satisfaction of performance obligations for the vast majority of the Company's contracts is one year or less; therefore, the Company applies a practical expedient and does not consider the effects of the time value of money. The Company's contracts with customer prepayment terms do not include a significant financing component because the primary purpose is not to receive financing from the customers.

Cost of Revenue

Cost of revenue is comprised of Lidar Sensor and Prototype Revenue and Development Cost of Revenue. Lidar Sensor and Prototype cost of revenue includes the manufacturing cost of lidar sensors, which primarily consists of personnel-related costs directly associated with the Company's manufacturing organization, and amounts paid to its third-party contract manufacturers and vendors. The Company's cost of revenue also includes depreciation and amortization, cost of component inventory, product testing costs, costs of providing services, an allocated portion of overhead, facility and IT costs, warranty costs, excess and obsolete inventory and shipping costs. Development Cost of Revenue includes similar costs and specifically relates to development contracts and arrangements focused on specific development and customization of lidar capabilities.

Product Warranties

The Company typically provides a one-year warranty on its products. Estimated future warranty costs are accrued and charged to cost of goods sold in the period that the related revenue is recognized. These estimates are derived from historical data and trends of product reliability and costs of repairing and replacing defective products. The Company periodically assesses the adequacy of its recorded warranty liabilities and adjusts the amounts as necessary. Through December 31, 2022, there were immaterial changes to the accrued warranty liability which was recorded in accrued expenses and other current liabilities on the consolidated balance sheet.

Research and Development

Research and development expenses consist primarily of personnel-related costs directly associated with the Company's research and development organization, with the remainder being prototype expenses, third-party engineering and contractor costs, an allocated portion of facility and IT costs and depreciation. The Company's research and development efforts are focused on enhancing and developing additional functionality for its existing products and on new product development, including new releases and upgrades to its lidar sensors and embedded software. Research and development costs are expensed as incurred.

Note 1. Description of Business and Summary of Significant Accounting Policies (cont.)

Advertising

Advertising costs are expensed as incurred and were $0.4 million and $0.2 million for the years ended December 31, 2022 and 2021, respectively, which was recorded in selling, general and administrative expense in the Company's consolidated statements of operations.

Income Taxes

The Company accounts for income taxes using the asset and liability method. Under this method, deferred income tax assets and liabilities are recorded based on the estimated future tax effects of differences between the financial statement and income tax basis of existing assets and liabilities. Deferred income tax assets and liabilities are recorded net and classified as non-current on the consolidated balance sheet. A valuation allowance is provided against the Company's deferred income tax assets when their realization is not reasonably assured. The Company accrues for uncertain tax positions identified, which are not deemed more likely than not to be sustained if challenged, and recognizes interest and penalties accrued on unrecognized tax benefits as a component of income tax expense.

Stock-Based Compensation Expense

The Company grants stock options, restricted stock units (RSUs), and performance-based stock units (PSUs) to employees and non-employees. Stock-based compensation is recognized on a straight line basis over the requisite service period, which is generally the vesting period of the award except as otherwise disclosed.

The Company uses the Black-Scholes option pricing model to determine the fair value of its stock option awards. The determination of the fair value for stock options in connection with determining stock compensation requires judgment, including estimating the fair market value of common stock (prior to Business Combination), stock-price volatility, expected term, expected dividends, and risk-free interest rates. Prior to the Business Combination with the absence of a public trading market, the Company considered numerous objective and subjective factors to determine the fair market value of common stock. These factors included but were not limited to (i) contemporaneous third-party valuations of common stock; (ii) the rights and preferences of preferred stock relative to common stock; (iii) the lack of marketability of common stock; (iv) developments in the business; and (v) the likelihood of achieving a liquidity event, such as an initial public offering or sale of the Company, given prevailing market conditions. After the Business Combination, the fair market value of common stock is readily available.

The fair value of RSUs is equal to the fair market value of the Company's common stock on the grant date. The fair value of the PSUs at valuation date was determined using a Monte Carlo valuation model that utilizes significant assumptions, including expected volatility, dividend yield, stock price as of the valuation date, market capitalization targets and the corresponding share price targets necessary for each tranche of PSUs to vest, expected life, and risk-free rate.

Stock options for all periods prior to the Business Combination have been retroactively restated to give effect to the recapitalization.

Impairment of Long-Lived Assets

Long-lived assets, such as property and equipment, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. If circumstances require the testing of a long-lived asset or asset group for possible impairment, the Company first compares undiscounted cash flows expected to be generated by that asset or asset group to its carrying amount. If the carrying amount of the long-lived asset or asset group is not recoverable on an undiscounted cash flow basis, an impairment is recognized to the extent that the carrying amount exceeds its fair value. Fair value is determined using various valuation techniques including discounted cash flow models, quoted market values and third-party independent appraisals, as considered necessary. No impairment loss was recognized for the years ended December 31, 2022 and 2021.

Note 1. Description of Business and Summary of Significant Accounting Policies (cont.)

Fair Value Measurements

The Company determines the fair value of an asset or liability based on the assumptions that market participants would use in pricing the asset or liability in an orderly transaction between market participants at the measurement date. The identification of market participant assumptions provides a basis for determining what inputs are to be used for pricing each asset or liability.

A fair value hierarchy has been established which gives precedence to fair value measurements calculated using observable inputs over those using unobservable inputs. This hierarchy prioritized the inputs into three broad levels as follows:

Level 1:	Quoted prices in active markets for identical instruments
Level 2:	Other significant observable inputs (including quoted prices in active markets for similar instruments)
Level 3:	Significant unobservable inputs (including assumptions in determining the fair value of certain investments)

Money market funds are highly liquid investments and are actively traded. The pricing information for the Company's money market funds are readily available and can be independently validated as of the measurement date. This approach results in the classification of these securities as Level 1 of the fair value hierarchy. The Company's short-term investments consisting of U.S. government agency securities and corporate debt securities are classified as Level 2 within the fair value hierarchy given their fair values are based on other significant observable inputs. As of December 31, 2022, the Company held $10.4 million in money market funds and $3.7 million in short-term investments. As of December 31, 2021, the Company held $0.9 million in money market funds and $2.8 million in short-term investments.

Commitments and Contingencies

Liabilities for loss contingencies arising from claims, assessments, litigation, fines, and penalties and other sources are recorded when it is probable that a liability has been incurred and the amount within a range of loss can be reasonably estimated. When no amount within the range is a better estimate than any other amount, the Company accrues for the minimum amount within the range. Legal costs incurred in connection with loss contingencies are expensed as incurred. No liabilities for loss contingencies were accrued as of December 31, 2022 and 2021.

Recently Adopted Accounting Pronouncements

In May 2021, the Financial Accounting Standards Board ("FASB") issued Accounting Standard Update ("ASU") 2021-04, *Earnings Per Share (Topic 260), Debt — Modifications and Extinguishments (Topic 470-50), Compensation — Stock Compensation (Topic 718), and Derivatives and Hedging — Contracts in Entity's Own Equity (Subtopic 815-40)*, which clarifies existing guidance for freestanding written call options which are equity classified and remain so after they are modified or exchanged in order to reduce diversity in practice. The Company is required to apply the amendments within this ASU prospectively to modifications or exchanges occurring on or after the effective date of the amendment. The standard is effective for fiscal years beginning after December 15, 2021, including interim periods within those fiscal years. The Company adopted this standard beginning on January 1, 2022, and the adoption did not have a material impact on its consolidated financial statements.

In August 2020, the FASB issued ASU 2020-06, *Debt — Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging — Contracts in Entity's Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity's Own Equity*, which simplifies the accounting for certain financial instruments with characteristics of liabilities and equity, including convertible instruments and contracts on an entity's own equity. The ASU is part of the FASB's simplification initiative, which aims to reduce unnecessary complexity in U.S. GAAP. As the Company expects to be an emerging growth company, ASU 2020-06 will be effective for interim and annual

Note 1. Description of Business and Summary of Significant Accounting Policies (cont.)

periods in fiscal years beginning after December 15, 2023, with earlier adoption permitted for fiscal years beginning after December 15, 2020. The Company early adopted this standard beginning January 1, 2022 using the modified retrospective method, and the adoption did not have a material impact on its consolidated financial statements.

In December 2019, the FASB issued ASU 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes*, which simplifies various aspects related to accounting for income taxes. The pronouncement is effective for fiscal years, and for interim periods within those fiscal years, beginning after December 15, 2020, with early adoption permitted. ASU 2019-12 is effective for the Company beginning January 1, 2022. The standard eliminates certain exceptions to the general principles in Accounting Standards Codification ("ASC") 740 and makes amendments to other areas with a focus on simplification and consistent application of U.S. GAAP. The Company adopted this standard beginning January 1, 2022 prospectively, and the adoption did not have a material impact on its consolidated financial statements.

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*, which supersedes the previous accounting guidance for leases included within ASC 840. Under the new guidance, a lessee is required to recognize assets and liabilities for finance and operating leases. The ASU also requires disclosures on the amount, timing, and uncertainty of cash flows arising from leases. The Company adopted this standard beginning January 1, 2022, using the modified retrospective method that included a number of optional practical expedients that the Company elected to apply. See Note 16 for disclosure on the impact of adopting this standard.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments — Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*, which significantly changes the way entities recognize credit losses and impairment of financial assets recorded at amortized cost. Currently, the credit loss and impairment model for loans and leases is based on incurred losses, and investments are recognized as impaired when there is no longer an assumption that future cash flows will be collected in full under the originally contracted terms. Under the new current expected credit loss ("CECL") model, the standard requires immediate recognition of estimated credit losses expected to occur over the remaining life of the asset. As the Company is an emerging growth company, the standard will be effective for fiscal years beginning after December 15, 2022, including interim periods within those fiscal years. Early adoption is permitted. The Company adopted this standard on January 1, 2023 using the modified retrospective method, and the adoption of the standard is not expected to have any material impacts to its consolidated financial statements and related disclosures.

Recently Issued Accounting Pronouncements

In June 2022, the FASB issued ASU 2022-03, *Fair Value Measurement (Topic 820): Equity Securities Subject to Contractual Sale Restrictions*, which clarifies how the fair value of equity securities subject to contractual sale restrictions is determined (Topic 820). The amendment clarifies that a contractual sale restriction should not be considered in measuring fair value. It also requires certain qualitative and quantitative disclosures related to equity securities subject to contractual sale restrictions. As the Company is an emerging growth company, the standard will be effective for fiscal years beginning after December 15, 2024, including interim periods within those fiscal years. Early adoption is permitted. The Company is currently evaluating the potential impact on its consolidated financial statements and related disclosures from the adoption of this standard.

Note 2. Business Combination

The Business Combination was accounted for as a reverse recapitalization as Legacy Cepton was determined to be the accounting acquirer under FASB ASC Topic 805, Business Combinations (ASC 805). The determination is primarily based on the evaluation of the following facts and circumstances:

- the equity holders of Legacy Cepton hold the majority of voting rights in the Company;
- the board of directors of Legacy Cepton represent a majority of the members of the board of directors of the Company or were appointed by Legacy Cepton;

Note 2. Business Combination (cont.)

- the senior management of Legacy Cepton became the senior management of the Company; and
- the operations of Legacy Cepton comprise the ongoing operations of the Company.

In connection with the Business Combination, outstanding capital stock of Legacy Cepton was converted into common stock of Legacy Cepton and then subsequently converted into Class A common stock of the Company, representing a recapitalization, and the net assets of the Company were acquired at historical cost, with no goodwill or intangible assets recorded. Legacy Cepton was deemed to be the predecessor of the Company, and the consolidated assets and liabilities and results of operations prior to the Closing Date are those of Legacy Cepton. The shares and corresponding capital amounts and net loss per share available to common stockholders, prior to the Business Combination, have been retroactively restated as shares reflecting the Exchange Ratio (as defined below). Operations prior to the Business Combination will be those of Legacy Cepton in future reports of the combined entity.

Recapitalization

In connection with the Business Combination, the following occurred to recapitalize the Company:

- Shares of Legacy Cepton convertible preferred stock and Class F stock issued and outstanding, were converted into common stock of Legacy Cepton, and thereafter, all shares of Legacy Cepton common stock were subsequently converted into the Company's Class A common stock, par value $0.0001 per share, at a rate of approximately 2.449 (the "Exchange Ratio");
- Vested stock options to purchase or receive shares of Legacy Cepton common stock (see Note 12) converted into options to purchase or receive shares of the Company's Class A common stock, par value $0.0001 per share, in accordance with the Exchange Ratio;
- Outstanding warrants, whether vested or unvested, to purchase shares of Legacy Cepton common stock (see Note 14) converted into shares of the Company's Class A common stock, par value $0.0001 per share, in accordance with the Exchange Ratio;
- Outstanding unvested stock options to purchase or receive shares of Legacy Cepton common stock (see Note 12) converted into unvested stock options to purchase or receive shares of the Company's Class A common stock upon the same terms and conditions that were in effect with respect to such stock options immediately prior to the Business Combination, after giving effect to the Exchange Ratio;
- The Company's certificate of incorporation was amended and restated to, among other things, increase the total number of authorized shares of capital stock to 355,000,000 shares, of which 350,000,000 shares were designated common stock, $0.00001 par value per share, and of which 5,000,000 shares were designated preferred stock, $0.00001 par value per share and to reclassify each share of Class A common stock and Class B common stock into one share of common stock.

PIPE Investment

Contemporaneously with the execution of the Merger Agreement, GCAC entered into subscription agreements with certain investors (the "PIPE Investors"), pursuant to which the PIPE Investors agreed to purchase an aggregate of 5,950,000 shares of common stock at a purchase price of $10.00 per share, or an aggregate purchase price of $59.5 million (the "PIPE Investment").

Redemption

Prior to the closing of the Business Combination on February 10, 2022, certain GCAC public shareholders exercised their right to redeem certain of their outstanding shares for cash, resulting in the redemption of 15,589,540 shares of GCAC Class A common stock for an aggregate payment of $155.9 million.

Note 2. Business Combination (cont.)

Public and Private Placement Warrants

GCAC warrants issued in connection with the IPO ("Public Warrants") and in connection with the private placement units held by the Sponsor ("Private Placement Warrants") remained outstanding after the closing of the Business Combination. The warrants became exercisable to purchase shares of the Company's common stock at an exercise price of $11.50 per share 30 days after the completion of the Business Combination, subject to other conditions, including with respect to the effectiveness of a registration statement covering the shares of common stock underlying such warrants, and will expire five years after the completion of the Business Combination or earlier upon redemption or liquidation. The Public Warrants are equity-classified and were valued based on the instruments' publicly listed trading price as of the Closing Date. The Private Placement Warrants are liability-classified and are valued on a recurring basis with changes in fair value recognized as a gain or loss upon remeasurement (see Note 14).

Transaction Costs

The Company incurred direct and incremental costs of approximately $31.7 million in connection with the Business Combination and the related equity issuance, consisting primarily of investment banking, legal, accounting, and other professional fees, which were recorded to additional paid-in capital as a reduction of proceeds. An approximate additional $2.6 million of transaction costs were recorded in general and administrative expense related to the liability classified instruments assumed subsequent to the Business Combination. Lastly, the Company recognized approximately $4.4 million and $1.9 million of prepaid director and officer insurance in prepaid expenses and other current assets and other long-term assets, respectively, in the consolidated balance sheet.

Transaction Proceeds

Upon closing of the Business Combination, the Company received gross proceeds of $76.1 million from the Business Combination and PIPE Investment, offset by total transaction costs of $40.7 million. The following table reconciles the elements of the Business Combination to the consolidated statements of cash flows and the consolidated statement of changes in stockholders' equity (deficit) for the period ended December 31, 2022 (in thousands):

Cash – Trust and cash, net of redemptions	$ 16,607
Cash – PIPE Investment	59,500
Gross Proceeds from the Business Combination	**76,107**
Less: transaction costs and advisory fees, paid.	(31,663)
Net proceeds from the Business Combination	**44,444**
Less: Private Placement Warrants assumed	(2,588)
Less: Earnout liability assumed	(74,998)
Reverse recapitalization, net	**(33,142)**
Add: Private Placement Warrants assumed.	2,588
Add: Earnout liability assumed.	74,998
Add: Transaction costs recorded to general and administrative expense	2,632
Business Combination proceeds, net	**$ 47,076**

Note 2. Business Combination (cont.)

The number of shares of common stock issued immediately following the consummation of the Business Combination were:

GCAC Class A common stock, outstanding prior to Business Combination	17,250,000
Less: Redemption of GCAC Class A common stock	(15,589,540)
Class A common stock of GCAC	1,660,460
GCAC founder shares	4,312,500
GCAC shares issued in PIPE Investment	5,950,000
Business Combination and PIPE shares	11,922,960
Legacy Cepton shares	142,075,043
Class A common stock immediately after Business Combination	**153,998,003**

The number of Legacy Cepton shares was determined as follows:

	Legacy Cepton shares	Legacy Cepton shares, after Exchange Ratio
Balance at December 31, 2021	27,618,907	67,645,189
Convertible preferred stock	21,671,491	53,078,571
Class F stock	8,372,143	20,505,344
Option exercises(1)	259,348	635,204
Warrants exercises(2)	86,041	210,735
Total		**142,075,043**

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(1) Option exercises during the period of January 1, 2022 to February 10, 2022.

(2) Represents warrants that were net exercised prior to the Business Combination (See Note 14).

Note 3. Revenue

The Company disaggregates its revenue from contracts with customers by country of domicile based on the shipping location of the customer. Total revenue disaggregated by country of domicile is as follows (dollars in thousands):

	Year Ended December 31,			
	2022		2021	
	Revenue	% of Revenue	Revenue	% of Revenue
Revenue by country of domicile:				
Japan	$ 3,948	53%	$ 3,404	75%
United States	2,400	32%	699	16%
China	880	12%	15	—%
Other	198	3%	384	9%
Total	$ 7,426	100%	$ 4,502	100%

As of December 31, 2022 and 2021, the Company had $0.5 million and $0.3 million, respectively, of contract liabilities included in accrued expenses and other current liabilities and no contract assets.

Note 4. Fair Value Measurement

The following table summarize the Company's assets measured at fair value on a recurring basis, by level, within the fair value hierarchy (in thousands):

	December 31, 2022			
	Level 1	**Level 2**	**Level 3**	**Total**
Assets:				
Cash equivalents:				
Money market fund	$ 10,437	$ —	$ —	$ 10,437
Total cash equivalents	$ 10,437	$ —	$ —	$ 10,437
Short-term investments:				
U.S. government agency securities	$ —	$ 2,493	$ —	$ 2,493
Corporate debt securities	—	1,210	—	1,210
Total short-term investments	—	3,703	—	3,703
Total assets measured at fair value	$ 10,437	$ 3,703	$ —	$ 14,140
Liabilities:				
Warrant liability	$ —	$ 440	$ —	$ 440
Earnout liability	—	—	920	920
Total liabilities measured at fair value	$ —	$ 440	$ 920	$ 1,360

	December 31, 2021			
	Level 1	**Level 2**	**Level 3**	**Total**
Assets:				
Cash equivalents:				
Money market fund	$ 932	$ —	$ —	$ 932
Total cash equivalents	$ 932	$ —	$ —	$ 932
Short-term investments:				
Corporate debt securities	$ —	$ 2,836	$ —	$ 2,836
Total short-term investments	—	2,836	—	2,836
Total assets measured at fair value	$ 932	$ 2,836	$ —	$ 3,768

Cash equivalents consist primarily of money market funds with original maturities of three months or less at the time of purchase, and the carrying amount is a reasonable estimate of fair value. Short-term investments consist of investment securities with original maturities greater than three months but less than twelve months and are included as current assets in the consolidated balance sheets. For corporate debt securities, the fair value as of December 31, 2022 and 2021 approximates amortized cost basis.

Because the transfer of Private Placement Warrants to non-permitted transferees would result in the Private Placement Warrants having substantially the same terms as the Public Warrants, the Company determined that the fair value of each Private Placement Warrant is consistent with that of a Public Warrant. Accordingly, the Private Placement Warrants are classified as Level 2 financial instruments under warrant liability.

The value of the earnout liability is classified as Level 3 under the fair value hierarchy because it has been valued based on significant inputs not observable in the market.

Note 4. Fair Value Measurement (cont.)

Changes in Level 3 liabilities related to earnout liability measured at fair value for the year ended December 31, 2022 (in thousands):

	Year Ended December 31, 2022
Balance as of December 31, 2021	$ —
Earnout liability assumed at the Closing of Business Combination	74,998
Gain on change in fair value of earnout liability	(74,078)
Balance as of December 31, 2022	$ 920

The gain on change in the fair value of the earnout liability was shown in the consolidated statement of operations and comprehensive income (loss).

Note 5. Inventories

Inventories consist of the following as of December 31, 2022 and 2021 (in thousands):

	December 31,	
	2022	2021
Raw materials	$ 1,179	$ 891
Work-in-process	1,141	518
Finished goods	665	1,114
Total inventories	$ 2,985	$ 2,523

Inventories are carried and depicted above at the lower of cost or net realizable value. For the years ended December 31, 2022 and 2021, the Company had write-downs of $0.4 million and $0.9 million, respectively.

Note 6. Prepaid expense and other current assets

Prepaid expense and other current assets consisted of the following as of December 31, 2022 and 2021 (in thousands):

	December 31,	
	2022	2021
Prepaid insurance	$ 2,533	$ 162
Other prepaid expenses	1,376	1,153
Deferred transaction costs	993	4,688
Payroll tax receivable	865	980
Other current assets	384	15
Total prepaid expense and other current assets	$ 6,151	$ 6,998

Note 7. Property and Equipment, Net

Property and equipment, at cost, consists of the following as of December 31, 2022 and 2021 (in thousands):

	December 31, 2022	December 31, 2021
Machinery and equipment	$ 1,445	$ 698
Automobiles	101	101
Leasehold improvements	189	120
Computer and equipment	116	87
Total property and equipment	1,851	1,006
Less: accumulated depreciation and amortization	(869)	(526)
Total property and equipment, net	$ 982	$ 480

The aggregate depreciation and amortization related to property and equipment was $0.3 million and $0.2 million for the years ended December 31, 2022 and 2021, respectively.

There were no disposals of property and equipment during the year ended December 31, 2022. For the year ended December 31, 2021, the Company disposed of office furniture and leasehold improvements pursuant to its relocation to a new office space. Most of the assets were fully depreciated and as a result, the disposal resulted in an immaterial loss. The loss is included in other income (expense), net within the consolidated statement of operations and comprehensive income (loss).

Note 8. Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consisted of the following as of December 31, 2022 and 2021 (in thousands):

	December 31, 2022	December 31, 2021
Accrued payroll	$ 1,300	$ 826
Accrued expenses and taxes	375	1,151
Deferred revenue	525	308
Warranty reserve	65	18
Deferred rent	—	373
Accrued unvested option liability	—	101
Total accrued expenses and other current liabilities	$ 2,265	$ 2,777

Note 9. Debt

2020 Promissory Note

On April 24, 2020, the Company entered into a promissory note (the “Promissory Note”) with JPMorgan Chase Bank, N.A. that provided for a PPP Loan in the amount of $1,120,000 pursuant to the Coronavirus Aid, Relief, and Economic Security (“CARES”) Act. The PPP Loan had a maturity date of April 24, 2022 and had a fixed interest rate of 0.98% per annum. Monthly amortized principal and interest payments were to be deferred to either (1) the date that U.S. Small Business Administration remits the borrower’s loan forgiveness amount to the lender or (2) if the borrower does not apply for loan forgiveness, 10 months after the end of the borrower’s loan forgiveness covered period. The entirety of the loan was eligible for forgiveness to the extent it was used towards qualifying expenses as described in the CARES Act. On August 25, 2021, the Company received notice from the U.S. Small Business Association that the entire PPP Loan balance and accrued interest were forgiven in full on such date. The Company recorded the loan forgiveness as a gain on extinguishment of debt in the Company’s consolidated statement of operations and comprehensive income (loss) during the year ended December 31, 2021.

Note 9. Debt (cont.)

Trinity Loan Agreement

On January 4, 2022, Legacy Cepton entered into a loan and security agreement and subsequent amendments ("Trinity Loan Agreement") with Trinity Capital Inc. ("Trinity") to borrow up to $25.0 million through January 1, 2023 at a floating per annum rate equal to the greater of (i) 10.75% or (ii) the prime rate plus 7.0%. The loan had a maturity date of February 1, 2026. In connection with the Trinity Loan Agreement, Legacy Cepton issued a warrant to purchase 96,998 shares of common stock with an exercise price of $16.89 per share (see Note 14). Legacy Cepton accounted for the issuance of the warrant as a commitment fee asset recorded in prepaid expenses and other current assets in the consolidated balance sheet. The fair value of the warrant was estimated to be $1.3 million on the date of issuance. On January 4, 2022, Legacy Cepton borrowed $10.0 million under the agreement, incurring $0.3 million in transaction costs which were accounted for as a debt discount. Legacy Cepton also recognized a pro rata portion of the warrant fair value as a debt discount related to the $10.0 million loan. Amortization of debt discounts, in accordance with the effective interest method, are recorded as interest expense in the accompanying consolidated statement of operations and comprehensive income (loss). Obligations under the Trinity Loan Agreement were secured by interest in substantially all of the Company's assets. The agreement contained customary affirmative and negative covenants.

For the year ended December 31, 2022, the Company recognized $2.0 million in interest expense in connection with the borrowings under the Trinity Loan Agreement. On November 7, 2022, the Company repaid all outstanding principal and accrued interest under and terminated the Trinity Loan Agreement including a 1.5% prepayment penalty and 2.5% end of term payment. The Company recorded a $1.0 million loss on extinguishment of debt during the year ended December 31, 2022.

Secured Term Loan Agreement — Koito

On October 27, 2022, the Company entered into an Investment Agreement (the "Investment Agreement") with Koito (See Note 10). Concurrently with the execution of the Investment Agreement, the Company entered into a Secured Term Loan Agreement with Koito to borrow Japanese Yen ¥5.8 billion (approximately $39.4 million) (the "Secured Term Loan Agreement"). The loan accrued interest at a rate equal to 1.0% per annum and was payable at maturity. The Secured Term Loan Agreement entered into with Koito was a related party transaction issued at a below market interest rate. To reflect what a similar debt instrument would be issued at with a market interest rate, the Company recorded a $2.0 million debt discount accounted for as a capital contribution within additional paid-in capital in the consolidated balance sheet as of December 31, 2022. Amortization of the debt discount, in accordance with the effective interest method, was recorded as interest expense in the accompanying consolidated statement of operations and comprehensive income (loss). The loan was set to mature on the earlier of three business days after the closing of the transactions contemplated by the Investment Agreement and the date on which the Investment Agreement is terminated in accordance with its terms. On November 7, 2022, the Company borrowed ¥5.8 billion (approximately $39.4 million) under the Secured Term Loan Agreement. Obligations under the Secured Term Loan Agreement were secured by interest in substantially all of the Company's assets, including all patents. The agreement contained customary affirmative and negative covenants. On January 24, 2023, the Company repaid all outstanding principal and accrued interest under the Secured Term Loan Agreement.

For the year ended December 31, 2022, the Company recognized $0.8 million in interest expense in connection with the borrowings under the Secured Term Loan Agreement. Additionally, the Company recognized a $4.3 million foreign currency transaction loss on remeasurement using the applicable exchange rate on December 31, 2022.

Note 10. Convertible Preferred Stock

As discussed in Note 2, the Company has retroactively adjusted the shares issued and outstanding prior to February 10, 2022 to give effect to the Exchange Ratio to determine the number of shares of common stock into which they were converted.

Prior to the Business Combination, Legacy Cepton had shares of $0.00001 par value Series A, Series B, Series B-1, and Series C preferred stock outstanding, all of which were convertible into shares of common stock of Legacy Cepton on a 1:1 basis, subject to certain anti-dilution protections.

The authorized, issued, and outstanding shares of Convertible Preferred Stock, and liquidation preferences prior to February 10, 2022 were as follows:

	Issuance Date	Shares Authorized	Shares Issued and Outstanding	Original Issue Price per Share	Aggregate Liquidation Preference
Series A	July 6, 2016	8,000,000	8,000,000	$ 1.0000	$ 8,000,000
Series B	July 13, 2018	4,069,600	4,069,600	6.2500	25,435,000
Series B-1	July 13, 2018	3,272,475	3,272,475	3.1250	10,226,484
Series C	February 4, 2020	7,463,934	6,329,416	8.3736	52,999,998
		22,806,009	21,671,491		$ 96,661,482

Upon the closing of the Business Combination, the 21,671,491 shares of convertible preferred stock issued and outstanding were converted into 53,078,571 shares of Class A common stock at the Exchange Ratio.

On October 27, 2022, the Company entered into an Investment Agreement (the “Investment Agreement”) with Koito pursuant to which, among other things, at the closing of the transactions, and based on the terms and subject to the conditions set forth therein, the Company issued and sold to Koito, 100,000 shares of Convertible Preferred Stock, par value $0.00001 per share (the “Preferred Stock”), for a purchase price of $100.0 million. The issuance and sale of the Preferred Stock and related matters were approved by the Company’s stockholders on January 11, 2023, and the Preferred Stock issued to Koito on January 19, 2023. The Preferred Stock will be convertible, beginning on January 19, 2024, into shares of the Company’s common stock at an approximate initial conversion price of $2.585 per share (subject to adjustment). At the Company’s election, the Preferred Stock carries a 4.25% per annum dividend if paid in kind or a 3.25% per annum dividend if paid in cash, in each case paid in arrears. See Note 21 for further information.

Note 11. Stockholders’ Equity (Deficit)

Common Stock

Holders of common stock were entitled to one vote per share, and to receive dividends when, as and if declared by the board of directors, and, upon liquidation or dissolution, were entitled to receive all assets available for distribution to stockholders. The holders had no preemptive or other subscription rights and there were no redemption or sinking fund provisions with respect to such shares.

Upon the closing of the Business Combination, the 27,618,907 shares of Legacy Cepton common stock issued and outstanding were converted into 67,645,189 shares of Class A common stock at the Exchange Ratio.

As of December 31, 2022, the Company had authorized 350,000,000 shares of common stock, each with a par value of $0.00001. As of December 31, 2022, there were 156,747,708 shares of common stock issued and outstanding.

Note 11. Stockholders' Equity (Deficit) (cont.)

Lincoln Park Transaction

On November 24, 2021, Legacy Cepton entered into a Purchase Agreement with Lincoln Park Capital Fund, LLC ("Lincoln Park" or "LPC"), pursuant to which Lincoln Park has agreed to purchase up to $100.0 million of common stock (subject to certain limitations contained in the Purchase Agreement) from time to time over a 36-month period (the "Purchase Agreement") after the consummation of the Business Combination and certain other conditions set forth in the Purchase Agreement. The Company may, from time to time and at its sole discretion, direct Lincoln Park to purchase Class A common stock in accordance with daily dollar thresholds as determined within the Purchase Agreement. The purchase price per share for Class A common stock will be the lower of: (i) the lowest trading price for shares of Class A common stock on the market in which it is listed, on the applicable purchase date and (ii) the average of the three (3) lowest closing sale price for Class A common stock during the ten (10) consecutive business days ending on the business day immediately preceding such purchase date. In consideration for entering into the Purchase Agreement, the Company issued, as a commitment fee, 50,000 shares of Class A common stock to Lincoln Park on the date of the closing of the Business Combination and subsequently an additional 150,000 shares of Class A common stock 180 days after the date of the closing of the Business Combination.

During the year ended December 31, 2022, 1,142,505 shares of common stock had been sold to Lincoln Park under the Purchase Agreement for consideration of $1.7 million.

Class F Stock

Holders of Legacy Cepton's Class F stock were entitled to the same voting rights as the equivalent number of common stock on an as-converted basis, and to receive dividends when, as and if declared by the board of directors. The holders had conversion rights for conversion into shares of common stock and preferred stock. The holders were subject to vesting terms wherein each holder acquired a vested interest in the stock over a service period of four years.

Upon the closing of the Business Combination, the 8,372,143 shares of Legacy Cepton Class F stock issued and outstanding were converted into 8,372,143 shares of common stock of Legacy Cepton and then subsequently converted into 20,505,344 shares of common stock of the Company at the Exchange Ratio.

Note 12. Stock-Based Compensation

Equity Incentive Plans

On July 5, 2016, Legacy Cepton adopted the 2016 Stock Plan (the "2016 Plan") under which 4,800,000 shares of Legacy Cepton's common stock were reserved for issuance to employees, nonemployee directors, consultants, and advisors. As of December 31, 2021, there were 9,187,533 shares of Legacy Cepton's common stock reserved for issuance and 1,472,512 shares were available for future issuance. As of December 31, 2022, there were no shares reserved or available for future issuance under the 2016 Plan.

As a result of the Business Combination, the Company no longer grants new incentive awards under the 2016 Plan. Incentive awards existing under the 2016 Plan immediately prior to the Business Combination were converted into options to receive shares of common stock through application of the Exchange Ratio ("Post Conversion Awards").

On February 10, 2022, the Company adopted the 2022 Stock Plan (the "2022 Plan") under which 15,123,142 shares of the Company's common stock were reserved for issuance to employees, nonemployee directors, consultants, and advisors. Per the terms of the 2022 Plan, in the event any Post Conversion Awards issued and outstanding under the 2016 Plan are cancelled, terminated, or expired, the number of shares underlying such cancelled, terminated or expired awards will be made available for issuance under the 2022 Plan. The share limit shall automatically increase on the first trading day in January of every calendar year during the term of the 2022 Plan, by an amount equal to the lesser of (i) two percent (2%) of the total number of shares of common stock issued and outstanding on December 31 of

Note 12. Stock-Based Compensation (cont.)

the immediately preceding calendar year or (ii) such number of shares of common stock as may be established by the board of directors. As of December 31, 2022, there were 10,396,800 shares of common stock reserved for issuance under the 2022 Plan.

Restricted Common Stock Awards

Unvested early exercise options and stock appreciation rights are considered restricted shares and are subject to repurchase by the Company in the event the shareholders' employment is terminated. The Company may, at its option, repurchase said shares at the lesser of (i) the price paid by the shareholder to exercise the award or (ii) the fair market value of the Company's common stock determined on the date of the repurchase. During the vesting term, each holder of restricted stock awards is deemed to be a common stock shareholder and, accordingly, shall have dividend and voting rights.

On August 20, 2020, Legacy Cepton granted 150,000 early exercise option awards under the 2016 Plan to an independent contractor. The options vest over 24 equal monthly installments beginning on August 10, 2020. On December 29, 2020, the option holder elected to early exercise all granted awards, purchasing the related shares for \$2.02 per share or aggregate consideration of \$0.3 million. At the time of exercise, 25,000 shares were fully vested with the remainder being unvested. On the date of purchase, Legacy Cepton recognized the vested portion purchased as common stock issued with additional paid in capital. As shares of restricted stock vest, the Company reclassifies the liability to common stock and additional paid in capital. As of December 31, 2021, the Company recognized a liability associated with the unvested restricted shares, recording a liability included in accrued expenses of \$0.1 million. As of December 31, 2022, all liabilities have been reclassified to common stock and additional paid-in capital as the early exercise option awards became fully vested. The Company did not grant any early exercise options during the years ended December 31, 2022 and 2021.

The fair value of Legacy Cepton's common stock on the date the early exercise options were granted was \$2.02 per share. The fair value of Legacy Cepton's common stock on the date the restricted shares were issued was \$3.07 per share.

Incentive Stock Options and Nonqualified Stock Options

Stock options generally vest over four years, subject to a service condition, with 25% of the awarded stock options vesting on the first anniversary of the grant date and the remaining 75% vesting monthly over the remaining 36 months. The options expire 10 years from grant date.

Note 12. Stock-Based Compensation (cont.)

A summary of the Company's employee and nonemployee stock option activity for the years ended December 31, 2022 and 2021 is presented below:

	Option shares	Weighted Average Exercise Price	Weighted Average Remaining Contract Term (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding as of December 31, 2020 (as previously reported)	5,221,283	$ 1.43	7.6	$ 8,550
Retroactive application of Exchange Ratio	7,566,865	(0.85)		
Outstanding as of December 31, 2020	12,788,148	0.58		
Granted	5,926,340	4.82		
Exercised	(879,336)	0.53		
Expired/Forfeited	(1,190,010)	2.71		
Outstanding as of December 31, 2021	16,645,142	$ 1.91	7.5	$ 126,591
Granted	681,050	7.80		
Exercised	(1,738,893)	0.58		
Expired/Forfeited	(1,325,315)	4.16		
Outstanding as of December 31, 2022	14,261,984	$ 2.14	6.5	$ 6,486
Exercisable, December 31, 2022	10,102,683	$ 1.40	5.9	$ 6,197
Vested and expected to vest as of December 31, 2022	14,261,984	$ 2.14	6.5	$ 6,486

For the years ended December 31, 2022 and 2021, the estimated weighted-average grant-date fair value of options granted was $3.15 and $3.02 per share, respectively. As of December 31, 2022 and 2021, there was $9.0 million and $14.5 million of unrecognized stock-based compensation expense related to unvested stock options expected to be recognized over a weighted-average period of 2.0 years and 2.72 years, respectively. The total intrinsic value of options exercised during the years ended December 31, 2022 and 2021 was $4.8 million and $3.9 million, respectively. The Company recognizes forfeitures as they occur.

The Company estimates the fair value of its options on grant date using the Black-Scholes option-pricing model, which requires the input of subjective assumptions, including the expected stock price volatility over the expected term of the options, expected term of the options, the risk-free interest rate for the expected term of the options, and expected dividends.

Stock price: The grant date fair value of the common stock, prior to the closing of the Business Combination was determined using valuation methodologies that utilize certain assumptions, including probability weighting of events, volatility, time to liquidation, risk-free interest rate, and an assumption for a discount for lack of marketability. Subsequent to the Business Combination, the grant date fair value of the common stock is the publicly traded closing price as reported on Nasdaq.

Expected Volatility: Expected volatility was estimated based on the average historical volatility of comparable companies' stock, as the Company does not have a sufficient trading history to determine historical volatility.

Risk-Free Interest Rate: The risk-free interest rate is based on the U.S. Treasury yield curve in effect at the time of issuance for zero-coupon U.S. Treasury notes with maturities corresponding to the expected terms of the options.

Expected Term: The expected term of options granted is based on the expected life of the stock options, giving consideration to the contractual terms and vesting schedules. Prior to the Business Combination, the expected term of the options was estimated using the simplified method because the Company did not have sufficient historical exercise data to provide a reasonable basis upon which to estimate the expected term for options.

Note 12. Stock-Based Compensation (cont.)

Expected Dividend Yield: The expected dividend rate is zero as the Company currently has no history or expectation of declaring dividends in the foreseeable future.

The weighted average assumptions used in the Black-Scholes option-pricing model for stock options for the years ended December 31, 2022 and 2021, were as follows:

	Year Ended December 31,	
	2022	**2021**
Stock price	\$1.47 – \$9.40	\$1.71 – \$8.37
Expected volatility	39 – 41%	60 – 70%
Risk-free interest rate	1.79 – 3.98%	0.72 – 1.34%
Expected term	5.92 – 6 years	6.25 years
Expected dividend yield	0%	0%

Restricted Stock Units

The Company granted RSUs under the 2022 Plan. Each RSU granted under the 2022 Plan represents a right to receive one share of the Company's common stock when the RSU vests. RSUs generally vest over a period of one to four years, subject to a service condition. The fair value of RSU is equal to the fair value of the Company's common stock on the date of grant.

No RSUs were granted during the year ended December 31, 2021.

A summary of the Company's RSU activity for the year ended December 31, 2022 is presented below:

	RSU Shares	Weighted Grant Date Fair Value
Outstanding as of December 31, 2021	—	\$ —
Granted	5,371,153	\$ 2.56
Released	(181,154)	\$ 2.31
Forfeited	(481,307)	\$ 2.61
Outstanding as of December 31, 2022	4,708,692	\$ 2.57

As of December 31, 2022, there was \$9.3 million of unrecognized stock-based compensation expense related to unvested RSUs expected to be recognized over a weighted-average period of 2.3 years. The total intrinsic value of RSUs outstanding at December 31, 2022 was \$6.0 million. The Company recognizes forfeitures as they occur.

Performance-based Stock units

For the year ended December 31, 2022, the Company granted 123,000 shares of performance-based stock units ("PSUs") under the 2022 Plan, with 66,000 shares in the first tranche and 57,000 shares in the second tranche. Each grant to consist of two market-based vesting tranches, with the first tranche to vest if, at the close of regular trading for 20 trading days out of any period of 30 consecutive trading days, either (i) the price of the Company's common stock exceeds \$15.00 per share or (ii) the Company's market capitalization exceeds \$2.1 billion; and the second tranche to vest if, at the close of regular trading for 20 trading days out of any period of 30 consecutive trading days, either (i) the price of the Company's common stock exceeds \$17.50 per share or (ii) the Company's market capitalization exceeds \$2.5 billion, provided in each case that the applicable stock price or market capitalization goal must be achieved no later than February 10, 2025 for the applicable tranche to vest, and provided further that the vesting of each tranche is subject to the grantee's continued employment with the Company through the day on which the applicable goal is achieved.

Note 12. Stock-Based Compensation (cont.)

The fair value of the PSUs at valuation date was determined using a Monte Carlo valuation model that utilizes significant assumptions, including expected volatility, dividend yield, stock price as of the valuation date, market capitalization targets and the corresponding share price targets necessary for each tranche of PSUs to vest, expected life, and risk-free rate.

The fair value of the PSUs at valuation date was $0.1 million with weighted average grant date fair value of $0.98, amortizing over a derived service period of 21 and 22 months for each tranche, respectively.

The weighted-average fair value of the PSUs was determined using the Monte Carlo simulation model incorporating the following weighted-average assumptions as of grant date on May 3, 2022:

Grant date stock price	$ 2.98
Expected volatility	74.0%
Risk-free interest rate	2.90%
Expected term	2.8 years
Expected dividend yield	0%

Stock-Based Compensation

For the years ended December 31, 2022 and 2021, the Company recorded stock-based compensation expense related to options granted to employees and nonemployees as follows (in thousands):

	Year Ended December 31, 2022	Year Ended December 31, 2021
Cost of revenue	$ 165	$ 83
Research and development expense	4,400	3,010
Selling, general and administrative expense	3,678	1,902
Total stock-based compensation expense	$ 8,243	$ 4,995

For the years ended December 31, 2022 and 2021, the Company capitalized $0.2 million and $0.1 million, respectively, of stock-based compensation expense into inventory. For the year ended December 31, 2022, the Company recognized additional stock-based compensation expense of $0.4 million as a result of modification related to a cancelled option and accelerated RSUs. There were no modifications during the year ended December 31, 2021.

Note 13. Earnout Liability

In addition to the shares issued upon closing of the Business Combination (see Note 2), additional contingent shares ("Earnout Shares") are payable to each holder of common stock and/or options receiving consideration in the Business Combination, in the amounts set forth below:

(a) If the closing share price of the Company's common stock equals or exceeds $15.00 per share for any 20 trading days within any consecutive 30-trading day period that occurs after February 10, 2022 and on or prior to February 10, 2025, then, the Company will issue to each holder of common stock that is entitled to Earnout Shares a number of shares of common stock equal to such holder's pro rata portion of 7,000,000 shares.

(b) If the closing share price of the Company's common stock equals or exceeds $17.50 per share for any 20 trading days within any consecutive 30-trading day period that occurs after February 10, 2022 and on or prior to February 10, 2025, the Company will issue to each holder of common stock that is entitled to Earnout Shares a number of shares of common stock equal to such holder's pro rata portion of 6,000,000 shares.

Note 13. Earnout Liability (cont.)

The Company concluded the Earnout Shares meet the criteria for liability classification due to the existence of contingent settlement provisions that could result in holders receiving differing amounts of shares depending on the Company's stock price or the price paid in a change of control. Because the settlement is not solely determined by the share price of the Company (that is, the share price observed in or implied by a qualifying change-in-control event), but also by the occurrence of a qualifying change-in-control event, this causes the Earnout Shares to not be indexed to the Company's own shares, resulting in liability classification. Upon the closing of the Business Combination, the Company recorded these instruments as liabilities on the consolidated balance sheet at fair value and will recognize subsequent changes in fair value in earnings at each reporting date. The fair value of the earnout liability was determined using a Monte Carlo valuation model that utilizes significant assumptions, including expected volatility, expected term, and risk-free rate, to determine the probability of achieving the common share price milestones.

The following table summarizes the assumptions used in estimating the fair value of the earnout liability at each of the relevant dates:

	December 31, 2022	February 10, 2022 (Closing Date)
Stock price	$ 1.27	$ 7.99
Expected volatility	79.0%	77.5%
Risk-free interest rate	4.42%	1.80%
Expected term	2.1 years	3.0 years
Expected dividend yield	0%	0%

Stock price: the stock price was based on the closing price as of the valuation date.

Expected volatility: the volatility rate was determined using a mix of historical and implied volatilities of selected industry peers deemed to be comparable to the Company's business, corresponding to the expected term of the awards.

Risk-free interest rate: The risk-free interest rate is based on the U.S. Treasury yield curve in effect at the time of issuance for zero-coupon U.S. Treasury notes with maturities corresponding to the expected 3-year term of the earnout period.

Expected term: The expected term is the remaining term of the three-year earnout period.

Expected dividend yield: The expected dividend rate is zero as the Company currently has no history or expectation of declaring dividends in the foreseeable future.

On February 10, 2022 upon the closing of the Business Combination, the earnout liability assumed was $75.0 million. For the year ended December 31, 2022, the Company recorded a gain of $74.1 million in the consolidated statement of operations and comprehensive income (loss) for the change in fair value of the earnout liability. As of December 31, 2022, the balance of the earnout liability was approximately $0.9 million.

Note 14. Warrants

Common Stock Warrants Assumed in Business Combination

As part of GCAC's initial public offering, 8,625,000 Public Warrants were sold. Each Public Warrant allows the holder to purchase one share of common stock at a price of $11.50 per share, subject to adjustments. The Public Warrants may be exercised only for a whole number of shares of common stock. The Public Warrants will expire on February 10, 2027, or earlier upon redemption or liquidation. The Public Warrants are listed on the Nasdaq under the symbol "CPTNW".

Note 14. Warrants (cont.)

The Company may redeem the Public Warrants when exercisable, in whole and not in part, at a price of $0.01 per warrant, so long as the Company provides not less than 30 days' prior written notice of redemption to each warrant holder, and only if the reported last sale of common stock equals or exceeds $18.00 per share for any 20 trading days within a 30-trading day period ending on the third trading day prior to the date the Company sends the notice of redemption to the warrant holders.

Simultaneously with GCAC's initial public offering, GCAC consummated a private placement of 5,175,000 Private Placement Warrants with the Sponsor. The Private Placement Warrants are identical to the Public Warrants, except that the Private Placement Warrants are non-redeemable so long as they are held by the initial purchasers or such purchaser's permitted transferees. If the Private Placement Warrants are held by someone other than the initial purchasers or their permitted transferees, the Private Placement Warrants will be redeemable by the Company and exercisable by such holders on the same basis as the Public Warrants.

The Company concluded the Private Placement Warrants meet the criteria for liability classification due to the existence of a settlement provision that adjusts the settlement amount based on who the holder of the warrant is (i.e., permitted vs. non-permitted transferees). This provision causes the Private Placement Warrants to not be indexed to the Company's own shares, resulting in liability classification. Upon consummation of the Business Combination, the fair value of the Private Placement Warrants was recorded at a value of approximately $2.6 million. The fair value of the Private Placement Warrants was remeasured on December 31, 2022 at $0.4 million. For the year ended December 31, 2022, the Company recorded a gain of $2.1 million in the consolidated statement of operations and comprehensive income (loss) for the change in fair value of the liability.

Common Stock Warrants Issued with Borrowings

In August 2019, Legacy Cepton entered into a loan and security agreement ("2019 Loan Agreement") with Silicon Valley Bank ("SVB") that allowed for borrowings of up to $5.0 million under a term loan through July 31, 2020. The term loan was repaid in February 2020. In connection with the 2019 Loan Agreement, Legacy Cepton issued detachable warrants to purchase an aggregate of 60,000 shares of common stock. The warrant was recorded to additional paid-in capital at an estimated fair value of $88 thousand as determined by the Black-Scholes valuation model. Immediately prior to the consummation of the Business Combination, the 60,000 warrants were net exercised and subsequently converted into 136,994 shares of common stock.

On January 4, 2022, in connection with the Trinity Loan Agreement, Legacy Cepton issued a warrant to purchase 96,998 shares of common stock with an exercise price of $16.89 per share. The warrant was immediately exercisable and expires on January 4, 2032. The Company concluded the warrant meets the criteria for liability classification due to the existence of contingent settlement provisions that could result in holders receiving differing amounts of shares depending on the Company's stock price or the price paid in a change of control. Because the settlement is not solely determined by the share price of the Company (that is, the share price observed in or implied by a qualifying change-in-control event), but also by the occurrence of a qualifying change-in-control event, this causes the warrant to not be indexed to the Company's own shares, resulting in liability classification. The fair value of the warrant was initially estimated to be $1.3 million using the Black-Scholes valuation model. Immediately prior to the consummation of the Business Combination, the 96,998 warrants were net exercised and subsequently converted into 73,741 shares of common stock. For the year ended December 31, 2022, the Company recorded a gain of $0.7 million in the consolidated statement of operations and comprehensive income (loss).

Note 15. Income Taxes

Income (loss) before income taxes consisted of the following (in thousands):

	Year Ended December 31, 2022	Year Ended December 31, 2021
Domestic	$ 9,620	$ (37,291)
Foreign	(224)	69
Income (loss) before income taxes	$ 9,396	$ (37,222)

Provision for income taxes consisted of the following (in thousands):

	Year Ended December 31, 2022	Year Ended December 31, 2021
Current:		
Federal	$ —	$ —
State	—	4
Foreign	16	16
Total Current	16	20
Deferred:		
Federal	—	—
State	—	—
Foreign	—	—
Total Deferred	—	—
Provision for income taxes	$ 16	$ 20

The effective tax rate of the Company's provision for income taxes differs from the federal statutory rate as follows:

	Year Ended December 31, 2022	Year Ended December 31, 2021
U.S. federal provision (benefit) at statutory rate	21.0%	21.0%
State taxes, net of federal benefit	(19.4)	—
Other permanent items	(0.8)	0.6
Stock-based compensation	4.4	(2.0)
Research and development credits	(8.3)	2.0
Transaction costs	(8.2)	—
Change in valuation allowance	183.5	(21.7)
Remeasurement of earnout liability	(172.1)	—
Effective tax rate	0.2%	(0.1)%

For the year ended December 31, 2022, the difference in the Company's effective tax rate and the U.S. federal statutory tax rate was primarily due to remeasurement of earnout liability, transaction costs, and the Company's full valuation allowance on its U.S. deferred tax assets. For the year ended December 31, 2021, the difference in the Company's effective tax rate and the U.S. federal statutory tax rate was primarily due to the Company's full valuation allowance on its U.S. deferred tax assets.

Note 15. Income Taxes (cont.)

The Company's deferred income tax assets and liabilities as of December 31, 2022 and 2021 were as follows (in thousands):

	December 31,	
	2022	**2021**
Deferred tax assets:		
Net operating loss carryforward	$ 28,199	$ 20,082
Section 174 capitalized research and development expenses	5,489	—
Research and development credits	5,319	3,323
Stock-based compensation	1,373	191
Other	779	309
Valuation allowance	(41,159)	(23,875)
Total deferred tax assets	—	30
Deferred tax liabilities:		
Depreciation and amortization	—	(30)
Total deferred tax liabilities	—	(30)
Net deferred tax assets (liabilities)	$ —	$ —

ASC 740 requires that the tax benefit of net operating losses, temporary differences and credit carryforwards be recorded as an asset to the extent that the Company assesses that realization is "more likely than not". Realization of the future tax benefits is dependent on the Company's ability to generate sufficient taxable income within the carryforward period. Because of the Company's recent history of operating losses, management believes that recognition of the deferred tax assets arising from the above-mentioned future tax benefits is currently not likely to be realized and, accordingly, has provided a full valuation allowance as of December 31, 2022 and 2021. The Company's valuation allowance balance increased by $17.3 million and $8.1 million for the years ended December 31, 2022 and 2021, respectively.

As of December 31, 2022 and 2021, the Company had total net operating loss carryforwards for federal income tax purposes of approximately $119.8 million and $83.4 million, respectively, out of which $2.4 million and $2.1 million net federal operating loss carryforwards will begin to expire in 2037 if not utilized. For tax years beginning January 1, 2018 onward, any federal net operating losses generated can be carried forward indefinitely, as opposed to the original expiration of 20 years. As of December 31, 2022 and 2021, the Company had $117.4 million and $81.3 million of federal net operating losses, respectively, that can be carried forward indefinitely. The Company also had a state net operating loss carryforward of approximately $46.4 million and $33.3 million as of December 31, 2022 and 2021, respectively, which will expire beginning in the year 2037.

As of December 31, 2022 and 2021, the Company had federal research and development credit carryforwards of approximately $4.3 million and $2.2 million, respectively, which begin to expire in 2038, and California research and development credit carryforward of approximately $5.8 million and $4.2 million, respectively, which do not expire.

Utilization of the research and development credit carryforward may be subject to an annual limitation due to the ownership percentage change limitations provided by the Internal Revenue Code of 1986 and similar state provisions. The annual limitation may result in the expiration of the research and development credits before utilization. The amount of such elimination, if any, has not been determined.

Note 15. Income Taxes (cont.)

As of December 31, 2022 and 2021, the total amount of unrecognized tax benefits was $4.0 million and $2.6 million, respectively, none of which would affect income tax expense, if recognized, after consideration of any valuation allowance. The Company does not expect the unrecognized tax benefits to change significantly over the next 12 months. The following table summarizes the aggregate changes in the total gross amount of unrecognized tax benefits (in thousands):

	Year Ended December 31, 2022	Year Ended December 31, 2021
Unrecognized tax benefits as of the beginning of the year	$ 2,569	$ 1,471
Increases related to prior year tax provisions	244	159
Increase related to current year tax provisions	1,216	939
Unrecognized tax benefits as of the end of the year	$ 4,029	$ 2,569

The Company is subject to income taxes in the U.S. federal, state, and various foreign jurisdictions. Tax regulations within each jurisdiction are subject to the interpretation of the related tax laws and regulations and require significant judgment to apply. All of the Company's tax years will remain open for examination by the federal and state tax authorities for three and four years, respectively, from the date of utilization of the net operating loss or research and development credits. The Company does not have any federal or state tax audits pending.

As a qualified small business, the Company applies a portion of its post-2015 federal research and development credit against payroll tax liabilities, instead of income tax liabilities. As of December 31, 2022 and 2021, the related payroll tax receivable balance is $0.9 million and $1.0 million, respectively.

Note 16. Leases

The Company leases office and manufacturing facilities under non-cancellable operating leases expiring at various dates through July 2027. The Company's lease agreements do not contain any material terms and conditions of residual value guarantees or material restrictive covenants.

The Company adopted ASU 2016-02, *Leases (Topic 842)* using the modified retrospective method on January 1, 2022. The most significant impact of the adoption of this standard was the recognition of right-of-use, or ROU, assets and lease liabilities for operating leases of $1.4 million and $1.8 million, respectively, and a reversal of deferred rent liabilities of $0.4 million on January 1, 2022. The adoption did not have a material impact on the Company's operating results or cash flows.

The Company determines if an arrangement is or contains a lease at inception. Operating leases are included in operating lease right-of use assets and operating lease liabilities in the Company's consolidated balance sheets.

Right-of-use assets represent the Company's right to use an underlying asset for the lease term and lease liabilities represent the Company's obligation to make lease payments arising from the lease. Operating lease right-of-use assets and liabilities are recognized at the commencement date based on an amount equal to the present value of lease payments over the lease term. The Company's leases do not provide an implicit rate; therefore, the Company uses an incremental borrowing rate based on the information available at the commencement date in determining the present value of lease payments. The Company uses the implicit rate when it is readily determinable. The Company elected the package of practical expedients permitted under the transition guidance within the new standard, which among other things, allowed it to carry forward existing lease classification and to exclude leases with original terms of one year or less. Further, the Company elected to combine lease and non-lease components for all asset classes. Variable lease payments are defined as payments made for the right to use an asset that vary because of changes in facts or circumstances occurring after the commencement date, other than the passage of time. Any variable lease components are expensed as incurred. The operating lease right-of-use assets also include adjustments related to prepaid or deferred

Note 16. Leases (cont.)

lease payments and lease incentives. The Company's lease terms may include options to extend or terminate the lease when it is reasonably certain that the Company will exercise that option. Operating lease expense for lease payments is recognized on a straight-line basis over the lease term.

The components of lease expense for the year ended December 31, 2022 were as follows (in thousands):

	Year Ended December 31, 2022
Operating lease cost	$ 1,516
Variable lease cost	845
Total operating lease cost	$ 2,361

Supplemental cash flow information for the year ended December 31, 2022 related to leases was as follows (in thousands):

	Year Ended December 31, 2022
Cash paid for amounts included in the measurement of lease liabilities:	
Cash paid for operating leases included in operating activities	$ 1,838
Right of use assets obtained in exchange for lease obligations:	
Operating leases	$ 1,827

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

	December 31, 2022
Operating lease right-of-use assets:	
Operating lease right-of-use assets, current	$ 121
Operating lease right-of-use assets, non-current	324
Total operating lease right-of-use assets	$ 445
Operating lease liabilities:	
Operating lease liabilities, current	$ 211
Operating lease liabilities, non-current	281
Total operating lease liabilities	$ 492

The non-current portion of the operating lease right-of-use assets was recorded in other assets and the non-current portion of the operating lease liabilities was recorded in other long-term liabilities in the consolidated balance sheets.

Weighted average remaining term and discount rates were as follows (term in years):

Weighted average remaining lease term	3.06
Weighted average discount rate	13.78%

Note 16. Leases (cont.)

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

Year Ending December 31,	
2023	$ 253
2024	104
2025	100
2026	93
Thereafter	55
Total undiscounted lease payments	$ 605
Less: Present value adjustment for minimum lease commitments	(113)
Net Lease Liabilities	$ 492

Disclosure under ASC 840, Leases

Rent expense was $2.0 million for the year ended December 31, 2021. As of December 31, 2021, future minimum lease payments under all non-cancellable operating leases with an initial lease term in excess of one year were as follows (in thousands):

2022	$ 1,853
2023	$ 152
Total	$ 2,005

Note 17. Commitments and Contingencies

Legal Proceedings

From time to time, the Company may be involved in various legal claims, litigation and other matters that arise in the normal course of its operations. Although there can be no assurances and the outcome of these matters is currently not determinable, the Company currently believes that none of these claims, actions or proceedings are likely to have a material adverse effect on the Company’s financial position.

The Company records accruals for its outstanding legal proceedings, investigations or claims when it is probable that a liability will be incurred, and the amount of loss can be reasonably estimated. The Company evaluated developments in legal proceedings, investigations or claims that could affect the amount of any accrual, as well as any developments that would result in a loss contingency to become both probable and reasonably estimable. There were no accruals for loss contingencies associated with such legal claims, actions or litigation as of December 31, 2022 and 2021.

Lease Commitments

The Company entered into two new office lease agreements commencing on February 1, 2023 with various maturities between January 31, 2026 through April 30, 2028 on the Company’s existing properties. One lease agreement required an initial security deposit of $2.6 million, payable at 60 days after execution of the lease agreement, which was recorded as restricted cash on the consolidated balance sheet, and will be reduced over the term of the lease agreement.

Note 17. Commitments and Contingencies (cont.)

Total amounts to be paid under the lease agreements are as follows (in thousands):

Year Ending December 31,	
2023	$ 2,311
2024	3,146
2025	3,228
2026	3,231
Thereafter	4,159
Total undiscounted lease payments	$ 16,075

Note 18. Related Party Transactions

Investment Agreement with Koito

On October 27, 2022, the Company entered into the Investment Agreement with Koito pursuant to which, among other things, at the closing of the transactions, and based on the terms and subject to the conditions set forth therein, the Company issued and sold to Koito, 100,000 shares of Preferred Stock, for a purchase price of $100.0 million. The issuance and sale of the Preferred Stock and related matters were approved by the Company's stockholders on January 11, 2023, and the Preferred Stock issued to Koito on January 19, 2023. The Preferred Stock will be convertible, beginning on January 19, 2024, into shares of the Company's common stock at an approximate initial conversion price of $2.585 per share (subject to adjustment). At the Company's election, the Preferred Stock carries a 4.25% per annum dividend if paid in kind or a 3.25% per annum dividend if paid in cash, in each case paid in arrears. See Note 21 for further information.

Investor Rights Agreement

At the closing of the issuance of the Preferred Stock, the Company and Koito entered into the Investor Rights Agreement. Pursuant to the Investor Rights Agreement, Koito is entitled to have its designees appointed to the Nominating and Corporate Governance Committee and Compensation Committee of the Company's Board of Directors (the "Board"), subject to satisfaction of applicable committee membership requirements. Furthermore, the Company is obligated to take all necessary action (to the extent not prohibited by law) to cause the Board to nominate for election that number of individuals designated by Koito that is proportional to Koito's beneficial ownership interest in the Company, *provided*, *however*, that Koito will not be entitled to nominate for election a number of individuals that would constitute a majority of the Board. In addition, Koito's designation rights will be reduced to one director at such time as Koito ceases to beneficially own at least 10% of the outstanding shares of common stock (on an as-converted basis) and Koito will no longer have any rights to designate a nominee to serve on the Board at such time as Koito ceases to beneficially own at least 5% of the outstanding shares of common stock (on an as-converted basis). The Investor Rights Agreement also provides for certain investor consent, preemptive, registration, and termination rights, which contain certain provisions that limit the Company's ability to access additional sources of funding without Koito's consent.

Secured Term Loan Agreement with Koito

Concurrently with the execution of the Investment Agreement, the Company entered into the Secured Term Loan Agreement to borrow Japanese Yen ¥5.8 billion (approximately $39.4 million). The borrowings under the Secured Term Loan Agreement (the "Loan") accrued interest at a rate equal to 1.0% per annum, which was payable at maturity. The Loan was set to mature on the earlier of three business days after the closing of the transactions contemplated by the Investment Agreement and the date on which the Investment Agreement was terminated in accordance with its terms. The Secured Term Loan Agreement entered into with Koito is a related party transaction issued at below market interest rates. On November 7, 2022, the Company borrowed ¥5.8 billion under the agreement. To reflect what a similar debt instrument would be issued at with a market interest rate, the Company recorded a $2.0 million debt discount accounted for as a capital contribution within additional paid-in capital in the consolidated balance sheet. Amortization of debt discounts, in accordance with the effective interest method, are recorded as interest expense

Note 18. Related Party Transactions (cont.)

in the accompanying consolidated statement of operations and comprehensive income (loss). Obligations under the Secured Term Loan Agreement were secured by interest in substantially all of the Company's assets, including all patents. The agreement contained customary affirmative and negative covenants. On January 24, 2023, the Company used the proceeds from the sale of the Preferred Stock to repay all outstanding principal and accrued interest under the Secured Term Loan Agreement with Koito. See Note 21 for further information.

For the year ended December 31, 2022, the Company recognized $0.8 million in interest expense in connection with the borrowings under the Secured Term Loan Agreement with Koito. Additionally, the Company recognized a $4.3 million foreign currency transaction loss on remeasurement using the applicable exchange rate on December 31, 2022.

Transactions with Koito

Koito is an automotive tier 1 partner of the Company and sales to Koito accounted for 43% of our total revenues for the year ended December 31, 2022. In 2020, the Company was chosen by Koito to supply Koito with ADAS lidar technology licenses and components for GM's ADAS series production program for mass-market consumer vehicles. The purpose of the arrangement is to supply Koito with automotive grade lidars using the Company's components and lidar technology. These lidars are to be supplied to GM to fulfill the needs of its series production program. Production volume will ultimately be dependent on numerous factors and are binding only upon issuance of a purchase order. Revenue generated from Koito was $3.2 million and $3.1 million for the years ended December 31, 2022 and 2021, respectively. Accounts receivable from Koito was $1.0 million as of December 31, 2022 and was $0.1 million as of December 31, 2021.

Note 19. Basic and Diluted Net Income (Loss) Per Share

The Company follows the two-class method when computing net income (loss) per common share when shares are issued that meet the definition of participating securities. The Company was in a net income position for the year ended December 31, 2022 and a net loss position for the year ended December 31, 2021. The Company considers its convertible preferred stock to be participating as holders of such securities have non-forfeitable dividend rights in the event of the declaration of a dividend for shares of common stock. When the Company is in a net loss position, the net loss attributable to common stockholders is not allocated to the convertible preferred stock under the two-class method as these securities do not have a contractual obligation to share in losses. Basic net income (loss) per share is computed by dividing net income (loss) attributable to common stockholders by the weighted-average number of shares of the Company's common stock outstanding. During the periods when there is a net loss attributable to common stockholders, potentially dilutive common stock equivalents have been excluded from the calculation of diluted net loss per share attributable to common stockholders as their effect is anti-dilutive. Net income (loss) per share calculations for all periods prior to the Business Combination have been retroactively restated to the equivalent number of shares reflecting the Exchange Ratio.

The following tables present reconciliations of the denominators of basic and diluted net income (loss) per share:

	Year Ended December 31,	
	2022	**2021**
Denominator:		
Weighted-average common shares outstanding – Basic	146,917,925	67,139,289
Stock options to purchase common stock and RSUs[1]	8,810,526	—
Weighted-average common shares outstanding – Diluted	155,728,451	67,139,289

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(1) Includes the weighted average unvested shares subject to repurchase of 9,083 for the year ended December 31, 2022.

Note 19. Basic and Diluted Net Income (Loss) Per Share (cont.)

The following common stock equivalents were excluded from the computation of diluted net income (loss) per share for the periods presented because including them would have been antidilutive:

	Year Ended December 31,	
	2022	**2021**
Stock options to purchase common stock and RSUs	5,002,191	16,645,279
Unvested restricted stock	—	122,462
Preferred shares on an as-converted basis	—	53,078,571
Class F shares an as-converted basis	—	20,505,344
Shares issuable upon exercise of warrants	—	146,954
Total	5,002,191	90,498,610

As of December 31, 2022, 13,000,000 Earnout Shares were excluded from the table above because the shares are considered contingently issuable and the required common share price milestones were not achieved as of December 31, 2022. As of December 31, 2022, 13,800,000 common stock warrants were excluded from the table above as no shares were issuable under the treasury stock method of computing diluted earnings per share.

Note 20. Segments

The Company conducts its business in one operating segment that develops and produces lidar sensors for use in automotive and smart infrastructure industries. The Company's Chief Executive Officer is the chief operating decision maker ("CODM"). The CODM allocates resources and makes operating decisions based on financial information presented on a consolidated basis, accompanied by disaggregated information about sales and gross margin by product group. The profitability of the Company's product group is not a determining factor in allocating resources and the CODM does not evaluate profitability below the level of the consolidated company. Long-lived assets of the Company located in its country of domicile, the United States, are approximately 85%.

Note 21. Subsequent Events

The Company has evaluated subsequent events from the balance sheet date through March 20, 2023, the issuance date of the consolidated financial statements.

Koito Investment Agreement

On October 27, 2022, the Company entered into the Investment Agreement with Koito pursuant to which, among other things, at the closing of the transactions, and based on the terms and subject to the conditions set forth therein, the Company issued and sold to Koito, 100,000 shares of Preferred Stock, for a purchase price of $100.0 million. The issuance and sale of the Preferred Stock and related matters were approved by the Company's stockholders on January 11, 2023, and the Preferred Stock issued to Koito on January 19, 2023. The Preferred Stock will be convertible, beginning on January 19, 2024, into shares of the Company's common stock at an approximate initial conversion price of $2.585 per share (subject to adjustment). On January 24, 2023, a portion of the proceeds from the sale of the Preferred Stock were used to pay the outstanding loan under the Secured Term Loan Agreement. The remainder of the proceeds will be used for the continued development of the Company's lidar technology and general corporate purposes.

Silicon Valley Bank

The Company maintains depository relationships with SVB. On March 10, 2023, SVB was closed by the California Department of Financial Protection and Innovation, which appointed the FDIC as receiver. On March 12, 2023, federal regulators announced that the FDIC would complete its resolution of SVB in a manner that fully protects all depositors. As a result, the Company has not experienced and does not anticipate any losses with respect to its funds deposited with SVB.

Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosures

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

We have established disclosure controls and procedures that are designed to ensure that the information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms and that such information is accumulated and communicated to management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we have evaluated the effectiveness of our disclosure controls and procedures as required under Rules 13a-15(e) and 15d-15(e) under the Exchange Act as of December 31, 2022. Based on this review, our principal executive officer and principal financial officer have concluded that these disclosure controls and procedures were not effective as of December 31, 2022 due to the material weakness in our internal control over financial reporting described below.

Management's Report on Internal Control Over Financial Reporting

As discussed elsewhere in this Report, we completed the Business Combination on February 10, 2022. Prior to the consummation of the Business Combination, we were a private company with limited accounting personnel and other resources with which to address our internal control over financial reporting. In connection with the preparation of our consolidated financial statements as of December 31, 2021, we identified a material weakness in our internal control over financial reporting, which continued to exist with respect to our internal control over financial reporting as of December 31, 2022:

- we did not maintain a sufficient complement of resources with an appropriate level of accounting knowledge and experience commensurate with the financial reporting requirements for a public company, in particular with respect to technical accounting knowledge regarding the accounting for certain non-standard transactions.

We cannot assure you that additional significant deficiencies or material weaknesses in our internal control over financial reporting will not be identified in the future. Any failure to maintain or implement required new or improved controls, or to implement our remediation plans or any difficulties we encounter in our implementation thereof, could result in additional significant deficiencies or material weaknesses or result in material misstatements in our financial statements. If we are unable to assert that our internal control over financial reporting is effective, or if our independent registered public accounting firm is unable to express an opinion as to the effectiveness of our internal control over financial reporting when required, lenders and investors may lose confidence in the accuracy and completeness of our financial reports.

This material weakness, if not remediated, could result in misstatements of accounts or disclosures that would result in a material misstatement to the annual or interim consolidated financial statements that would not be prevented or detected.

Our management anticipates that our internal control over financial reporting will not be effective until the above material weakness is remediated. If our remediation of this material weakness is not effective, or we experience additional material weaknesses in the future or otherwise fail to maintain an effective system of internal control over financial reporting in the future, the accuracy and timing of our financial reporting may be adversely affected, we may be unable to maintain compliance with securities law requirements regarding timely filing of periodic reports in addition to the Nasdaq listing requirements, investors may lose confidence in our financial reporting, and the price of our common stock may decline as a result. In addition, we may be unable to sell shares of common stock to Lincoln Park pursuant to the Purchase Agreement at prices we consider to be reasonable or at all, we may be unable to borrow funds from banking institutions on acceptable terms or at all, and we may face restricted access to various sources of financing in the future.

We hired additional accounting staff during the year ended December 31, 2022 and we will continue to evaluate our accounting and financial needs in light of the material weakness described above. While we have made progress to enhance our internal control over financial reporting and will continue to devote effort in control remediation, additional time is required to complete implementation and to assess and ensure the sustainability of these procedures. Accordingly, the material weakness cannot be considered remediated until the applicable controls operate for a sufficient period of time and management has concluded, through testing, that these controls are operating effectively.

As a non-accelerated filer, we are not required to provide an attestation report on our internal control over financial reporting issued by the Company's independent registered accounting firm.

Changes in Internal Control Over Financial Reporting

Other than in connection with executing upon the implementation of remediation measures as noted above, there was no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that occurred during the year ended December 31, 2022 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

None.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

Part III

Item 10. Directors, Executive Officers and Corporate Governance

The following table sets forth the name, age and position of certain of our directors and executive officers as of the date of this Annual Report on Form 10-K:

Name	Age	Position
Executive Officers		
Jun Pei	54	President, Chief Executive Officer & Chairman of the Board
Hull Xu	49	Chief Financial Officer
Dongyi Liao	48	Chief Technology Officer
Liqun Han	53	Chief Operating Officer
Non-Employee Directors		
Jun Ye	55	Director
Takayuki Katsuda	59	Director
Hideharu (Harry) Konagaya	59	Director
George Syllantavos	58	Director
Mei (May) Wang	52	Director
Xiaogang (Jason) Zhang	56	Director

Executive Officers

Dr. Jun Pei. Dr. Pei has served as our President, Chief Executive Officer and Chairman of the Board since February 2022. Prior to the Business Combination, Dr. Pei served as the CEO of Legacy Cepton since co-founding the company in 2016 until February 2022. Before that, Dr. Pei served as the CEO and founder of AEP Technology, Inc., an optical instrumentation company, from November 2010 to July 2017 and as a general manager of acoustic and lidar engineering at Velodyne Lidar, Inc., a lidar technology company, from May 2007 to November 2010. Dr. Pei received his Ph.D. in Electrical Engineering from Stanford University

Hull Xu. Mr. Xu has served as our Chief Financial Officer since April 2022. Mr. Xu previously served as the Company's Vice President of Finance and Strategy from February 2022 until April 2022, and served in such role for Legacy Cepton since January 2021. Prior to joining Legacy Cepton, from November 2015 to January 2021, Mr. Xu was a Director and head of Electronics and Automotive Technology coverage at RBC Capital Markets. From September 2014 to November 2015, Mr. Xu was a Vice President at Barclays Investment Bank, covering the global Electronics industry. Additionally, from June 2013 to September 2014, Mr. Xu was an Executive Director, Head of Technology Origination at GE Capital. He also previously spent six years with Barclays Investment Bank covering the Technology industry from July 2008 to June 2013. Mr. Xu began his career as an electrical engineer at HP Inc. (NYSE:HPQ) and later at Agilent Technologies, Inc. (NYSE:A) and Turin Networks, Inc. Mr. Xu has an M.B.A. from the Haas School of Business at the University of California, Berkeley, an M.S. in Electrical Engineering from Stanford University and a B.S. in Electrical Engineering from the University of California, Davis.

Dr. Dongyi Liao. Dr. Liao was promoted to Chief Technology Officer in March 2023, and previously served as our Senior Vice President of Applications since February 2022. Dr. Liao was the Vice President of Applications of Legacy Cepton from February 2017 to June 2019 and has previously served as the Senior Vice President of Applications of Legacy Cepton since June 2019 until the closing of the Business Combination. Dr. Liao previously co-founded YourMechanic.com and served as its Chief Technology Officer from January 2012 until December 2016. He also served in various engineering and managerial roles at NVIDIA from 2001 to 2010. Dr. Liao has a Ph.D. in Nuclear Engineering from Massachusetts Institute of Technology.

Dr. Liqun Han. Dr. Han has served as our Chief Operating Officer since August 2022. Dr. Han previously served as the Senior Vice President of Operations of the Company from February 2022 to July 2022, Senior Vice President of Operations of Legacy Cepton from September 2020 to February 2022 and as the Vice President of Operations of Legacy Cepton from October 2016 to September 2020. Previously, Dr. Han was Director of Engineering & Technology at KLA-Tencor, responsible for core technology innovation and new product introduction. Dr. Han received a Ph.D. in Applied Physics and a M.S. in Electrical Engineering from Stanford University, with a specialty in solid-state electronics and optics.

Non-Employee Directors

Dr. Jun Ye. Dr. Ye has served as a member of our Board since February 2022. Dr. Ye has also served as the President and CEO of Sentieon, Inc., a bioinformatics software development company, since co-founding it in July 2014. Dr. Ye previously served as the Co-founder, President and CEO of Founton Technologies, Inc., a company that specialized in data mining, which is now part of Alibaba Group, from May 2011 to June 2014. Prior to Founton, Dr. Ye was the Co-founder, President, and CTO of Brion Technologies, Inc., a company specializing in computational lithography for semiconductor manufacturing (acquired by ASML in December 2006), from September 2002 to April 2011. Dr. Ye was a consulting professor of electrical engineering at Stanford University from October 2001 to August 2015. Dr. Ye has a Ph.D. in Electrical Engineering from Stanford University, a M.S. in Physics from Iowa State University and a B.S. in Electrical Engineering from Fudan University.

Takayuki Katsuda. Mr. Katsuda has served as a member of our Board since February 2022. Mr. Katsuda has served as the Managing Corporate Officer of Koito since June 2016 and as a member of the Legacy Cepton board since June 2019. Prior to Koito, Mr. Katsuda served as the Chief Engineer, Product Planning at Lexus International from January 2007 to March 2016. Mr. Katsuda holds a degree in Aeronautical Engineering from Kyushu University.

Hideharu (Harry) Konagaya. Mr. Konagaya has served as a member of our Board since January 2023. Since 2017, Mr. Konagaya also serves as the Senior Managing Director, Head of the Finance & Accounting Department, and Head of the Procurement Department of Koito Manufacturing Co., Ltd., which is a leading Japanese manufacturer of automotive lighting equipment, aircraft parts, electrical equipment, and other products, operating on a global basis, and listed on the Tokyo Stock Exchange. Mr. Konagaya has a degree in Industrial Management from the Faculty of Science and Engineering, Waseda University, in Japan.

George Syllantavos. Mr. Syllantavos has served as a member of our Board since February 2022. Prior to the Business Combination, Mr. Syllantavos served as a member of the board of directors of GCAC since December 2019. As a director of GCAC, Mr. Syllantavos was designated to serve as the co-CEO and CFO of GCAC from December 2019 until the closing of the Business Combination in order to facilitate an acquisition. Previously, Mr. Syllantavos served as a board member and the Chair of the audit committee of ITHAX Acquisition Corp. N/K/A Mondee, Inc. (Nasdaq:MOND) from January 2021 to July 2022, as a board member of Phunware Inc. (Nasdaq:PHUN) from December 2018 to December 2021 and as co-CEO and CFO of Stellar Acquisition III Corp. N/K/A Phunware Inc. from December 2015 to December 2018. Mr. Syllantavos also co-founded Nautilus Energy Management Corp. and has served as a managing director since May 2011, and has served as partner of SevenSeas Investment Fund since 2018. Mr. Syllantavos holds a degree in Industrial Engineering from Roosevelt University and a M.B.A. from Northwestern University, Kellogg School of Management.

Dr. Mei (May) Wang. Dr. Wang has served as a member of our Board since February 2022. Dr. Wang has also served as the Chief Technology Officer, Internet of Things, of Palo Alto Networks, Inc. (Nasdaq:PANW) a multinational cybersecurity company, since September 2019, and as a Venture Partner at SAIF Partners, an Asian private equity firm, since November 2013. Previously, she served as the Chief Technology Officer and a board member of Zingbox Inc., an internet of things cybersecurity company (acquired by Palo Alto Networks in September 2019), until September 2019 after co-founding the company in November 2014. Prior to that, she served as the President and Chairman of the Board of the North America Chinese Clean-tech & Semiconductor Association from June 2007 to May 2010. Dr. Wang received her Ph.D. in Electrical Engineering from Stanford University.

Xiaogang (Jason) Zhang. Mr. Zhang has served as a member of our Board since February 2022. Mr. Zhang has also served as the managing partner of CFT Capital, a leading high tech industry investment fund management firm in China, since January 2018. During 2017, Mr. Zhang served as a consultant, advisor and/or board member to certain companies. Mr. Zhang previously served as the Managing Director, Asia Pacific of Delphi Automotive Inc. from August 2015 to December 2016, senior executive positions at Freescale Semiconductor Inc, NXP Semiconductors Co. Ltd., Philips China Investment Co. Ltd. In China. He was the CFO at T3G Technologies Inc. from 2004 to 2005, as assigned by Philips. Mr. Zhang has an M.B.A. from Insead, an M.S. in Engineering from Stanford University and a B.S. in Engineering from Tsinghua University.

Family Relationships

There are no family relationships between or among any of our executive officers or directors.

Corporate Governance Guidelines

Our Board has adopted Corporate Governance Guidelines to assist the Board in the discharge of its duties and to set forth the Board's current views with respect to selected corporate governance matters considered significant to our stockholders. Our Corporate Governance Guidelines direct our Board's actions with respect to, among other things, our Board composition and director qualifications, responsibilities of directors, director compensation, director orientation and continuing education, succession planning and the Board's annual performance evaluation. A current copy of our Corporate Governance Guidelines is available under "Corporate Governance" on our website at *https://investors.cepton.com/*.

Corporate Governance

Board Composition

Our Board is currently comprised of seven directors. Under our amended and restated certificate of incorporation (the "Certificate of Incorporation"), our Board is divided into three classes, each serving a staggered three-year term and with one class being elected at each year's annual meeting of stockholders as follows:

- Class A, which consists of Jun Ye, Mei (May) Wang, and Hideharu (Harry) Konagaya, whose terms will expire at the 2023 annual meeting of stockholders;
- Class B, which consists of George Syllantavos and Xiaogang (Jason) Zhang, whose terms will expire at the 2024 annual meeting of stockholders; and
- Class C, which consists of Jun Pei and Takayuki Katsuda, whose terms will expire at the 2025 annual meeting of stockholders.

At each annual meeting of stockholders to be held after the initial classification, directors for that class will be elected for a three-year term at the annual meeting of stockholders in the year in which the term expires. Each director's term is subject to the election and qualification of his or her successor, or his or her earlier death, disqualification, resignation or removal. Subject to any rights applicable to any then outstanding preferred stock, any vacancies on our Board may be filled only by the affirmative vote of a majority of the directors then in office. Any increase or decrease in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of the directors. This classification of our Board may have the effect of delaying or preventing changes in our control or management. Our directors may be removed for cause by the affirmative vote of the holders of at least two-thirds of our voting securities.

Audit Committee

Our Board determined that each of Mr. George Syllantavos, Dr. Mei (May) Wang and Mr. Xiaogang (Jason) Zhang, who comprise our Audit Committee, satisfy the independence standards for such committee established by applicable SEC rules and the listing standards of the Nasdaq. Additionally, our Board has determined that each of Mr. George Syllantavos and Mr. Xiaogang (Jason) Zhang is an "audit committee financial expert" as defined by applicable SEC rules.

The audit committee's responsibilities include, among other things:

- Appointing, compensating, retaining and overseeing the work of our independent auditors.
- Evaluating the performance, independence and qualifications of our independent auditors.
- Monitoring the integrity of our financial statements and our compliance with legal and regulatory requirements as they relate to financial statements or accounting matters.
- Reviewing the integrity, adequacy and effectiveness of our internal control policies and procedures.
- Preparing the audit committee report required by the SEC to be included in our annual proxy statement.
- Discussing the scope and results of the audit with our independent auditors, and reviewing with management and our independent auditors our interim and year-end operating results.

- Establishing and overseeing procedures for employees to submit concerns anonymously about questionable accounting or auditing matters.
- Reviewing our guidelines and policies on risk assessment and risk management.
- Reviewing and approving related party transactions.
- Obtaining and reviewing a report by our independent auditors at least annually, that describes our independent auditors internal quality control procedures, any material issues raised by review under such procedures, and any steps taken to deal with such issues when required by applicable law.
- Approving (or, as permitted, pre-approving) all audit and non-audit services to be performed by our independent auditors.

Compensation Committee

Our Board determined that each of Dr. Jun Ye, Mr. George Syllantavos and Dr. Mei (May) Wang, who comprise our Compensation Committee, satisfy the independence standards for such committee established by applicable SEC rules and the listing standards of the Nasdaq. In making its independence determination for each member of the Compensation Committee, our Board considered whether the director has a relationship with the Company that is material to the director's ability to be independent from management in connection with the duties of a Compensation Committee member.

The compensation committee's responsibilities include, among other things:

- Retaining compensation consultants and outside service providers and advisors.
- Reviewing and approving, or recommending that our Board approve, the compensation of our executive officers, including annual base salary, long- and short-term incentive plans, retirement plans, deferred compensation plans, equity award plans and other benefits.
- Reviewing and recommending to our Board the compensation of our non-employee directors.
- Administering and determining any award grants under our equity and non-equity incentive plans.
- Reviewing and evaluating succession plans for our executive officers.
- Preparing the compensation committee report required by the SEC to be included in our annual proxy statement.
- Periodically reviewing our practices and policies of employee compensation as they relate to risk management and risk-taking incentives.

Nominating and Corporate Governance Committee

Our Board determined that each of Dr. Jun Ye, Mr. George Syllantavos, and Mr. Xiaogang (Jason) Zhang, who comprise our Nominating and Corporate Governance Committee, satisfy the independence standards for such committee established by applicable SEC rules and the listing standards of the Nasdaq. In making its independence determination for each member of the Compensation Committee, our Board considered whether the director has a relationship with the Company that is material to the director's ability to be independent from management in connection with the duties of a Nominating and Corporate Governance Committee member.

The nominating and corporate governance committee's responsibilities include, among other things:

- Identifying, evaluating and recommending individuals qualified to become members of our Board and its committees.
- Evaluating the performance of our Board and of individual directors.
- Reviewing the Company's environmental and social responsibility policies and practices.
- Developing and recommending corporate governance guidelines to our Board.
- Overseeing an annual evaluation of our Board and management

Code of Ethics

We have adopted a written code of conduct and ethics that applies to each of our employees, officers and directors. A current copy of the code is posted under "Corporate Governance" on our website at *https://investors.cepton.com/*. To the extent required by rules adopted by the SEC and Nasdaq, we intend to promptly disclose future amendments to certain provisions of the code, or waivers of such provisions granted to executive officers and directors, on our website at *https://investors.cepton.com/*.

The Board's Role in Risk Oversight

Our Board, as a whole and through its committees, serves an active role in overseeing the management of risks related to our business. Our officers are responsible for day-to-day risk management activities. The full Board monitors risks through regular reports from each of the committee chairs and is apprised of particular risk management issues in connection with its general oversight and approval of corporate matters. The Board and its committees oversee risks associated with their respective areas of responsibility, as summarized below. Each committee meets with key management personnel and representatives of outside advisers as required.

Our Board has delegated oversight for specific areas of risk exposure to its committees as follows:

- The Audit Committee oversees the management of a variety of the Company's risks, including through review and discussion of the Company's guidelines and policies governing the process by which senior management of the Company and the relevant departments of the Company assess and manage the Company's exposure to risk, and reviews of any significant financial risk exposures facing the Company and management's plans to monitor, control, or minimize such exposures. The Audit Committee is also responsible for primary risk oversight related to our financial reporting, accounting, and internal controls, oversees risks related to our compliance with legal and regulatory requirements, and meets regularly with our internal auditors and our independent registered public accounting firm.
- The Compensation Committee oversees, among other things, the assessment and management of risks related to our compensation plans, policies and practices.
- The Nominating and Corporate Governance Committee oversees, among other things, the impact of our Board's leadership structure on the Board's role in risk oversight.

The Compensation Committee identifies and considers risks related to our executive compensation, including during its review and approval of our executive compensation program. Our compensation programs are designed to reward our named executive officers and other employees for the achievement of the Company's corporate strategies, business objectives and the creation of long-term value for stockholders, while at the same time avoiding the encouragement of unnecessary or excessive risk-taking. Annual incentive bonuses are balanced with long-term equity incentives that are subject to vesting schedules.

Our Board believes that the leadership structure described above under "Board Leadership Structure" facilitates the Board's oversight of risk management because it allows the Board, with leadership from the Lead Independent Director and working through its independent committees, to participate actively in the oversight of management's actions.

Item 11. Executive Compensation

This section describes the material components of the executive compensation program for certain of our executive officers and our directors.

Executive Compensation

Our compensation program is designed to align executives' compensation with our business objectives and the creation of stockholder value, while helping us to continue to attract, motivate and retain individuals who contribute to the long-term success of the company. Compensation for our executive officers has three primary components: base salary, an annual cash incentive bonus opportunity, and long-term equity-based incentive compensation granted under our 2022 Equity Incentive Plan (the "2022 Plan").

Our Compensation Committee reviews our executive officers' overall compensation packages on an annual basis (or more frequently as it deems warranted) to help ensure we continue to attract and retain highly talented executives and provide appropriate incentives to create additional value for our stockholders.

As an emerging growth company and a smaller reporting company, we have opted to comply with the executive compensation disclosure rules applicable to "smaller reporting companies" (as such term is defined under applicable securities laws), which require compensation disclosure for our principal executive officer and the two most highly compensated executive officers other than our principal executive officer. In certain circumstances, the compensation of former executive officers may also need to be disclosed. The table below sets forth the annual compensation for services rendered during 2022 by these executive officers, also referred to as our "named executive officers" (or "NEOs").

Summary Compensation Table — Fiscal Years 2021-2022

Name and Principal Position	Year	Salary ($)	Bonus ($)	Stock Awards ($)[1]	Option Awards ($)[1]	Non-Equity Incentive Plan Compensation ($)	Non-Qualified Deferred Compensation Earnings ($)	All Other Compensation ($)	Total ($)
Dr. Jun Pei	2022	312,385	—	596,000	—	—	—	—	908,385
Chief Executive Officer	2021	265,108	—	—	—	—	—	—	265,108
Mr. Hull Xu[2]	2022	268,000	—	1,723,520	—	—	—	—	1,991,520
Chief Financial Officer									
Dr. Liqun Han	2022	272,385	—	890,000	—	—	—	—	1,162,385
Chief Operating Officer	2021	224,339	—	—	—	—	—	—	224,339

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(1) Represents the aggregate grant date fair value of the stock awards and option awards granted to the named executive officer in 2022. These values have been determined under the principles used to calculate the value of equity awards for purposes of our financial statements. For a discussion of the assumptions and methodologies used to calculate the amounts referred to above, please see the discussion of equity incentive awards contained in Note 12, Stock-Based Compensation within this Report. The amounts reported in these columns reflect the accounting cost for these awards and do not correspond to the actual economic value that may be received by the named executive officer pursuant to the awards.

The amount reported in this column for Mr. Hull Xu includes a grant date fair value of $54,720 for an award of performance-based restricted stock units as described in note (5) of the Outstanding Equity Awards table below. This value has been determined based on the probable outcome (determined as of the grant date) of the performance-based conditions applicable to the award. The grant date value of this award assuming that the highest level of performance conditions will be achieved is $166,880.

(2) Mr. Hull Xu was appointed our Chief Financial Officer, effective April 5, 2022. He did not serve in an executive officer position during 2021.

Outstanding Equity Awards as of December 31, 2022

The following table provides information regarding outstanding stock options and restricted stock units held by each of our NEOs as of December 31, 2022, including the vesting dates for the portions of these awards that had not vested (and the fair market value of unvested restricted stock units) as of that date. Our NEOs did not hold any other outstanding equity awards as of that date.

	Option Awards				Stock Awards			
Name	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price ($)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested ($)[1]	Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested ($)[1]
Dr. Jun Pei.	—	—	—	—	200,000[2]	254,000	—	—
Mr. Hull Xu. . . .	293,401	318,907[3]	1.26	2/11/2031	—	—	—	—
	—	—	—	—	560,000[4]	711,200	—	—
	—	—	—	—	—	—	56,000[5]	71,120
Dr. Liqun Han . .	1,959,387	—	0.10	11/15/2026	—	—	—	—
	377,591	112,255[6]	0.97	11/20/2029	—	—	—	—
	—	—	—	—	200,000[2]	—	—	—
	—	—	—	—	200,000[7]	—	—	—

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(1) The amounts in this column have been determined by multiplying the number of shares or units, as applicable, by the closing price of a share of our common stock on December 30, 2022 (i.e., the last trading day of fiscal 2022).

(2) The restricted stock units ("RSUs") subject to these awards vest in two equal installments on May 20, 2023 and May 20, 2024.

(3) The unvested portions of this option vests in 25 monthly installments from January 19, 2023 through January 19, 2025.

(4) The RSUs subject to this award vest in the following installments: 220,000 of the RSUs on May 20, 2023, 220,000 of the RSUs on May 20, 2024 and 120,000 RSUs will vest on May 20, 2025.

(5) Represents performance-based stock units ("PSUs"), each of which represents a contingent right to receive one share of the Company's common stock. The award will vest as to 30,000 of the PSUs if, at the close of regular trading for 20 trading days out of any period of 30 consecutive trading days, either (i) the Company's closing stock price (in regular trading) exceeds $15.00 per share or (ii) the Company's market capitalization exceeds $2.1 billion; and will vest as to the remaining 26,000 PSUs if, at the close of regular trading for 20 trading days out of any period of 30 consecutive trading days, either (i) the Company's closing stock price (in regular trading) exceeds $17.50 per share or (ii) the Company's market capitalization exceeds $2.5 billion, provided in each case that the applicable stock price or market capitalization goal must be achieved no later than February 10, 2025 for the applicable tranche to vest, and provided further that the vesting of each tranche is subject to continued employment with the Company through the day on which the applicable goal is achieved.

(6) The unvested portion of this option vests in 11 monthly installments from January 20, 2023 through November 20, 2023.

(7) The RSUs subject to this award vest in four equal installments on August 20, 2023, August 20, 2024, August 20, 2025 and August 20, 2026.

2022 Equity Grants

On May 3, 2022, Dr. Jun Pei and Dr. Liqun Han were each granted an award of 200,000 RSUs that will vest in two equal installments on May 20, 2023 and May 20, 2024, and Mr. Hull Xu was granted (i) an award of 560,000 RSUs (that will vest as to 220,000 RSUs on May 20, 2023 and May 20, 2024 and as to 120,000 RSUs on May 20, 2025), and (ii) an award of 56,000 PSUs (that will vest based on achievement of stock price or market capitalization goals as described in note (5) to the Outstanding Equity Awards table above). Dr. Liqun Han was granted an additional award of 200,000 RSUs on July 29, 2022 that will vest in four equal installments on August 20, 2023, August 20, 2024, August 20, 2025 and August 20, 2026. Each of these awards was granted under, and is subject to the terms of, the 2022 Plan.

The 2022 Plan is administered by the Compensation Committee of the Board, which has authority to interpret the plan provisions and make all required determinations under the plan. This authority includes, subject to the provisions of the 2022 Plan, selecting participants and determining the type(s) of award(s) that they are to receive, determining the number of shares that are to be subject to awards and the terms and conditions of awards, including the price (if any) to be paid for the shares or the award, accelerating or extending the vesting or exercisability or extending the term of any or all outstanding awards, making certain adjustments to an outstanding award and authorizing the conversion, succession or substitution of an award, determining the manner in which the purchase price of an award or the Company's common stock may be paid, making required proportionate adjustments to outstanding awards upon the occurrence of certain corporate events such as reorganizations, mergers and stock splits, and making provisions to ensure that any tax withholding obligations incurred in respect of awards are satisfied. Awards granted under the plan are generally only transferable to a beneficiary of the participant upon his or her death or, in certain cases, to family members for tax or estate planning purposes.

Under the terms of the 2022 Plan, a change in control of the Company does not automatically trigger vesting of the awards then outstanding under the plan. If there is a change in control, each participant's outstanding awards granted under the plan will generally be assumed by the successor company, unless the compensation committee provides that the award will not be assumed and will become fully vested and, in the case of options, exercisable, any options that become vested in connection with a change in control will generally terminate to the extent they are not exercised prior to the change in control.

Non-Equity Incentive Plan Compensation

While each of the NEOs was eligible to receive a discretionary cash bonus for 2022, the Compensation Committee determined not to award bonuses to any of the NEOs in order to help the Company conserve cash. In February 2023, the Compensation Committee approved a grant of RSUs to each of the NEOs under the 2022 Plan (196,923 RSUs for Dr. Jun Pei and 172,308 RSUs for each of Mr. Hull Xu and Dr. Liqun Han) that will vest in three equal annual installments on February 20, 2024, February 20, 2025 and February 2026. Under SEC rules, equity awards are reported in the Summary Compensation Table as compensation for the fiscal year in which the award is granted. Accordingly, these award grants will be reported in the Summary Compensation Table as compensation for 2023 in the proxy statement for the Company's 2024 annual meeting.

Executive Employment and Severance Agreements

We have entered into employment agreements with each of the NEOs. The employment agreements do not have a specified term and provide that the executive's employment with the Company is at-will. Each employment agreement provides for the executive to receive a base salary and to participate in the Company's benefit plans made available to employees generally. The letters do not provide for any severance or other benefit upon a termination of the executive's employment.

Dr. Jun Pei's employment agreement provides for an initial annual base salary of $320,000 and is eligible for an annual discretionary bonus as determined by the Compensation Committee and to participate in the Company's benefit plans made available to employees generally. If Dr. Jun Pei's employment with the Company is terminated by the Company without "cause" or by him for "good reason" (as defined in the agreement), he will receive severance of 18 months base salary (or $900,000 if such termination occurs prior to February 10, 2024), payable in installments over an 18-month period, payment of his COBRA premiums for 18 months, and 18 months' accelerated vesting of his then-outstanding and unvested equity awards granted by the Company. However, if such a termination of his employment occurs in connection with or within 18 months following a change in control of the Company, his severance will equal the sum of 18 months of his base salary and one and one-half times his annual target bonus for the year of termination (or, if no target bonus has been established, the amount of his actual bonus for the prior year and provided that his severance will not be less than $900,000 if such termination occurs within two years after the closing) and will be paid in a lump sum; and his then-outstanding equity awards granted by the Company will be fully vested. Dr. Jun Pei's right to receive these severance benefits is subject to his providing a release of claims to the Company and his continued compliance with his confidentiality, non-solicitation and other covenants in favor of the Company.

The agreements for Mr. Hull Xu and Dr. Liqun Han each provide the executive will receive an initial annual base salary of $280,000 and is eligible for an annual discretionary bonus as determined by the Compensation Committee and to participate in the Company's benefit plans made available to employees generally. If the executive's employment with the Company is terminated by the Company without "cause" or by the executive for "good reason" (as defined in the agreement), the executive will receive severance of 12 months base salary, payable in installments over a 12-month period, payment of his COBRA premiums for 12 months, and 12 months' accelerated vesting of his then-outstanding and unvested equity awards granted by the Company. However, if such a termination of the executive's employment occurs in connection with or within 18 months following a change in control of the Company, the executive's severance will equal the sum of 12 months of his base salary and his annual target bonus for the year of termination (or, if no target bonus has been established, the amount of his actual bonus for the prior year) and will be paid in a lump sum, and his then-outstanding equity awards granted by the Company will be fully vested. In each case, the executive's right to receive these severance benefits is subject to his providing a release of claims to the Company and his continued compliance with his confidentiality, non-solicitation and other covenants in favor of the Company.

Defined Contribution Plans

As part of our overall compensation program, we provide all full-time employees, including each of our NEOs, with the opportunity to participate in a defined contribution 401(k) plan. Our 401(k) plan is intended to qualify under Section 401 of the Internal Revenue Code so that employee contributions and income earned on such contributions are not taxable to employees until withdrawn. Employees may elect to defer a percentage of their eligible compensation (not to exceed the statutorily prescribed annual limit) in the form of elective deferral contributions to the plan. Our 401(k) plan also has a "catch-up contribution" feature for employees aged 50 or older (including those who qualify as "highly compensated" employees) who can defer amounts over the statutory limit that applies to all other employees. The Company does not currently make any matching or other contributions to participants' accounts under the 401(k) plan.

Non-Employee Director Compensation

Under our Director Compensation Policy, which was adopted on June 30, 2022, annual compensation for the members of our Board who are not employed by us or any of our subsidiaries (referred to in this section as "non-employee directors") consists of an annual cash retainer, an additional cash retainer for non-employee directors serving in certain positions as described below, and equity awards as described below. Members of the Board are also reimbursed for their reasonable out-of-pocket expenses, including travel and lodging, incurred in attending meetings of the Board and Board committees or in connection with Board-related business, in each case consistent with our expense reimbursement policy. Our Board reserves the right to modify the Director Compensation Policy from time to time.

Annual Cash Retainers

Our Director Compensation Policy provides annual cash retainers for our non-employee directors as follows:

Annual Retainer	$	40,000
Additional Committee Chair Retainers:		
Audit Committee Chair	$	15,000
Compensation Committee Chair	$	10,000
Nominating and Corporate Governance Committee Chair	$	8,000
Additional Committee Retainers:		
Audit Committee	$	10,000
Compensation Committee	$	8,000
Nominating and Corporate Governance Committee	$	5,000

These retainers are paid on a quarterly basis, in arrears, and are pro-rated if the director serves for a portion of a quarter in the applicable position.

Equity Compensation

Our Director Compensation Policy provides that on the date of our annual meeting of stockholders (or, for 2022, a date determined by our Board), each non-employee director continuing in office after that date will be granted an award of restricted stock units ("RSUs") under our equity incentive plan, with the number of RSUs covered by the award to be determined by dividing $120,000 by the closing price of our stock on the grant date (or the preceding trading day if the grant date is not a trading day), rounded to the nearest whole share. The award will be scheduled to vest on the day immediately preceding our next annual meeting of shareholders (or, if earlier, the first anniversary of the grant date), subject to the non-employee director's continued service on the Board.

In addition, if a new non-employee director is appointed or elected to the Board (other than at an annual meeting in connection with which the non-employee director receives an annual equity award as described above), the non-employee director will receive a pro-rated RSU award under our equity incentive plan upon joining the Board, with the number of RSUs covered by the award to be determined by dividing (i) the product of $120,000 multiplied by a fraction (not greater than one and not less than zero), the numerator of which is 365 minus the number of calendar days that had elapsed as of the date the director's appointment or election to the Board since the date of the last annual meeting and the denominator of which is 365 by (ii) the closing price of our stock on the grant date (or the preceding trading day if the grant date is not a trading day), rounded to the nearest whole share. This initial RSU award will be scheduled to vest on the same vesting date as the equity awards granted to non-employee directors in connection with our last annual meeting of shareholders.

RSU awards granted to our non-employee directors that are then outstanding will generally vest in full upon a change in control of the Company. The Board may approve other grants of equity-based awards to non-employee directors from time to time on such terms as it determines appropriate.

Pursuant to the Director Compensation Policy, we granted each of Dr. Mei (May) Wang, Mr. Xiaogang (Jason) Zhang and Mr. George Syllantavos an award of 76,923 RSUs on June 30, 2022, with each such award to vest on the date of our 2023 annual meeting of stockholders (or, if earlier, June 30, 2023).

Director Compensation Table — Fiscal 2022

The following table sets forth the total compensation paid to our non-employee directors for their service on our Board during fiscal 2022. Dr. Jun Pei, who is employed by us, does not receive any compensation for his service on the Board.

Name	Fees Earned or Paid in Cash ($)	Stock Awards ($)[1][2]	Option Awards ($)[1][2]	All Other Compensation ($)	Total ($)
Dr. Winston Fu[3]	60,000	223,500	—	—	283,500
Takayuki Katsuda[4]	—	—	—	—	—
George Syllantavos	51,000	120,000	—	—	171,000
Dr. Mei (May) Wang	43,500	120,000	—	—	163,500
Dr. Jun Ye[5]	—	—	—	—	—
Xiaogang (Jason) Zhang	36,667	120,000	—	—	156,667

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(1) Represents the aggregate grant date fair value of the stock awards and option awards granted to the non-employee director in 2022. These values have been determined under the principles used to calculate the value of equity awards for purposes of our financial statements. For a discussion of the assumptions and methodologies used to calculate the amounts referred to above, please see the discussion of equity incentive awards contained in Note 12, Stock-Based Compensation within this Report. The amounts reported in these columns reflect the accounting cost for these awards and do not correspond to the actual economic value that may be received by the non-employee director pursuant to the awards.

(2) The aggregate number of outstanding and unvested RSUs and outstanding and unexercised stock options held by each non-employee director as of December 31, 2022 are set forth below. No non-employee director held any other outstanding equity awards as of that date.

Name	Number of Outstanding Stock Awards as of 12/31/22	Number of Outstanding Stock Options as of 12/31/22
Dr. Winston Fu	—	—
Takayuki Katsuda	—	—
George Syllantavos	76,923	—
Dr. Mei (May) Wang	76,923	—
Dr. Jun Ye	—	—
Xiaogang (Jason) Zhang	76,923	—

(3) Dr. Winston Fu was employed by us and served as a member of our Board until November 2022. The compensation reported in the table above represents his compensation as an employee. He did not receive any compensation for his service on the Board during 2022.

(4) Mr. Takayuki Katsuda declined the compensation he would have otherwise been entitled to receive under our Director Compensation Policy for his service on the Board during 2022.

(5) Dr. Jun Ye declined the compensation he would have otherwise been entitled to receive under our Director Compensation Policy for his service on the Board during 2022.

Item 12. Security Ownership of Certain Beneficial Owner and Management and Related Stockholder Matters

The following table sets forth certain information with respect to the beneficial ownership of our common stock as of March 1, 2023 for:

- each of our named executive officers;
- each of our directors;
- all of our current directors and executive officers as a group; and
- each person known by us to be the beneficial owner of more than 5% of the outstanding shares of our common stock.

We have determined beneficial ownership in accordance with the rules of the SEC, and thus it represents sole or shared voting or investment power with respect to our securities. Unless otherwise indicated below, to our knowledge, the persons and entities named in the table have sole voting and sole investment power with respect to all shares that they beneficially owned, subject to community property laws where applicable. The information does not necessarily indicate beneficial ownership for any other purpose, including for purposes of Sections 13(d) and 13(g) of the Securities Act.

We have based our calculation of the percentage of beneficial ownership on 156,761,170 shares of our common stock outstanding as of March 1, 2023. In accordance with SEC rules, we have deemed shares of our common stock subject to stock options or warrants that are currently exercisable or exercisable within sixty (60) days of the date of March 1, 2023 and shares of our common stock underlying RSUs that are currently releasable or releasable within sixty (60) days of March 1, 2023 to be outstanding and to be beneficially owned by the person holding the common stock, options, warrants or RSUs for the purpose of computing the percentage ownership of that person. We did not deem these shares outstanding, however, for the purpose of computing the percentage ownership of any other person.

Unless otherwise indicated, the address of each beneficial owner listed in the table below is c/o Cepton, Inc., 399 West Trimble Road, San Jose, California, 95131. The information provided in the table is based on our records, information filed with the SEC and information provided to us, except where otherwise noted.

Name and Address of Beneficial Owners	Number of Shares of common stock Beneficially Owned	%
5% Holders:		
Koito Manufacturing Co., Ltd.[(1)]	19,624,741	12.5%
LDV Partners Fund I, L.P.[(2)]	16,163,422	10.3%
Yupeng Cui[(3)]	9,679,376	6.2%
Executive Officers and Directors:		
Dr. Jun Pei[(4)]	29,178,885	18.6%
Dr. Jun Ye[(5)]	25,916,966	16.5%
Hull Xu[(6)]	331,416	*
Dr. Mark McCord[(7)]	10,389,248	6.6%
Dr. Liqun Han[(8)]	2,847,237	1.8%
Dr. Dongyi Liao[(9)]	2,308,912	1.5%
George Syllantavos[(10)]	976,500	*
Takayuki Katsuda[(11)]	—	—%
Hideharu (Harry) Konagaya[(12)]	—	—%
Dr. Mei (May) Wang	—	—%
Xiaogang (Jason) Zhang	—	—%
Directors and executive officers as a group (eleven individuals)	**71,949,164**	**45.0%**

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* Less than one percent.

(1) Consists of 19,624,741 shares of common stock. The business address of Koito Manufacturing Co., Ltd. is 5-1-18, Kitashinagawa, Shinagawa-ku, Tokyo, Japan.

(2) Based on Amendment No. 1 to the Schedule 13G filed by LDV Partners Fund I, L.P. on February 6, 2023.

(3) Consists of 9,679,376 shares of common stock.

(4) Consists of 1,224,617 shares of common stock owned by Dr. Pei and 27,954,268 shares of common stock owned by the Pei 2000 Trust of which Dr. Pei is a trustee.

(5) Consists of (i) 20,818,496 shares of common stock owned by Dr. Ye; (ii) 2,449,235 shares of common stock owned by the Lynnelle Lin Ye Irrevocable Trust dated December 8, 2020 of which Dr. Ye is a trustee; (iii) 2,449,235 shares of common stock owned by the Brion Qi Ye Irrevocable Trust dated December 8, 2020 of which Dr. Ye is a trustee; (iv) and 200,000 shares of common stock owned by the Ye-Wang Family Trust, dated March 31, 2007, of which Dr. Ye is a trustee.

(6) Consists of (i) 318,916 shares of common stock issuable pursuant to options and (ii) 12,500 shares of common stock issuable pursuant to warrants, in each case, exercisable within 60 days of March 1, 2023.

(7) Consists of 10,389,248 shares of common stock owned by the McCord Trust, dated January 7, 2020, of which Dr. McCord is a trustee. On March 14, 2023, Mr. McCord transitioned to the chair of our Technology Advisory Board and ceased to be an executive officer.

(8) Consists of 489,847 shares of common stock owned by The Han-Ouyang Living Trust, U/A, dated March 21, 2021, of which Dr. Han is a trustee, and 2,357,390 shares of common stock issuable pursuant to options exercisable within 60 days of March 1, 2023.

(9) Consists of 2,308,912 shares of common stock issuable pursuant to options exercisable within 60 days of March 1, 2023.

(10) Consists of 359,000 shares of common stock owned by Mr. Syllantavos and 617,500 shares of common stock issuable to Magellan Investments Corp. pursuant to warrants that are exercisable within 60 days of the date of March 1, 2023. Mr. Syllantavos is the president and the sole director of Magellan Investments Corp.

(11) Mr. Katsuda is the Managing Corporate Officer of Koito Manufacturing Co., Ltd. The business address of Mr. Katsuda is c/o Koito Manufacturing Co., Ltd., 5-1-18, Kitashinagawa, Shinagawa-ku, Tokyo, Japan.

(12) Mr. Konagaya is a Senior Managing Director, Head of the Finance & Accounting Department, and Head of the Procurement Department of Koito Manufacturing Co., Ltd. The business address of Mr. Konagaya is c/o Koito Manufacturing Co., Ltd., 5-1-18, Kitashinagawa, Shinagawa-ku, Tokyo, Japan.

Equity Incentive Plan Information

We currently maintain three equity incentive plans — our 2022 Plan, our Employee Stock Purchase Plan (the "ESPP"), and our 2016 Plan. Each of these plans has been approved by our stockholders. The table below presents information regarding the number of outstanding awards and shares available for issuance under these plans as of December 31, 2022.

Plan Category	(a) Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights	(b) Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights ($)	(c) Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a))
Equity compensation plans approved by security holders	19,093,676(1)	2.14(2)	13,477,760(3)
Equity compensation plans not approved by security holders	—	—	—
Total	19,093,676	2.14	13,477,760

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(1) Of these shares, 4,831,692 shares were subject to outstanding awards of RSUs (including stock units subject to performance-based vesting) granted under the 2022 Plan, 524,050 shares were subject to outstanding options granted under the 2022 Plan, and 13,737,934 shares were subject to outstanding awards granted under the 2016 Plan.

(2) This figure does not take into account outstanding awards of RSUs.

(3) Of these shares, 10,396,800 shares were available for issuance under the 2022 Plan, and 3,080,960 shares were available for issuance under the ESPP. The shares available for issuance under the 2022 Plan are generally available for any type of award authorized under that plan, including stock options, stock appreciation rights, restricted stock awards, restricted stock unit awards, performance awards and other awards. No new awards may be granted under the 2016 Plan. The Company has not yet implemented the ESPP, and no shares have been issued under that plan.

Item 13. Certain Relationships and Related Transactions, and Director Independence

Policy Regarding Related Party Transactions

Our Board has adopted a written Related Person Transactions Policy that sets forth the Company's policies and procedures regarding the identification, review, consideration and oversight of "related person transactions." For purposes of our policy, a "related person transaction" is a transaction, arrangement or relationship (or any series of similar transactions, arrangements or relationships) in which (i) the Company (including any of its subsidiaries) was, is or will be a participant, (ii) the aggregate amount involved exceeds or may be expected to exceed $120,000 and (iii) a related person has or will have a direct or indirect material interest.

Subject to certain limitations, transactions involving compensation for services provided to the Company as an employee or director will not be considered related person transactions under this policy. A related person is any executive officer, director, nominee to become a director or a holder of more than 5% of any class of our voting securities (including the common stock), including any of their immediate family members and affiliates, including entities owned or controlled by such persons. A related person is also someone who has a position or relationship with any firm, corporation or other entity that engages in the transaction if (i) such person is employed or is a general partner or principal or in a similar position with significant decision making influence, or (ii) the direct or indirect ownership by such person and all other foregoing persons, in the aggregate, is 10% or greater in another person which is party to the transaction.

Under the policy, any related person, or any director, officer or employee of the Company who knows of the transaction, must report the information regarding the proposed related person transaction to our Chief Financial Officer and chairperson of the Audit Committee for review. To identify related person transactions in advance, we will rely on information supplied by our executive officers, directors and certain significant stockholders. In considering related person transactions, the Audit Committee will take into account the relevant available facts and circumstances, which may include, but are not limited to:

- the nature of the related person's interest in the transaction;
- the impact on a director's independence in the event the related person is a director, immediate family member of a director or an entity with which a director is affiliated;
- the terms of the transaction;
- the availability of other sources for comparable services or products; and
- the terms available to or from, as the case may be, unrelated third parties.

All related party transactions may be consummated or continued only if approved or ratified by our Audit Committee. No director or member of our Audit Committee may participate in the review, approval or ratification of a transaction with respect to which he or she is a related party, except that such member may be counted for purposes of a quorum and shall provide such information with respect to the transaction as may be reasonably requested by other members of our Audit Committee.

Certain Relations and Related Party Transactions

Investment Agreement

On October 27, 2022, the Company entered into the Investment Agreement with Koito pursuant to which, among other things, at the closing of the transactions, and based on the terms and subject to the conditions set forth therein, the Company issued and sold to Koito, 100,000 shares of Preferred Stock, for a purchase price of $100.0 million. The Preferred Stock will be convertible, beginning on January 19, 2024, into shares of the Company's common stock at an approximate initial conversion price of $2.585 per share (subject to adjustment). The issuance and sale of the Preferred Stock and related matters were approved by the Company's stockholders on January 11, 2023, and the Preferred Stock issued to Koito on January 19, 2023.

Investor Rights Agreement

Board and Committee Rights

At the closing of the issuance of the Preferred Stock, the Company and Koito entered into the Investor Rights Agreement, pursuant to which, among other things, the Company ensured that two designees of Koito (Mr. Takayuki Katsuda and Mr. Hideharu (Harry) Konagaya) sat on the Board immediately following the closing. Koito is entitled to have its designees appointed to the Nominating and Corporate Governance Committee and Compensation Committee of the Company's Board, subject to satisfaction of applicable committee membership requirements. Furthermore, under the Investor Rights Agreement, the Company is obligated to take all necessary action (to the extent not prohibited by law) to cause the Board to nominate for election that number of individuals designated by Koito that is proportional to Koito's beneficial ownership interest in the Company, *provided*, *however*, that Koito will not be entitled to nominate for election a number of individuals that would constitute a majority of the Board. In addition, Koito's designation rights will be reduced to one director at such time as Koito ceases to beneficially own at least 10% of the outstanding shares of common stock (on an as-converted basis) and Koito will no longer have any rights to designate a nominee to serve on the Board at such time as Koito ceases to beneficially own at least 5% of the outstanding shares of common stock (on an as-converted basis).

Investor Consent Rights

Pursuant to the terms of the Investor Rights Agreement, the prior written consent of Koito (the "Investor Consent Rights") is required for the Company to effect or validate certain enumerated actions in the Investor Rights Agreement for so long as Koito beneficially owns a number of shares of common stock representing at least 75% of the number of shares of common stock held by Koito as of the closing date after giving effect to the Transaction and including the shares of common stock issuable upon conversion of the Preferred Stock, including, but not limited to: (i) issuing securities that are senior or pari passu to the Series A Preferred Stock, (ii) declaring or paying dividends, (iii) acquiring, redeeming or repurchasing capital stock, (iv) incurring debt or liens for borrowed money in excess of specified amounts, (v) entering into related party transactions, (vi) amending the Company's charter or bylaws, (vii) changing the size of the Board, (viii) adopting a poison pill (unless it grandfathers in Koito), (ix) making acquisitions in excess of specified amounts, (x) selling, leasing or transferring assets or properties, or incurring liens (other than certain permitted liens) in excess of specified amounts, (xi) increasing the number of shares reserved for issuance under the Company's existing equity incentive plans beyond automatic annual increases currently provided for under such plans, (xii) transfers or abandonment of, or incurrence of liens on, the Company's material intellectual property and (xiii) capital expenditures in excess of specified amounts.

Preemptive Rights

Pursuant to the terms of the Investor Rights Agreement, and subject to certain exceptions, when the Company authorizes the issuance or sale of any common stock or equity-linked securities (as defined in the Investor Rights Agreement), the Company is required to first offer to sell to Koito a proportion of such common stock or equity-linked securities sufficient for Koito to maintain its pro rata share in the common stock (on an as-converted, exchanged or exercised basis, as applicable) prior to the issuance or sale of such common stock or Equity-Linked Securities to such other person, with the consummation of the sale or issuance to such other person and to Koito to occur on the same date, subject to certain exceptions.

Registration Rights

Pursuant to the Investor Rights Agreement, among other things, and subject to certain limitations set forth therein, the Company is obligated to prepare and file within 300 days after January 19, 2023 a registration statement registering shares of common stock held by any holder of Preferred Stock, including any shares of common stock acquired by any holder pursuant to the conversion of, or as a dividend on, the Preferred Stock (the "Registrable Securities").

In addition, pursuant to the Investor Rights Agreement, holders of Registrable Securities have the right to require the Company, subject to certain limitations set forth therein, to effect a sale of any or all of their Registrable Securities by means of an underwritten offering. The Company is not obligated to effect an underwritten offering (a) more than twice in any 365-day period, (b) if the anticipated gross proceeds are less than $25 million (unless Koito is proposing to sell all of its remaining Registrable Securities), or (c) during a Quarterly Blackout Period (as defined in the Investor Rights Agreement).

The Investor Rights Agreement also provides holders of Registrable Securities with certain customary piggyback registration rights and indemnification rights.

These registration rights are subject to certain conditions and limitations, including the right of the underwriters to limit the number of shares to be included in a registration or offering and the Company's right to delay or withdraw a registration statement under certain circumstances.

Termination

The Investor Rights Agreement will terminate with respect to Koito upon the mutual agreement in writing among the Company and Koito, other than termination provisions applicable to particular sections of the Investor Rights Agreement that are specifically provided in the Investor Rights Agreement. The Investor Rights Agreement will terminate automatically with respect to any other party thereto at such time as such party ceases to own any Registrable Securities.

The foregoing summary of the Investor Rights Agreement does not purport to be complete and is subject to, and is qualified in its entirety by, the full text of the Investor Rights Agreement, which was included as an exhibit to this Report.

Secured Term Loan Agreement with Koito

Concurrently with the execution of the Investment Agreement, the Company entered into the Secured Term Loan Agreement to borrow Japanese Yen ¥5.8 billion (approximately $39.4 million). The borrowings under the Secured Term Loan Agreement (the "Loan") accrued interest at a rate equal to 1.0% per annum, which was payable at maturity. The Loan was set to mature on the earlier of three business days after the closing of the transactions contemplated by the Investment Agreement and the date on which the Investment Agreement was terminated in accordance with its terms. The Secured Term Loan Agreement entered into with Koito is a related party transaction issued at below market interest rates. On November 7, 2022, the Company borrowed ¥5.8 billion under the agreement. To reflect what a similar debt instrument would be issued at with a market interest rate, the Company recorded a $2.0 million debt discount accounted for as a capital contribution within additional paid-in capital in the consolidated balance sheet. Amortization of debt discounts, in accordance with the effective interest method, are recorded as interest expense in the accompanying consolidated statement of operations and comprehensive income (loss). Obligations under the Secured Term Loan Agreement were secured by interest in substantially all of the Company's assets, including all patents. The agreement contained customary affirmative and negative covenants. On January 24, 2023, the Company used the proceeds from the sale of the Preferred Stock to repay all outstanding principal and accrued interest under the Secured Term Loan Agreement with Koito. See Note 21 of the consolidated financial statements in this Report for further information.

For the year ended December 31, 2022, the Company recognized $0.8 million in interest expense in connection with the borrowings under the Secured Term Loan Agreement with Koito. Additionally, the Company recognized a $4.3 million foreign currency transaction loss on remeasurement using the applicable exchange rate on December 31, 2022.

Transactions with Koito

Koito is an automotive tier 1 partner of the Company and sales to Koito accounted for 43% of our total revenues for the year ended December 31, 2022. In 2020, the Company was chosen by Koito to supply Koito with ADAS lidar technology licenses and components for GM's ADAS series production program for mass-market consumer vehicles. The purpose of the arrangement is to supply Koito with automotive grade lidars using the Company's components and lidar technology. These lidars are to be supplied to GM to fulfill the needs of its series production program. Production volume will ultimately be dependent on numerous factors and are binding only upon issuance of a purchase order. Revenue generated from Koito was $3.2 million and $3.1 million for the years ended December 31, 2022 and 2021, respectively. Accounts receivable from Koito was $1.0 million as of December 31, 2022 and was $0.1 million as of December 31, 2021.

Director Independence

Under the rules of Nasdaq and our Corporate Governance Guidelines, independent directors must comprise a majority of our Board. Under the Nasdaq rules, a director will only qualify as an "independent director" if our Board affirmatively determines that the director, in the opinion of our Board, does not have a relationship which would interfere with the exercise of independent judgment in carrying out the responsibilities of a director.

Our Board reviewed its composition and the independence of our directors and considered whether any director has a relationship with us that could interfere with his or her ability to exercise independent judgment in carrying out his or her responsibilities. In addition, the Nominating and Corporate Governance Committee of our Board annually evaluates and recommends to the Board a determination with respect to the independence of each our non-employee directors under the Nasdaq listing standards. As a part of the Nominating and Corporate Governance Committee's evaluation process, and as part of the independence determinations by the Nominating and Corporate Governance Committee and the Board, the Nominating and Corporate Governance Committee and the Board, as applicable, each consider, in addition to such other factors as they may deem appropriate, each director's occupation, personal and affiliate transactions with the Company, and other relevant direct and indirect relationships with the Company that may affect independence. Based upon information requested from and provided by each director concerning his or her background, employment, and affiliations, including family relationships, our Board has determined that each of Dr. Jun Ye, Mr. Xiaogang (Jason) Zhang, Mr. George Syllantavos and Dr. Mei (May) Wang qualify as independent directors, as defined under the listing rules of Nasdaq, and our Board consists of a majority of "independent directors," as defined under the rules of the SEC and Nasdaq. In making these determinations, our Board considered the relationships that each non-employee director has with us and all other facts and circumstances our Board deemed relevant in determining independence. Dr. Jun Pei is not an independent director as a result of his position as our President and Chief Executive Officer, and Mr. Takayuki Katsuda and Mr. Hideharu (Harry) Konagaya are not independent directors as a result of their affiliation with Koito.

Item 14. Principal Accounting Fees and Services

The aggregate fees billed to us for the fiscal years ended December 31, 2022 and 2021 by our independent registered public accounting firm, KPMG LLP (PCAOB ID Number 185), are as follows:

	2022	2021
Audit Fees[1]	$ 680,000	$ 1,175,000
Audit-Related Fees	—	—
Tax Fees	—	—
All Other Fees	—	—
Total Fees	$ 680,000	$ 1,175,000

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(1) Audit Fees represent the aggregate fees billed to us by KPMG LLP for professional services rendered for the audit of our annual consolidated financial statements for the fiscal year ended December 31, 2022, for the reviews of our consolidated financial statements included in our Form 10-Q filings for each fiscal quarter since the Business Combination in February 2022, and for procedures performed with respect to our registration statements.

Audit Committee Pre-Approval Policies and Procedures

The Audit Committee is required to pre-approve the audit and non-audit services performed by our independent registered public accounting firm in order to assure that the provision of such services does not impair the auditor's independence. The Audit Committee at least annually reviews and provides general pre-approval for the services that may be provided by the independent registered public accounting firm.

All services performed and related fees billed by KPMG LLP during fiscal 2022 and fiscal 2021 were pre-approved by the Audit Committee pursuant to the foregoing pre-approval policy of the Audit Committee.

Part IV

Item 15. Exhibits and Financial Statement Schedules

The following documents are filed as part of this report:

1. Financial Statements. The financial statements included in "Index to the Consolidated Financial Statements" in Part II, Item 8 are filed as part of this Annual Report on Form 10-K.
2. Financial Statement Schedules. None.
3. Exhibits. Exhibits listed in the accompanying index to exhibits are filed or incorporated by reference as part of this Annual Report on Form 10-K.

Exhibit No.	Description
2.1	Business Combination Agreement, dated as of August 4, 2021, by and among GCAC, Merger Sub and Cepton (incorporated by reference to Exhibit 2.1 to the Registration Statement on Form S-1 filed by the Company on February 11, 2022).
2.2	Amendment to Business Combination Agreement, dated as of January 21, 2022, by and among GCAC, Merger Sub and Cepton (incorporated by reference to Exhibit 2.2 to the Registration Statement on Form S-1 filed by the Company on February 11, 2022).
3.1	Second Amended and Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to the Registration Statement on Form S-1 filed by the Company on February 11, 2022).
3.2	Amended and Restated Bylaws (incorporated by reference to Exhibit 3.2 to the to the Current Report on Form 8-K filed by the Company on February 10, 2022).
3.3	Certificate of Designations of Series A Convertible Preferred Stock, par value $0.00001, of Cepton, Inc., dated January 18, 2023 (incorporated by reference to Exhibit 3.1 to the Current Report on Form 8-K filed by the Company on January 24, 2023).
4.1	Form of Common Stock Certificate of the Company (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K filed by the Company on February 10, 2022).
4.2	Form of Warrant Certificate of the Company (incorporated by reference to Exhibit 4.2 to the Registration Statement on Form S-1 filed by the Company on February 11, 2022).
4.3	Warrant Agreement, dated January 29, 2021, by and between the Company and Continental Stock Transfer & Trust Company, as warrant agent (incorporated by reference to Exhibit 4.3 to the Registration Statement on Form S-1 filed by the Company on February 11, 2022).
4.4	Warrant to Purchase Stock for Legacy Cepton (incorporated by reference to Exhibit 4.4 to the Registration Statement on Form S-1 filed by the Company on February 11, 2022).
4.5*	Description of Securities.
10.1++	Employment Agreement, dated April 5, 2022, between the Company and Hull Xu (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by the Company on April 5, 2022).
10.2++	Employment Agreement, dated as of December 7, 2021, by and between Legacy Cepton and Jun Pei (incorporated by reference to Exhibit 10.26 to the Registration Statement on Form S-4/A filed by GCAC on December 17, 2021).
10.3++	Employment Agreement, dated as of December 7, 2021, by and between Legacy Cepton and Liqun Han (incorporated by reference to Exhibit 10.29 to the Registration Statement on Form S-4/A filed by GCAC on December 17, 2021).
10.4++	Employment Agreement, dated as of December 7, 2021, by and between Legacy Cepton and Dongyi Liao (incorporated by reference to Exhibit 10.30 to the Registration Statement on Form S-4/A filed by GCAC on December 17, 2021).
10.5	Form of PIPE Subscription Agreement (incorporated by reference to Exhibit 10.1 to the Registration Statement on Form S-1 filed by the Company on February 11, 2022).
10.6	Form of PIPE Subscription Agreement Amendment (incorporated by reference to Exhibit 10.2 to the Registration Statement on Form S-1 filed by the Company on February 11, 2022).
10.7++	Form of Director and Officer Indemnification Agreement (incorporated by reference to Exhibit 10.8 to the Current Report on Form 8-K filed by the Company on February 10, 2022).
10.8++	Cepton, Inc. 2022 Equity Incentive Plan and Forms of Award Agreements (incorporated by reference to Exhibit 10.9 to the Registration Statement on Form S-1/A filed by the Company on April 12, 2022).

Exhibit No.	Description
10.9++	Cepton, Inc. Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.10 to the Current Report on Form 8-K filed by the Company on February 10, 2022).
10.10++	Legacy Cepton Stock Incentive Plan (incorporated by reference to Exhibit 10.11 to the Current Report on Form 8-K filed by the Company on February 10, 2022).
10.11	Loan Agreement, dated January 4, 2022, by and between Legacy Cepton and Trinity Capital Inc. (incorporated by reference to Exhibit 10.21 to the Registration Statement on Form S-1 filed by the Company on February 11, 2022).
10.12	Pledge Agreement, dated January 4, 2022, by and between Legacy Cepton and Trinity Capital Inc. (incorporated by reference to Exhibit 10.22 to the Registration Statement on Form S-1 filed by the Company on February 11, 2022).
10.13	Participation Rights Agreement, dated January 4, 2022, by and between Legacy Cepton and Trinity Capital Inc. (incorporated by reference to Exhibit 10.23 to the Registration Statement on Form S-1 filed by the Company on February 11, 2022).
10.14	First Amendment to the Trinity Loan Agreement, dated as of May 5, 2022, entered into by Cepton Technologies and Trinity (incorporated by reference to Exhibit 10.2 to the Quarterly Report on Form 10-Q filed by the Company on August 11, 2022).
10.15	Second Amendment to the Trinity Loan Agreement, dated as of June 20, 2022, entered into by Cepton Technologies and Trinity (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Cepton on June 20, 2022).
10.16	Amended and Restated Pledge Agreement, dated as of May 5, 2022, entered into by Cepton Technologies and Trinity (incorporated by reference to Exhibit 10.5 to the Quarterly Report on Form 10-Q filed by the Company on August 11, 2022).
10.17++	Director Compensation Policy and form of Director RSU Grant, dated as of June 30, 2022 (incorporated by reference to Exhibit 10.6 to the Quarterly Report on Form 10-Q filed by the Company on August 11, 2022).
10.18	Investment Agreement, dated October 27, 2022, by and between Cepton, Inc. and Koito Manufacturing Co., Ltd. (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed on October 27, 2022).
10.19	Form of Voting Support Agreement (incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K filed on October 27, 2022).
10.20	Secured Term Loan Agreement, dated October 27, 2022, by and between Cepton Technologies, Inc. and Koito Manufacturing Co., Ltd. (incorporated by reference to Exhibit 10.3 to the Current Report on Form 8-K filed on October 27, 2022).
10.21	Security Agreement, dated as of November 7, 2022, by and between Cepton Technologies, Inc. and Koito Manufacturing Co., Ltd. (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed on November 8, 2022).
10.22	Patent Security Agreement, dated as of November 7, 2022, by and between Cepton Technologies, Inc. and Koito Manufacturing Co., Ltd. (incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K filed on November 8, 2022).
10.23	Exclusivity agreement extension letter, dated October 6, 2022, by and between Cepton, Inc. and Koito Manufacturing Co., Ltd. (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed on October 7, 2022).
10.24	Investor Rights Agreement, dated January 19, 2023, by and between Cepton, Inc. and Koito Manufacturing Co., Ltd. (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed on January 24, 2023).
21.1	Subsidiaries of the Registrant. (incorporated by reference to Exhibit 21.1 to the Current Report on Form 8-K filed on February 11, 2022).
23.1*	Consent of KPMG LLP, Independent Registered Public Accounting Firm
31.1*	Certification of the 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.
31.2*	Certification of the 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.

Exhibit No.	Description
32.1*	Certification of the Principal Executive Officer Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2*	Certification of the Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	Inline XBRL Instance Document.
101.SCH	Inline XBRL Taxonomy Extension Schema Document.
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document.
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document.
104	Cover Page Interactive Data File (formatted as Inline XBRL)

++ Indicates a management or compensatory plan.
* Filed herewith.

Item 16. Form 10-K Summary

None.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of San Jose, State of California, on the 20th day of March 2023.

CEPTON, INC.

By: /s/ Jun Pei
Jun Pei
President, Chairman,
Chief Executive Officer and Director

Pursuant to the requirements of the Securities Act, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated:

Name	Position	Date
/s/ Jun Pei Jun Pei	President, Chairman, Chief Executive Officer and Director (Principal Executive Officer)	March 20, 2023
/s/ Hull Xu Hull Xu	Chief Financial Officer (Principal Financial and Accounting Officer)	March 20, 2023
* Jun Ye	Director	March 20, 2023
* Xiaogang (Jason) Zhang	Director	March 20, 2023
* Takayuki Katsuda	Director	March 20, 2023
* George Syllantavos	Director	March 20, 2023
* Mei (May) Wang	Director	March 20, 2023
* Hideharu (Harry) Konagaya	Director	March 20, 2023

* By: /s/ Jun Pei
Jun Pei
Attorney-in-fact

BOARD OF DIRECTORS

Dr. Jun Pei
President, Chief Executive Officer
and Chairman of the Board

Dr. Jun Ye
President and Chief Executive
Officer of Sentieon, Inc.

Takayuki Katsuda
Managing Corporate Officer of
Koito Manufacturing Co., Ltd.

Hideharu (Harry) Konagaya
Senior Managing Director,
Head of Finance and Accounting and
Head of Procurement of Koito
Manufacturing Co., Ltd.

George Syllantavos
Former co-Chief Executive Officer
and Chief Financial Officer of
Growth Capital Acquisition Corp.

Dr. Mei (May) Wang
Former Chief Technology Officer,
Internet of Things, of Palo Alto
Networks, Inc.

Xiaogang (Jason) Zhang
Managing Partner of CFT Capital

EXECUTIVE OFFICERS

Dr. Jun Pei
President, Chief Executive Officer
and Chairman of the Board

Hull Xu
Chief Financial Officer

Dongyi Liao
Chief Technology Officer

Liqun Han
Chief Operating Officer

CORPORATE HEADQUARTERS
399 West Trimble Road
San Jose, CA 95131

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