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

FORM 10-K

☒ **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 ________

Commission file number 333-259554

AEye, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**37-1827430**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
One Park Place, Suite 200, Dublin, CA	**94568**
(Address of Principal Executive Offices)	(Zip Code)

(925) 400-4366
Registrant's telephone number, including area code
Not Applicable
(Former name, former address and former fiscal year, if changed since last report)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common stock, $0.0001 par value per share	LIDR	The Nasdaq Stock Market LLC
Warrants to purchase one share of common stock	LIDRW	The Nasdaq Stock Market LLC

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 or 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 and posted on its corporate web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company, or an emerging growth company.. See the definitions of "large accelerated filer," "accelerated filer", "smaller reporting company", and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒	Smaller reporting company	☒
		Emerging growth company	☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

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

As of June 30, 2022 (the last business day of the registrant's most recently completed second fiscal quarter), the registrant had 107,232,863 shares of voting common stock that were held by non-affiliates. The approximate aggregate market value of shares held by non-affiliates was $205 million.

As of March 10, 2023, the registrant had 168,762,257 shares of common stock, $0.0001 par value per share, outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant’s Proxy Statement relating to the 2023 Annual Meeting of Stockholders, are incorporated by reference into Part III of this Annual Report on Form 10-K where indicated. Such Proxy Statement, or an amendment to this Annual Report on Form 10-K, will be filed with the Securities and Exchange Commission within 120 days after the end of the registrant’s fiscal year ended December 31, 2022.

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CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

The information in this Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. Such statements are based upon current expectations that involve risks and uncertainties, including risks and uncertainty around the impact of the COVID-19 pandemic and related public health measures. Any statements contained herein that are not statements of historical facts may be deemed to be forward-looking statements. For example, words such as “may,” “will,” “should,” “estimates,” “predicts,” “potential,” “continue,” “strategy,” “believes,” “anticipates,” “plans,” “expects,” “intends” and similar expressions are intended to identify forward-looking statements. You should not rely on forward-looking statements as predictions of future events. Our actual results and the timing of certain events may differ significantly from the results discussed in the forward-looking statements. Factors that might cause or contribute to such differences include, but are not limited to, those discussed elsewhere in this report, particularly in Part I, Item 1A titled “Risk Factors,” and the risks discussed in our other Securities and Exchange Commission, or SEC, filings. We undertake no obligation to update the forward-looking statements after the date of this report, except as required by law.

PART I

Item 1. Business

General

We are a provider of high-performance, active lidar systems technology for vehicle autonomy, advanced driver-assistance systems, or ADAS, and robotic vision applications. We have developed an artificial intelligence technology that enables adaptive “intelligent sensing,” differentiating us in the marketplace from our competition. Our proprietary software-definable 4Sight™ Intelligent Sensing Platform combines solid-state active lidar, an optionally fused low-light HD camera, and integrated deterministic artificial intelligence to capture more intelligent information with less data, enabling faster, more accurate, and more reliable perception of the surroundings.

We were founded in 2013 by Luis Dussan, our Chief Technology Officer, to create a deterministic AI-driven sensing system that performs better than the human eye and visual cortex. Mr. Dussan’s experience developing mission-critical targeting systems for fighter jets and ground troops on behalf of the U.S. military provided him with the background to develop a differentiated approach to visual sensing. While traditional sensing systems passively collect data, our active 4Sight™ Intelligent Sensing Platform leverages principles from automated targeting systems and biomimicry to scan the environment, while intelligently focusing on what matters in order to enable safer, smarter, and faster decisions in complex scenarios. From our inception, our culture drew from esteemed scientists and electro-optics engineers from the National Aeronautics and Space Administration, or NASA, Lockheed Martin Corporation, Northrop Grumman Corporation, the U.S. Air Force, and the Defense Advanced Research Projects Agency, or DARPA, to create the highest performing sensing and perception system for the most challenging situations, ensuring the highest levels of safety for autonomous driving.

As a result, our adaptive lidar is designed to enable higher levels of autonomy and functionality — SAE Levels 2 through 5 — with the goal of optimizing performance, power, and reducing cost. Our 4Sight Intelligent Sensing Platform is software-definable and network-optimized, and leverages deterministic artificial intelligence at the edge. We have made substantial investments in our R&D processes and deliver value to our customers through a combination of sales and direct channels. We perform the majority of our R&D activities in our 56,549 square foot corporate headquarters in Dublin, California. Our modular design facilitates product hardware updates as technologies evolve, and its small size and modest heat dissipation enable very flexible placement options on the interior or exterior of a vehicle. 4Sight also leverages a common architecture to create application-specific products across the Automotive and Industrial markets.

Our systems-based approach encourages partnership from the well-established automotive supply chain, including original equipment manufacturers, or OEMs, as well as Tier 1 and Tier 2 OEM suppliers. There is strong alignment between us and our partners given what is required to produce high-performance automotive grade products at scale, including quality, reliability, and affordability. Our Tier 1 partners will add value with OEM customers through industrialization, manufacturing, integration, sales, marketing, product liability, and warranty. Our Tier 2 partners will provide automotive-grade sub-components, which are used not only in automotive lidar for ADAS use cases, but also for our products to be sold in the Industrial market. We expect the result will be a high-quality, high-performance product at the right price point, which we believe to be a key enabler in accelerating adoption of lidar across various markets in Automotive and beyond.

In pursuing this strategy, we have partnered with leading Tier 1 automotive suppliers, including Continental, who is in the process of bidding for long range lidar series production awards with OEMs that are expected to represent a substantial portion of our future revenues. The main markets for lidar, including Automotive and Industrial, are projected to see significant growth in both the near and long term. We believe this expected growth will allow us to capture significant market share as well as pursue specialization opportunities like highway autonomous driving applications that benefit from our products. We expect that lidar will be a required sensing solution across many end markets, and we intend to be the leading solutions provider in these spaces.

Market Outlook/Overview

We believe that lidar will be a required sensing solution across many end markets. We broadly define our two key end markets as Automotive and Industrial.

Automotive

We believe that lidar will be a critical component of ADAS and fully autonomous driving or self-driving systems. Applications for the Automotive end market include lidar sensors and software for passenger and commercial vehicles. Automotive and commercial vehicle OEMs are expected to introduce lidar sensors to add ADAS features and improve safety for passengers and pedestrians. For vehicles to achieve greater autonomous functionality and perform those functions at higher speeds, we believe long-range lidar will be necessary. Our sensors were designed to search, detect, acquire, and track small objects at long distances. We may also introduce other mid- and short-range lidar systems based on the same 4Sight Intelligent Sensing Platform. Our system is particularly well-suited to reduce the intensive compute (and associated power and latency) requirements of autonomous systems because our platform handles critical data processing at the sensor level, thereby allowing the self-driving system to focus limited compute resources on the vehicle's path planning. We believe that our strategy to partner with Tier 1 automotive suppliers to produce high-quality, long-range lidar at scale will drive adoption of lidar in series production across major global OEMs.

- **Passenger vehicle ADAS** — highway autonomy in passenger vehicles is a highly relevant use case for our technology, as passenger vehicle OEMs are actively in the process of adding new features that enhance the consumer driving experience. These highway systems rely on consistent detection of dangerous, often small, obstacles at long distances and high speeds, which our system can optimize for in software.

- **Commercial vehicle ADAS** — hub-to-hub autonomy in commercial vehicles, such as short- and long-range delivery vehicles, enabled by lidar, promises similar technological utility to that in passenger vehicles. Importantly, however, the value that a commercial vehicle operator derives from commercial ADAS is driven by increased utility and safety through reduced risk from driver fatigue. We believe that adoption rates for long-range lidar will be higher in commercial vehicles initially due to the significant share of time that highway driving represents for commercial customers.

Industrial

We believe there are a broad range of use cases for lidar in Industrial markets, including but not limited to rail, construction, mining, agriculture, aerospace, defense, and intelligent transportation systems.

- **Rail** — detecting and acquiring railway debris at long distances to stop the train to prevent derailment; assessing tracks for maintenance needs; and monitoring platform safety.

- **Construction, Mining, & Agriculture** — detecting and acquiring obstacles, pedestrians, and animals in the path of large, autonomous construction and mining vehicles and agricultural equipment.

- **Aerospace & Defense** — detecting wires or other obstacles above ground for helicopters; automating logistics vehicles for the military; enabling mid-air refueling.

- **Intelligent Transportation Systems (ITS)** — intersection traffic management, tolling automation, smart mobility infrastructure, autonomous/smart parking, and work zone safety.

Commercial

Overview

We employ two different go-to-market models: one model addresses the traditional Automotive end market and the other model addresses the Industrial end market.

We employ a channel model in the traditional Automotive market by working through Tier 1 suppliers that sell products to OEM customers. Those Tier 1 suppliers will industrialize, manufacture, and sell lidar sensor solution units to OEMs that incorporate our proprietary design and software. We expect that we will receive royalty payments from those Tier 1 suppliers for each unit they sell to their OEM customers. Royalties may take the form of a fixed amount per unit, a percentage of the average selling price of the sensor, profit-sharing, or some combination of these methods. We work alongside our Tier 1 supplier partners to quote new business according to the OEM's specifications. Our announced Tier 1 supplier engagements include Continental. We are also currently engaged in partnership discussions with other Tier 1 suppliers.

For the Industrial market, we either sell directly to the customer or through systems integrators. Contract manufacturers with whom we have agreements, assemble, test, and deliver these products. Direct sales constitute sales of units to upgrade systems or otherwise add on to an existing product, while systems integrators will build our technology into mass produced systems, such as autonomous mining haulers, locomotives, or intelligent transportation systems.

Our lidar products employ a single product platform that is based on components sourced from an established Tier 2 automotive supply chain to drive down costs and increase reliability. We expect to utilize those same components to address the Industrial market, which enables us to leverage our volume in automotive, and drive costs down for the products made by our contract manufacturing partners.

Relationship with Continental

Continental, which refers to Continental AG together with its subsidiaries, is one of the largest Tier 1 automotive suppliers globally as measured by revenue. Continental is also a leading provider of ADAS products, supplying more than 25 OEMs, 50 brands, and 300 vehicle models globally, having shipped over 100 million ADAS products over the last three years, including radar, camera, autonomous driving compute units, and complementary flash lidar for short-range applications.

In October 2020, we and Continental publicly announced a strategic partnership whereby Continental will manufacture and integrate our lidar products into OEM model lines through long-term series production contracts with OEMs. Continental, after evaluating a wide range of competing solutions, entered into a Joint Development Agreement in 2021 with us setting forth the basis for a long-range lidar technology partnership.

Continental is currently engaged in multiple OEM purchasing processes using us as its technology design partner. Continental is planning a manufacturing facility with a 2024 anticipated start of production. It is expected that the full production line capacity will be contractually committed through Continental for various series production car models over the next few years.

For production lines that utilize our product design, Continental will purchase the hardware components from a group of approved automotive-grade Tier 2 suppliers manufacturing our component designs. We expect that for each unit that Continental sells based upon our licensed product design, Continental will pay us a royalty.

Technology

We developed the 4Sight Intelligent Sensing Platform, to combine solid-state active lidar, an optionally fused low-light HD camera, and integrated deterministic artificial intelligence to capture more intelligent information with less data, enabling faster, more accurate, and more reliable perception of the surroundings. The 4Sight Intelligent Sensing Platform enables the integration of various types of sensor inputs, including camera, lidar, and radar. Our 4Sight products are developed on this framework and incorporate both camera and lidar sensors.

The 4Sight Intelligent Sensing Platform leverages a bistatic architecture, allowing for physically separated transmit and receive paths. This improves range, refresh rate, and resolution over conventional coaxial architectures employed by our competitors, by allowing the transmitter to direct energy independently of the receiver's focus. The lidar system employs time-of-flight based scanning, delivered with extremely low latency.

The laser we utilize is a 1550nm fiber laser. The 1550nm wavelength provides a photon budget far exceeding (>100x) 905nm lasers, and because 1550nm is a retina-safe wavelength, more energy can be utilized by lidar solutions using 1550nm lasers.

We leverage custom high resonance micro-electro-mechanical systems, or MEMS, for agile scanning over a wide field of view. The MEMS that we use are extremely small when compared to competing MEMS-based lidar solutions, and when coupled with the extremely high resonant frequency at which they can operate, our MEMS meet and exceed shock and vibration requirements for the Automotive and Industrial markets.

The bistatic architecture that we use is key to our proprietary camera-lidar system integration. By separating the send and receive paths, we can boresight align a camera imager with the laser transmitter. While the lidar delivers deterministic 3D data, the camera is additive for interpreting human-designed contextual clues, such as the color of stop lights or the words on a road sign. The camera integration is optional, therefore, we also intend to offer lidar-only solutions to our customers.

All of the data collected is processed directly on the system-on-a-chip, where our algorithms continually evaluate the certainty of object detection in order to direct system energy and focus.

4Sight Intelligent Sensing Platform

4Sight is our proprietary lidar intelligent sensing platform. This intelligence is enabled by our patented bistatic architecture, which keeps the transmit and receive channels separate, allowing 4Sight to optimize for both. As each laser pulse is transmitted, the receiver is told where and when to look for its return. Ultimately, this establishes the 4Sight platform as active — allowing it to focus on what matters most in a vehicle's surroundings.

The result mimics how the human visual cortex conceptually focuses on and evaluates the environment around the vehicle, driving conditions, and road hazards, enabling smarter, more accurate decision making — radically improving the probability of detection and the accuracy of classification. The sensor captures more intelligent information with less data, enabling faster, more accurate and more reliable perception.

We have identified four increasingly complex levels of software which differentiate our system:

1. **4Sight at Design:** 4Sight at Design (software configured scan patterns) enables customers to create a single, deterministic scan pattern to deliver optimal information for any specific use case. This level is particularly beneficial for repetitive motion applications, such as power line or pipeline inspection (which cameras alone cannot achieve), or robots in a closed-loop environment that is unlikely to experience anything unexpected. Through 4Sight at Design, the customers' unique, deterministic scan pattern will give them precisely the information they need for their repetitive pattern application.

2. **Triggered 4Sight:** With Triggered 4Sight, customers can create a library of deterministic, software-configurable scan patterns at design time, each one addressing a specific use case. Maps, IMU, speed, tilt, weather, and direction of the vehicle can all trigger the sensor to switch from one scan pattern to another. For example, a customer can create different scan patterns for highway, urban, and suburban driving, as well as an "exit ramp" pattern. In addition, the customer can create scan patterns for those same driving environments, but optimized for bad weather (e.g., "highway rain scan pattern" vs "highway sunlight scan pattern").

3. **Responsive 4Sight:** With Responsive 4Sight, scan patterns are created at design and run time. In this level, the entire platform is completely software-configurable and situationally aware, adjusting, in real time, how it scans the scene, where to apply density and extra power, and what scan rate to employ. In this level, deterministic feedback loops or other sensors, such as camera and radar, inform the lidar to interrogate objects discretely or via dense, dynamic regions of interest, or ROIs, at various points throughout the scene. It can also dynamically alter its scan pattern on the fly. The system is intelligent, with the ability to interrogate the scene, and perpetually optimize its own scan patterns and data collection to focus on the information that matters most and respond based on firmware feedback.

4. **Predictive 4Sight:** Predictive 4Sight (motion forecasting) can take what is offered in Responsive 4Sight but look ahead enabling even smarter interrogation. In this level, basic perception can be distributed to the edge of the sensor network. Predictive 4Sight seeks to understand the motion of everything it sees, thereby enabling the system to deliver more information with less data by focusing its energy on the most important objects in a scene while paying attention to everything else in its periphery. Predictive 4Sight can “sense” (i.e., predict) where an object will be at different times in the future, enabling the vehicle to solve challenging edge cases.

4Sight for Automotive

Built on a modular architecture, the 4Sight series is easily customizable to address the specific design requirements for multiple Automotive OEMs. Industrialized, manufactured, tested, and validated by our Tier 1 partners, the 4Sight series features industry leading, long-range ADAS performance, designed to address the need for high-performance applications. 4Sight is built on our patented 1550nm, solid-state, active lidar. We expect that the 4Sight solutions for Automotive will generally utilize one of the first three software levels described above: 4Sight at Design, Triggered 4Sight, or Responsive 4Sight.

We believe the unique combination of features of 4Sight include:

- Active lidar enables user’s choice of deterministic scan patterns catered to specific use cases and applications, such as highway autopilot;
- Feature-specific Fixed Regions of Interest (ROIs) designed to detect threats from various locations;
- Lidar perception made available through a software reference library;
- Windshield, grill, and other discreet vehicle integration options that are optimized by software configurability;
- Size, Weight, and Power (“SWaP”) optimized; and
- Functional Safety (“FuSa”)/Safety of the Intended Functionality (“SOTIF” or ISO 21448) compliant for signal path — providing necessary determinism for testing and validation.

4Sight for Industrial

Built on our unique 4Sight Intelligent Sensing Platform, 4Sight meets the diverse array of performance and functional requirements for the Industrial market with our industry-leading lidar performance, integrated intelligence, advanced vision capabilities, and unmatched reliability and safety. 4Sight is a cost-effective, customizable perception solution that leverages the complete 4Sight software platform and includes a comprehensive software development kit for an extensible roadmap to autonomous functionality. 4Sight for the Industrial market may utilize any of the four software levels described above: 4Sight at Design, Triggered 4Sight, Responsive 4Sight, or Predictive 4Sight.

Flexible sensor location within the car

Our design allows for unique flexibility with respect to sensor placement for two key reasons. First, our performance is not significantly impaired by first surfaces, such as stray light reflected off of a windshield or the plastic used in the fascia or headlight. Second, the unit’s power requirements and small form factor makes it easier for OEM designers to integrate our sensors into a variety of locations in a vehicle, such as behind the windshield. Competing solutions, on the other hand, may need to be integrated into the roof of the car in order to resolve challenges with excess heat or size. As a result, OEMs that install competing products may need to substantially alter the physical appearance of their vehicles to accommodate those products.

Competition

Lidar-based perception solutions for autonomous applications is an emerging market with a wide variety of possible applications across many different markets. We face competition from numerous companies worldwide that are developing lidar solutions, and some of these solutions may use a similar wavelength or scanning methodology.

For example, we and at least one of our major competitors both use lasers that have a 1550nm wavelength. Other competitors use MEMS-based scanning technologies, but we believe our MEMS solution is uniquely robust due its small size and high resonant frequency. In addition to companies focused specifically on developing lidar solutions, we also face competition from current or potential partners and customers that may be developing lidar solutions internally. We believe that many of the other companies developing lidar solutions are focused on shorter-range sensors that passively collect data, and most of these sensors utilize 905nm lasers that limit their performance. We believe that we are differentiated from competitors by virtue of our active, embedded artificial intelligence approach that enables our lidar sensors to dynamically adapt to changing environments. In addition, we believe that our product design delivers longer range and higher resolution than many of our competitors. This is possible, in part, because we utilize 1550nm lasers that enable our lidar solutions to achieve a higher photon budget than many of our competitors that rely upon 905nm lasers. While 1550nm lasers are more costly than 905nm lasers on a per unit basis, 1550nm lasers have much higher performance and our product only requires one such laser. Some 905nm systems utilize up to 128 lasers and still don’t attain the performance results we achieve with a single 1550 nm laser. As a result, we believe that we are able to compete favorably in the lidar market, particularly in market segments such as highway autonomous driving applications that can benefit from our active, long-range, high-resolution capabilities.

We believe that our modular, patented design, our embedded artificial intelligence, which is inherently enabled by our unique product, and our strong R&D capabilities will enable us to remain a technology leader in the lidar market.

Research and Development

We have made substantial investments into our R&D efforts historically, and we expect to substantially increase our investments in this area in the future. We believe that this is essential to maintain our position as a provider of one of the most advanced lidar solutions in the market. While our R&D activities occur primarily at our headquarters in Dublin, California, we work with technology developers on a worldwide basis. Our engineers located in Dublin, California focus on developing sensor hardware, firmware, and perception software.

Our R&D team is responsible for both developing new technology, as well as enhancing the capabilities and performance of our lidar hardware, firmware, and perception software. Our R&D team also has responsibility for identifying, defining, and prototyping advanced components that we may utilize from key suppliers, as well as for our design-for-manufacturability, or DFM, and other critical capabilities. Additionally, this team works alongside our operations team to assist our Tier 1 and contract manufacturer partners as they develop large-scale manufacturing processes based on our lidar design.

Intellectual Property

We believe that our competitive advantage and our success depend in part upon our ability to develop and protect both our intellectual property and our technology. We own a portfolio of intellectual property which includes patents (issued and pending), registered trademarks, copyrights, trade secrets, and expertise in the development of our lidar solutions.

We have filed patent and trademark applications in order to further secure these rights and strengthen our ability to defend against third parties who may infringe on our rights. We also rely on trade secrets, design and manufacturing know-how, continuing technological innovations, and licensing and exclusivity opportunities to maintain and improve our competitive position. Additionally, we protect our proprietary rights through agreements with our commercial partners, vendors, employees, and consultants, as well as close monitoring of the developments, components, products, and competitors in the industry.

As of March 1, 2023, we owned 60 U.S. and foreign issued patents and we had 83 pending U.S. and foreign patent applications, with three patent applications in the drafting stage. In addition, we have two registered and two pending trademark applications. Our patents and patent applications cover a broad range of system level and component level aspects of our key technology including, among other things, bistatic lidar system architecture, laser, scanner, receiver, and perception technology.

Sales and Marketing

We utilize a combination of channel (indirect) sales and direct sales methods. In the Automotive market, we work with Tier 1 partners that are suppliers to OEMs. We intend to license our lidar designs and other intellectual property to these Tier 1 partners, who will then industrialize and sell our technology to their OEM customers. While we intend to use Tier 1 partners as our sales channel, we also maintain direct contact with the OEMs, which better enables us to understand their specific product requirements and facilitate the implementation of our product design into their vehicles. Working with Tier 1 partners allows us to use this existing automotive value chain and provides us with an opportunity to increase our penetration of the Automotive market more rapidly than would otherwise be possible. This, in turn, will substantially reduce our investment in sales and marketing, and it will also substantially reduce the associated costs for manufacturing, working capital, validation, and testing, as well as the overhead of product liability and warranty over the life of the multiyear series production programs with OEMs. In the Industrial market, we use the same supply chain to manufacture through global contract manufacturers, and we will sell our products primarily through system integrator channel partners that may integrate our lidar sensor and software as part of a larger solution for an end customer. We also intend to sell directly to certain customers for situations in which a system integrator relationship is either not present or not required.

We solicit feedback directly from partners and customers in order to identify opportunities to improve our product design. Our sales and marketing team works with industry analysts, universities, and independent labs to conduct studies and performance tests, which provides third-party validation of our solutions to current and potential customers and partners. Our marketing team also drives our brand management and increases our public visibility through news releases, advertising campaigns, events, industry panels, and other public relations programs.

Government Regulation

We believe that the U.S. has provided a constructive legal environment to enable the testing and development of autonomous capabilities. We do not expect any federal rules or regulations in the near future that would impact the use or demand for our lidar technology. The states of California and New York, however, do enforce operational or registration requirements for some autonomous functions. U.S. federal regulations generally allow higher levels of safe and responsible autonomous functionality to be deployed. The European Union, China, and other foreign markets are also developing standards to define the requirements for deploying higher levels of autonomy.

The National Highway Traffic Safety Administration, or NHTSA, is the principal legal and regulatory authority that has oversight of vehicles equipped with our sensors as they are deployed on public roadways. The obligations of motor vehicle equipment manufacturers include regular reporting under the Transportation Recall Enhancement, Accountability and Documentation Act, or TREAD, as well as strict recall and reporting requirements for any defects related to highway safety or any non-compliance with the Federal Motor Vehicle Safety Standards. Similar such reporting and recall requirements exist in foreign markets. As the development of federal, state, and foreign legal frameworks around autonomous vehicles continue to evolve, we may be subject to additional regulatory schemes.

Lidar technology, such as ours, is subject to the Electronic Product Radiation Control Provisions of the Federal Food, Drug, and Cosmetic Act. These requirements are enforced by the U.S. Food and Drug Administration, or FDA. Electronic product radiation includes laser technology. 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.

We are also subject to import and export regulations of the U.S. and certain foreign jurisdictions. 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, or OSHA, 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 Resources

We believe that our culture is one of our competitive advantages. We have emphasized a collaborative, team-oriented, performance-based culture with a strong focus on both the development of differentiated technology and the success of our customers. Our leadership team has come from sectors including aerospace and defense, semiconductors, software, computer hardware, management consulting, and private equity. As of December 31, 2022, we had over 160 employees worldwide. The majority of our employees are in the R&D function. We also engage numerous consultants and contractors to supplement our regular full-time workforce. None of our employees are represented by a labor union, and we consider our employee relations to be good. To date, we have not experienced any work stoppages.

Facilities

Our corporate headquarters is located in Dublin, California, where we lease 56,549 square feet pursuant to a lease that expires on December 1, 2026. The Dublin facility contains engineering, R&D, operations, customer support, marketing, and administrative functions. We also lease 10,198 square feet of office space in a facility in Palm Bay, Florida pursuant to a lease which expires on August 14, 2027. The Florida facility contains R&D functions. In addition, we also lease office/building space around the world, primarily in North America, Europe, and Asia. We believe our existing facilities are in good condition and suitable for the conduct of our business.

Legal Proceedings

From time to time, we may become involved in actions, claims, suits, and other legal proceedings arising in the ordinary course of our business, including assertions by third parties relating to intellectual property infringement, breaches of contract or warranties, or employment-related matters. We are not currently a party to any actions, claims, suits, or other legal proceedings the outcome of which, if determined adversely to us, would individually or in the aggregate have a material effect on our business, financial condition, or results of operations.

Recent Developments

DGCL 205 Petition

On August 12, 2021, CF Finance Acquisition Corp. III, or the Pre-Merger Company, our predecessor, held a special meeting of stockholders to approve certain matters related to the business combination between the Pre-Merger Company and AEye Technologies, Inc. Among the proposals presented to the Pre-Merger Company stockholders were proposals to (i) adopt a certificate of amendment to the Pre-Merger Company’s amended and restated certificate of incorporation to increase the number of authorized shares of its Class A Common Stock from 200,000,000 to 300,000,000, or the Authorized Share Amendment, and (ii) amend and restate the charter in connection with the business combination, which included eliminating its Class B Common Stock immediately prior to the closing of the business combination after giving effect to the conversion of each outstanding share of Class B Common Stock into one share of its Class A Common Stock, or the Class B Elimination Amendment. The proposals each received approval from the holders of a majority of the Pre-Merger Company’s outstanding shares of Class A Common Stock and Class B Common Stock, voting together as a single class, that were outstanding as of the record date for such special meeting. Following the special meeting, the business combination was closed and the Pre-Merger Company changed its name to "AEye, Inc."

A recent ruling by the Court of Chancery of the State of Delaware, or Chancery Court, introduced uncertainty as to whether Section 242(b)(2) of the General Corporation Law of the State of Delaware, or DGCL, would have required the Authorized Share Amendment to be approved by a separate vote of the majority of the Pre-Merger Company’s then-outstanding shares of Class A Common Stock and the Class B Elimination Amendment to be approved by a separate vote of the majority of the Pre-Merger Company’s then-outstanding shares of Class B Common Stock.

Although we received no demands or inquiries from our stockholders regarding the potential uncertainty surrounding our Second Amended and Restated Certificate of Incorporation, or our Charter, which was adopted at the special meeting, and our own analysis determined that a separate class vote to adopt the Charter was not necessary, in light of the recent Chancery Court decision, and to resolve any potential uncertainty with respect to our Charter, or our capital structure, on February 23, 2023, we filed a petition in the Chancery Court under Section 205 of the DGCL, our Section 205 Petition, to seek validation of the Authorized Share Amendment, our Charter, and the shares we issued in reliance thereon. Section 205 permits the Chancery Court, in its discretion, to validate potentially defective corporate acts after considering a variety of factors. Concurrently with the filing of our Section 205 Petition, we filed a motion to expedite the hearing, which was granted. The hearing was set for March 14, 2023.

At the March 14, 2023 hearing on our Section 205 Petition, no objections were filed and the court granted our petition. The court order declared our Charter to be valid and effective as of the date and time it was originally filed and that all shares of our capital stock that we have issued in reliance on our Charter were valid as of the date such shares were issued, thereby eliminating any uncertainty with respect to our Charter or any shares we have issued or may issue in the future in reliance thereon.

Silicon Valley Bank Closure

On March 10, 2023, Silicon Valley Bank, or SVB, was closed by the California Department of Financial Protection and Innovation, and the Federal Deposit Insurance Corporation, or FDIC, was appointed as receiver. We have deposit accounts at SVB. The standard deposit insurance amount is up to $250 thousand per depositor, per insured bank, for each account ownership category. As of March 10, 2023, we had approximately $9.6 million in deposit accounts at SVB, of which approximately $2.2 million was held as collateral for letters of credit under our lease agreement. We do not maintain any other material accounts or lines of credit with SVB. On March 12, 2023, the U.S. Treasury, Federal Reserve, and FDIC announced that SVB depositors will have access to all of their money starting March 13, 2023. We began the process of withdrawing our deposits from SVB on March 13, 2023.

Available Information

Our Annual Reports on Form 10-K, along with all other reports and amendments thereto filed with or furnished to the SEC, are publicly available free of charge on the Investors section of our website at www.aeye.ai or at www.sec.gov as soon as reasonably practicable after these materials are filed with or furnished to the SEC. We also use our website as a tool to disclose important information about the company and comply with our disclosure obligations under Regulation Fair Disclosure. Our Corporate Governance Guidelines, Code of Business Conduct and Ethics, and the committee charters for our Board of Directors are also posted on the Investors section of our website. The information on our website (or any webpages referenced in this Annual Report on Form 10-K) is not part of this or any other report we file with, or furnish to, the SEC.

Item 1B. Unresolved Staff Comments

None.

Item 1A. Risk Factors

In conducting our business, we may face risks and uncertainties that may interfere with our business objectives. You should carefully consider the following risk factors, as well as all of the other information contained in this Annual Report, including "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes thereto included elsewhere in this Annual Report. The risks and uncertainties below are not the only ones that we face. Additional risks and uncertainties that we are unaware of, or that we currently believe are not material, may also become important factors that adversely affect our business. The occurrence of any of the following risks, or others specified below, could materially and adversely affect our business, strategies, prospects, financial condition, results of operations and cash flows. In such case, the market price of our common stock could decline, and you could lose all or part of your investment.

Summary of Risk Factors

As noted above, our business is subject to numerous risks and uncertainties, including those highlighted in this "*Risk Factors*" section 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:

- We are an early stage company with a history of losses and we expect to incur significant expenses and continuing losses for at least the next several years.

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

- 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.

- If our deterministic artificial intelligence-driven sensing system is not selected for inclusion in autonomous driver-assistance systems, or ADAS, by any automotive OEMs or their suppliers, our business will be materially and adversely affected.

- Our business could be materially and adversely affected by the lingering and continuing impacts of the global COVID-19 pandemic, other epidemics or outbreaks, as well as other global events and macroeconomic factors, such as the war in Ukraine.

- Our products require key components and critical raw materials and our inability to reduce and control the cost of such components and raw materials could negatively impact the adoption of our products and, accordingly, our financial condition and operating results.

- 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.

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

- 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, longer than anticipated lead times for components, and supply changes, any of which could disrupt our supply chain and could delay deliveries of our products to customers.

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

- The average selling prices of our products or our fees or royalties from technology licenses could decrease rapidly over the life of the product or license term, which may negatively affect our revenue and gross margin.

- We are substantially relying on our relationship with Continental AG; our business could be materially and adversely affected if our relationship with Continental was terminated, or if we, through our relationship with Continental, are unable to obtain a sufficient number of design wins and successfully enter into definitive agreements or other commercial arrangements with automotive OEMs with respect to such design wins.

Risk Factors Relating to Our Business and Industry

We are an early stage company with a history of losses and we expect to incur significant expenses and continuing losses for at least the next several years.

We have incurred net losses in each year since our inception. In the twelve months ended December 31, 2022 and 2021, we incurred net losses of approximately $98.7 million and $65.0 million, respectively. We expect that we will continue to incur significant losses for at least the next several years as we:

- continue to utilize our third-party partners for design, testing and commercialization;

- expand our operations and supply chain capabilities to produce our lidar solutions, including costs associated with outsourcing the production of our lidar solutions which, in some instances, requires significant upfront payments by us;

- expand our design, development, and servicing capabilities;

- build up inventories of parts and components for our lidar solutions;

- produce an inventory of our lidar solutions and potentially significant negative impacts to revenues and margins on existing products as we introduce new products;

- increase our sales and marketing activities and develop our distribution infrastructure; and

- increase our general and administrative spending to meet the requirements of operating as a public company.

As of December 31, 2022, we had an accumulated deficit of approximately $250.5 million. Even if we are able to increase sales or licensing of our products, there can be no assurance that we will be commercially successful. Since we will incur the costs and expenses from these efforts prior to receiving incremental revenues with respect thereto, our losses in future periods will be significant. In the past, design wins, the first step towards commercialization with a particular OEM, have taken longer than originally expected, Such delays, including if delays occur in the future, will impact the timing of our revenue. If our products do not achieve sufficient market acceptance, we will not become profitable. If we fail to become profitable, or if we are unable to fund our continuing losses, we may be unable to continue our business operations. There can be no assurance that we will ever achieve or sustain profitability.

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 our deterministic artificial intelligence-driven sensing system for vehicle autonomy, ADAS, and industrial applications since 2013. This relatively limited operating history makes it difficult to evaluate our future prospects and the risks and challenges we may encounter, which include our ability to:

- develop and commercialize our products;

- produce and deliver lidar and software products meeting acceptable performance metrics;

- forecast our revenue and budget for and manage our expenses;

- attract new customers and retain existing customers;

- develop, obtain, or progress strategic partnerships;

- 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 as well as 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 lingering impacts of the COVID-19 pandemic on our business as well as other macroeconomic factors, such as the war in Ukraine;

- develop and protect our 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 those predictions would be if we had a longer operating history or operated in a more predictable market. We have encountered in the past, and will continue to 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.

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 or to achieve and maintain profitability.

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

- investing in R&D;
- expanding our sales and marketing efforts to attract new customers and strategic partners;
- investing in new applications and markets for our products;
- further enhancing our manufacturing processes and partnerships;
- protecting our intellectual property; 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 an early stage of development, and it may be many years before the end markets we expect to serve generate demand for our products at scale, if at all. Our revenue may be adversely affected for a number of reasons, including the development and/or market acceptance of new technology that competes with our products, if automotive original equipment manufacturers, or automotive OEMs, Tier 1 automotive suppliers, or other market participants change their view towards autonomous vehicles or ADAS technologies or strategies, the failure of our customers to commercialize autonomous systems that include our solutions, our inability to effectively manage or outsource the management of our inventory, manufacturing, or contract manufacturing of products at scale, our inability to enter new markets or to help our customers adapt our products for new applications, or our failure to attract new customers or secure production orders from existing customers currently analyzing our solutions, or 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, developments in ADAS and related technologies, 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 over the long term, our ability to achieve and maintain profitability may be adversely affected, and the value of our business may significantly decrease.

We intend to raise additional capital in order to execute our business plan and to respond to changing market conditions, which additional capital may not be available on terms acceptable to us, or at all.

We intend to raise additional capital in order to respond to market timing delays, technological advancements, competition, competitive technologies, customer demands, business opportunities, other challenges, potential acquisitions, and 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 customers or partners. Despite the need for 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 capital 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 our business relationships, our existing stockholders would likely experience dilution, which may be significant. 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 or 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 support our business and to respond to business challenges could be significantly limited.

The market price and trading volume of our common stock may be volatile and could decline significantly.

The stock markets, including Nasdaq on which we list our shares of common stock, have from time to time experienced significant price and volume fluctuations. Even if an active, liquid, and orderly trading market develops and is sustained for our common stock, the market price of our common stock may continue to be volatile and could decline significantly. Most recently, since December 6, 2022, our stock has closed below $1.00 per share. As previously disclosed, on January 20, 2023, we received notice from Nasdaq that we were no longer in compliance with the $1.00 per share minimum bid price requirement for continued listing on Nasdaq. Although the notification does not have an immediate impact on our Nasdaq listing, we were given a period of 180 calendar days, or until July 19, 2023, to regain compliance with the requirement. If we do not regain compliance by July 19, 2023, we may be eligible for a second 180-day compliance period. If we are unable to regain compliance with the requirement during the compliance period, we will be subject to delisting from Nasdaq. In addition, the trading volume of our common stock may fluctuate significantly, which can have significant impact on the price of our common stock. If the market price of our common stock declines significantly, you may be unable to resell your shares at an attractive price, or at all. We cannot assure you that the market price of our common stock will not fluctuate widely or decline significantly in the future.

Our business could be materially and adversely affected by the lingering impact of the global COVID-19 pandemic or other epidemics and outbreaks.

The COVID-19 pandemic had disrupted and affected our business operations, which has led to business and supply chain disruptions. The lingering effects of the pandemic are likely to continue to disrupt our business and supply chain in the future. For example, our offices and R&D and manufacturing locations had been, and may continue to be, impacted due to national and regional government declarations requiring closures, quarantines, and travel restrictions, although nearly all government-imposed restrictions have been significantly reduced in most parts of the world. However, given the unpredictable nature of COVID-19 and its variants, it is difficult, if not impossible, to predict, whether any government-imposed restrictions will be reimposed at previous levels or enhanced in one or more ways impacting our business operations or those of third parties upon which we rely. The COVID-19 pandemic, including associated business interruptions and recovery, as well as other possible epidemics or outbreaks of other contagions could result in a material adverse impact on our or our current or anticipated customers' or suppliers' business operations, including reduction or suspension of operations in the U.S. or other parts of the world. Our design and engineering operations, among others, cannot all be conducted remotely and often require on-site access to materials and equipment. We have customers, suppliers, and partners with international operations, and our customers, suppliers, and partners also depend on suppliers and manufacturers worldwide, which means that our business and prospects could be affected by the lingering effects of the COVID-19 pandemic anywhere in the world. Depending upon the duration of the lingering effects of the COVID-19 pandemic and the associated business interruptions, our customers, suppliers, manufacturers, and partners may suspend or delay their engagements with us. We and our customers' and suppliers' response to the lingering effects of the COVID-19 pandemic may prove to be inadequate and they may be unable to continue their respective operations in the manner they had prior to the outbreak or the worsening of the outbreak, and we may consequently endure interruptions, reputational harm, delays in our product development, and shipments, all of which could have an adverse effect on our business, operating results, and financial condition. In addition, we cannot assure you as to the timing of the economic recovery given the lingering effects of the pandemic, which could have a material adverse effect on our target markets and our business.

If our deterministic artificial intelligence-driven sensing system is not selected for inclusion in ADAS technology by automotive OEMs or their suppliers, our business will be materially and adversely affected.

Automotive OEMs and their suppliers design and develop ADAS technology over several years. These automotive OEMs and suppliers undertake extensive testing or qualification processes prior to placing orders for large quantities of products, such as our active lidar products, because such products will function as part of a larger system or platform and must meet specifications that we do not control or dictate. We have spent, and will continue to spend significant time and resources to have our products selected by automotive OEMs and their suppliers, which we refer to as a "design win." In the case of autonomous driving and ADAS technology, a design win means our active lidar product has been selected for use in a particular vehicle model or models. If we do not achieve a design win with respect to a particular vehicle model, we may not have an opportunity to supply our products to the automotive OEM or its supplier for that vehicle model for a period of many years. In many cases, this period can be as long as five 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 less likely that our product will be deployed in other vehicle models of that automotive OEM. If we fail to obtain design wins for a significant number of vehicle models from one or more automotive OEMs or their suppliers, our business, results of operations, and financial condition will be materially and adversely affected. Our business model for the Automotive market is based on our relationships with Tier 1 suppliers. If these relationships do not materialize, automotive OEMs may be less inclined to select our products for use in their vehicle models. The period of time from a design win to implementation is long and we are subject to the risks of cancellation or postponement of the contract or unsuccessful implementation.

Our forward-looking estimates of certain financial metrics may prove inaccurate.

We use various estimates in formulating our business plans. We base our estimates upon a number of assumptions that are inherently subject to significant business and economic uncertainties and contingencies, many of which are beyond our control. Our estimates therefore may prove inaccurate, causing the actual amount to differ from our estimates. These factors include, without limitation:

- the extent to which we meet contractual terms and conditions;
- the extent to which our technology is successfully integrated into our customers' vehicles;
- the timing of when our customers adopt our technology into their vehicles on a commercial basis which could be delayed for regulatory, safety or reliability issues unrelated to our technology;
- undetected or unknown errors, defects or reliability issues in our hardware or software which could reduce the market adoption of our new products;
- loss of business with respect to, the failure or lack of commercial success of a vehicle model for which we are a significant supplier for reasons unrelated to our technology;
- a decline, for any reason, in the production levels of our customers, particularly with respect to models which incorporate our technology;
- customer cancellations of their contracts;
- if our products are included as part of a vehicle option package, the extent to which end customers select it; and
- other risk factors set forth in this Annual Report.

We are substantially relying on our relationship with Continental AG; our business could be materially and adversely affected if our relationship with Continental was terminated, or if we, through our relationship with Continental, are unable to obtain a sufficient number of design wins and successfully enter into definitive agreements or other commercial arrangements with automotive OEMs with respect to such design wins.

Our business prospects are substantially based on our relationship with Continental. We have entered into a Joint Development Agreement with Continental pursuant to which Continental will license from us the rights to manufacture and integrate our lidar solution into automotive OEM model lines through long-term series production contracts with automotive OEMs. There can be no assurance that we will be able to maintain or further our relationship with Continental and/or that Continental will secure orders for our product designs and software. If we are unable to maintain or progress our relationship with Continental, or if Continental is unable to secure a sufficient number of design wins and successfully enter into definitive agreements or other commercial arrangements with automotive OEMs, then our business could be materially and adversely affected.

The period of time from a design win to implementation is long and we are subject to the risks of cancellation or postponement of the contract or unsuccessful implementation.

Prospective customers, including those in the automotive industry, generally must make significant commitments of resources to test and validate products like ours and confirm that they can integrate these products with other technologies before including them in any particular system, product, or model. The development cycles for our products with new customers varies widely depending on the application, market, customer, and the complexity of the product. In the automotive market, for example, this development cycle can be five to seven years (or more). The development cycle in certain other markets can be months to one or two years (or more). These development cycles result in us investing our resources prior to realizing any revenue from commercialization. Further, we are subject to the risk that customers cancel or postpone implementation of our technology or our customers are unable to integrate our technology successfully into a larger system. If our customers face financial difficulties, they may also cancel current or future product programs that could materially and adversely impact our financial results. 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, results of operations, and financial condition.

Our products require key components and critical raw materials and our inability to reduce and control the cost of such components and raw materials could negatively impact the adoption of our products and accordingly, our financial condition and operating results.

The production of our components is dependent on sourcing certain key components and raw materials at acceptable price levels. We have experienced, and may continue to experience, supply chain-induced shortages of key components, leading to a scarcity of such components, a limited availability of such components at greatly inflated prices, or both. If we or our licensees or contract manufacturers are unable to adequately reduce and control the costs of such key components, they 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 have an adverse effect on our brand, business, prospects, financial condition, and operating results.

Continued pricing pressures, automotive OEM and Tier 1 supplier cost reduction initiatives, and the ability of automotive OEMs and Tier 1 suppliers to re-source or cancel vehicle or technology programs may result in lower than anticipated revenues, or cause substantial losses, which may adversely affect our business.

Cost-cutting initiatives adopted by our customers may result in continued downward pressure on pricing. Our agreements and partnerships with automotive OEMs and Tier 1 suppliers may require step-downs in pricing over the term of the agreement or partnership, or if commercialized, over the period of production. In addition, our automotive OEM and Tier 1 suppliers often reserve the right to terminate their supply contracts for convenience, which enhances their ability to obtain price reductions. Automotive OEMs and Tier 1 suppliers also 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. See also the risk factor entitled, “We operate in a highly competitive market involving emerging technology. We compete against a number of competitors, some of whom have substantially greater resources than us,” below.

Accordingly, we expect to be subject to substantial and continuing pricing pressure from automotive OEMs, Tier 1 suppliers, and lidar competitors, which may impact the revenue we receive from licensing our product designs or selling our products. It is possible that pricing pressures beyond our expectations could intensify as automotive OEMs, Tier 1 suppliers, and lidar competitors pursue restructuring, consolidation, and cost-cutting initiatives. If we are unable to identify sufficient design cost savings to meet the expectations of automotive OEMs and Tier 1 suppliers, our revenue and profitability would be adversely affected.

We expect to continue 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. We plan to continue to incur substantial and 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 $37.6 million and $26.5 million during the twelve months 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 an essential technology for autonomous vehicles and other emerging applications, market adoption of lidar is uncertain. If market adoption of lidar does not continue to develop, or adoption is deferred, or otherwise develops more slowly than we expect, our business will be adversely affected.

While our artificial intelligence-driven lidar-based sensing system can be applied to different use cases across end markets, approximately 52% and 76% of our revenue during the twelve months ended December 31, 2022 and 2021, respectively, was generated from automotive applications with other customers in the aerospace, delivery, shuttle, railway, mining, toll, and aviation sectors. Despite the fact that the automotive industry has expended 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 on a timeframe that matches our expectations, or at all. We continually study emerging and competing sensing technologies and methodologies and we may incorporate new sensing technologies to our product portfolio over time. However, lidar products remain relatively new and it is possible that other sensing modalities, or a new disruptive modality based on new or existing technologies, including a combination of technologies, will achieve acceptance or leadership in the ADAS and autonomous driving space. Even if lidar products are used in initial generations of autonomous driving technology and ADAS products, 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 robo-taxis and shuttles, and that mass market adoption of autonomous technology may lag significantly behind these initial applications. The speed of market adoption and growth for ADAS or autonomous vehicles is difficult, if not impossible, to predict, and it is more difficult to predict this market's future growth in light of the economic consequences of the lingering effects of the COVID-19 pandemic and other macroeconomic factors. Although we currently believe we have a differentiated market leading technology for the autonomous vehicle market, by the time mass market adoption of autonomous vehicle technology is achieved, we expect competition among providers of sensing technology based on lidar and other modalities to increase substantially. If, by the time autonomous vehicle technology achieves mass market adoption, 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 products, automotive OEMs, regulators, safety organizations, or other market participants, 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 aerospace and defense, shuttle, delivery vehicle, drone, railway, intelligent transport, and mining sectors. 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 that we address the particular requirements of that market.

Addressing these requirements can be time-consuming and costly. The market for lidar technology is relatively new, rapidly developing, and unproven in many markets or industries. Many of our prospective customers 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 that lidar will be sold into any markets at scale. Adoption of lidar products, including our products, 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 associated with designing lidar into larger sensing systems outweighs 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 and whether lidar developers such as us can keep pace with the expected rapid technological change in certain developing markets, and the global response to the lingering effects of the COVID-19 pandemic, and other macroeconomic factors, and the length of any associated economic recovery. If lidar technology does not achieve commercial success, or if adoption of lidar is deferred or the market otherwise develops at a pace slower than we expect, our business, results of operations, and financial condition will be materially and adversely affected.

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

Over the long term, 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, legal and compliance programs, and reporting systems. 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, longer than anticipated lead times for components, and supply changes, any of which could disrupt our supply chain and could delay deliveries of our products to customers.

Most of the components that go into the manufacturing of our solutions are sourced from third-party suppliers. To date, we have produced our products in relatively limited quantities for use in R&D programs. Although we do not have any experience in managing our supply chain to manufacture and deliver our products at scale, our future success will depend on our ability to do so. 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. As we rely on a global supply chain, the lingering effects of the COVID-19 pandemic, other epidemics and outbreaks, should they materialize, and other macroeconomic factors may 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. For example, our products depend on lasers. Any shortage in the availability of these lasers 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. While we have entered into agreements with some suppliers for the supply of certain components at set prices, such quantities are limited given we are not yet producing at scale. Therefore, we have in the past experienced, and may in the future experience, component shortages and significant price fluctuations of key components and materials, and the predictability of the availability and pricing of these components may be limited.

Component shortages or pricing fluctuations could be material in the future, which could be exacerbated by employee retention issues at any of our suppliers. In the event of a component shortage, supply interruption, or a material pricing change from suppliers of these components, we may not be able to develop alternate sources in a timely manner, or at all, especially in the case of sole or limited source items. 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 will be required to absorb some or all of 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 our products.

Because our sales have been primarily to customers making purchases for R&D projects and customers' current orders are project-based, we expect our results of operations to continue to fluctuate on a quarterly and annual basis, which could cause our stock price to fluctuate or decline.

Our quarterly results of operations have fluctuated in the past and may vary 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 their own R&D, sales in any given quarter can fluctuate based on the timing and success of our customers' development 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, without limitation, those listed below:

- the timing and magnitude of orders and shipments of our products in any quarter;
- decreases in pricing we may adopt to drive market adoption or in response to competitive pressure;
- our ability to retain our existing customers and strategic partners and attract new customers and strategic partners;
- our 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 relationships 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 for our products;
- the mix of products sold or licensed by us in any given quarter;
- the duration of the lingering effects of the global COVID-19 pandemic and the time it takes for economic recovery;
- the duration or worsening of the military conflict in Ukraine and the time it will take for the economic recovery for such impact to occur;
- the timing and rate of broader market adoption of ADAS or autonomous systems utilizing our solutions across the automotive and other market sectors;
- the timing and scale of the market acceptance of lidar generally;
- further technological advancements by our competitors and other market participants;

- the ability of our customers and strategic partners 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;
- our ability to effectively manage or outsource management of our inventory;
- changes in the source, cost, availability of, and regulations pertaining to components and materials we use in our products;
- 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.

We may face risks associated with our reliance on certain artificial intelligence and machine learning models.

We rely on artificial intelligence and machine learning models in the development of our solutions for vehicle autonomy, ADAS, and industrial applications. The models that we use are developed or trained using various data sets. If the models are incorrectly designed, the data we use to train them is incomplete, inadequate, or biased in some way, or if we do not have sufficient rights to use the data on which our models rely, the performance of our products, services, and business, as well as our reputation, could suffer or we could incur liability through the violation of laws, third-party privacy, or other rights, or contracts to which we are a party.

Our outsourced manufacturing business model for the industrial market may not be successful, which could harm our ability to deliver products and recognize revenue in the industrial market.

Our manufacturing strategy for the industrial market has always been focused on outsourcing volume manufacturing to contract manufacturers while maintaining the design, engineering, prototyping, testing, and pilot manufacturing in-house at our facility in Dublin, California. We currently have agreements with certain third-party manufacturers to provide contract manufacturing, testing, and delivery of certain of our products.

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, the lingering effects of the global COVID-19 pandemic, or if other epidemics or outbreaks of other contagions materialize, increased military conflict, especially in Eastern Europe, or work stoppages or capacity constraints, our ability to ship products 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 our 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 or 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.

We may engage international contract manufacturers, and therefore we may face risks associated with manufacturing operations outside the United States.

To the extent our manufacturing is done outside of the United States, we are subject to several inherent risks, including:

- foreign currency fluctuations;

- local economic conditions;
- political instability, including the military actions occurring in the Ukraine;
- import and export requirements;
- foreign government regulatory requirements;
- reduced protection for intellectual property rights in some countries;
- tariffs and other trade barriers and restrictions; and
- potentially adverse tax consequences.

We intend to engage with contract manufacturers outside the United States, therefore we will be subject to these risks, each of which could increase our costs and decrease our profit margins.

We, our outsourcing partners, and our suppliers rely on complex machinery for production of our lidar solutions, which involves a significant degree of risk and uncertainty in terms of operational performance and costs.

We, our outsourcing partners, and our suppliers rely on complex machinery for the production, assembly, and installation of our lidar solutions, which involve a significant degree of uncertainty and risk in terms of operational performance and maintenance costs. In addition, the cost to procure such machinery can be significant and, in many instances, such costs will be paid by us. Our limited in-house production facility, 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 require repairs and spare parts to resume operations, which may not be available when needed. Unexpected malfunctions of these components may significantly affect intended operational efficiency. 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, fires, seismic activity, and other natural and manufactured disasters. Should such operational risks materialize, it may result in personal injury to or death of workers, 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, some of which may be the responsibility of our outsourcing partners and suppliers, but 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 and adversely affected, and our stock price could decline.

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 governmental authorities for the acquisitions and to comply with any applicable laws and regulations, which could result in increased delay and costs, and may disrupt our business strategy if we fail to obtain such required approvals. Furthermore, acquisitions and the subsequent integration of new assets, businesses, key personnel, customers, vendors, and suppliers will 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 closing acquisitions may be significant.

To date, we have very limited 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.

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

Sales to international customers accounted for 32% and 26% of our revenue during the twelve months 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:

- exchange rate fluctuations;
- political and economic instability, international terrorism, and anti-American sentiment, particularly in emerging markets;
- global or regional health crises, such as the lingering effects of the COVID-19 pandemic or other epidemics or outbreaks of other contagions;
- increasing military conflicts in Eastern Europe;
- 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;
- potential consequences of, and uncertainty related to, the “Brexit” process in the United Kingdom, which could lead to additional expense and complexity in doing business there;
- increased difficulty in managing inventory;
- delayed revenue recognition;
- the potential for 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, or GDPR, in the European Union, European competition law, the Restriction of Hazardous Substances Directive, or RoHS, the Waste Electrical and Electronic Equipment Directive, or WEEE, and the European Ecodesign Directive, all of which 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
- the U.S. government’s restrictions on technology transfers to certain countries.

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 could result in unforeseen delays or expenses from undetected defects, errors, or reliability issues in our hardware or software which could reduce the market adoption of our products, damage our reputation with current or prospective customers, expose us to product liability and other claims, and thereby adversely affect our operating costs.

Our products are highly technical, very complex, and require high standards to manufacture. Our products have in the past experienced, and will likely in the future experience, defects, errors, or reliability issues at various stages of development, production, and use. 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 the technology incorporating our products, or those in the surrounding area, 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. Our reputation or brand may be damaged as a result of these problems and customers may be reluctant to buy our products thereafter, 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. 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 or warranty claims that could result in significant direct or indirect costs, which could adversely affect our business and operating results.

Our customers intend to use our solutions in autonomous driving and ADAS applications; the operation of motor vehicles, even with our solutions embedded, presents the risk of significant injury, including fatalities. We may be subject to claims if a product using our active lidar technology is involved in an accident and persons are injured or purport to be injured. 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 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, autonomous driving, or certain other 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, increase the liability associated with the use of our products, or regulate the use of or delay the deployment of autonomous driving and ADAS technology. Any of these events could adversely affect our brand, relationships with customers, operating results, or financial condition.

Suppliers to automotive OEMs may require that we provide a warranty, either directly or indirectly, on our products, including our embedded software. The occurrence of any material defects in our products during the warranty period 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 and operating results.

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

To ensure adequate inventory, we must forecast inventory needs and expenses, place orders sufficiently in advance with our 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 accuracy of the forecasts that we receive from our customers, the rapidly changing nature of the autonomous driving and ADAS 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, the lingering effects of the COVID-19 pandemic, other epidemics or outbreaks of other contagions should they materialize, any work stoppages or interruptions, unanticipated changes in general market conditions, and the general weakening of economic conditions or consumer confidence, which may be exacerbated by the on-going military actions in Ukraine. If our lidar products are commercialized in autonomous driving and ADAS applications, both of which are 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 enhanced by the fact that we may not carry or be able to obtain for our manufacturing partners a significant level of inventory to satisfy short-term increases in demand. 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 or our fees or royalties from technology licenses could decrease rapidly over the life of the product or license term, which may negatively affect our revenue and gross margin.

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 or due to competitive pressures. 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 and our Tier 1 partners must continually engineer the most cost-effective design for our products. In addition, we continuously drive initiatives to reduce assembly cost, improve efficiency, reduce the cost of materials, use fewer materials, and further lower overall product costs by carefully managing component prices, inventory, and shipping costs. We also need to continually introduce new and competitive products in order to maintain our overall gross margin. We may also experience declines in fees or royalties from licensing our technology as customers reduce the prices of products incorporating our licensed technology in order to achieve market acceptance or due to competitive pressures. If we are unable to manage the cost structure of our products, successfully introduce new products with higher gross margins, and develop new technology that we can license at attractive royalty rates, our revenue and overall gross margin would likely decline.

Adverse conditions in the automotive industry or downturns in domestic or global economic conditions, or other macroeconomic factors 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 automotive 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 (which have recently seen significant increases) and credit availability, changes in inflation rates (which the U.S. has recently experienced), consumer confidence, fuel costs, fuel availability, environmental impact, governmental incentives and regulatory requirements, and political volatility, especially in energy-producing countries and growth markets. Increases in interest rates, especially if coupled with reduced government spending and volatility in financial markets, may have the effect of further increasing economic uncertainty and heightening these risks, which may impact our ability to raise additional capital in the future. The March 2023 failure of Silicon Valley Bank and its potential near- and long-term effects on the technology industry and its participants such as our vendors, suppliers, and investors, may also adversely affect our operations and stock price. In addition, the recent outbreak of hostilities between Russia and Ukraine and global reactions thereto have increased U.S. domestic and global energy prices. Oil supply disruptions related to the Russia-Ukraine conflict, and sanctions and other measures taken by the U.S. and its allies, could lead to higher costs for gas, food, and goods in the U.S. and exacerbate the inflationary pressures on the economy, with potentially adverse impacts on our customers and on our business, results of operations, and financial condition. Moreover, certain raw materials needed to produce components that are incorporated into our products, and the products of our customers, are primarily derived in the region in which the Russia-Ukraine conflict is occurring. The longer the Russia-Ukraine conflict continues and the more damage to Ukrainian infrastructure that occurs, the greater the impact could be on the supply of such raw materials, and the failure to have access to such raw materials could have an adverse effect on our business and results of operations. In addition, the Cybersecurity and Infrastructure Security Agency, or CISA, has warned all organizations in the U.S. to be on guard against possible cyber attacks coming from Russia which has the potential to disrupt business operations, limit access to essential services, and threaten public safety.

Automotive production and sales can also be affected by our automotive OEM and Tier 1 supplier 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, such as the unavailability of unrelated components in the assembly of automobiles, an example of which is the current shortage of semiconductors necessary for automobile production. The volume of automotive production in North America, Europe, and the rest of the world has fluctuated, sometimes significantly, from year to year, and we expect such fluctuations to give rise to fluctuations in the demand for our products and licenses of our technology. Any significant adverse change in any of these factors may result in a reduction in automotive sales and production by our automotive OEM and Tier 1 supplier customers and could have a material adverse effect on our business, results of operations, and financial condition.

Customers with which we enter into supply agreements may require changes to our products or may be subject to renegotiation or termination in a short time period, which would materially and adversely affect our business.

If we and our partners are able to secure design wins so that our solutions are included in autonomous driving and ADAS products, we expect that we, or our Tier 1 partners will enter into supply agreements with that customer. Market practice dictates that these supply agreements typically require us 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 arrangements can have short terms, be subject to renegotiation, or may be reduced or otherwise terminated, the occurrence of any of which may affect product pricing and future profitability. Therefore, even if we are successful in obtaining design wins, and we or our Tier 1 partners are able to enter into definitive agreements with OEMs, 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 and rapidly evolving, it is difficult to forecast 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 the opportunities. For example, autonomous driving and lidar-based ADAS applications require the utilization of complex technology. Because these 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 not being ready to be deployed in automobiles. We are in the process of developing necessary relationships with commercial partners which may not result in the commercialization of our 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 emerging 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 these markets. If demand does not develop or if we cannot accurately forecast customer demand, the size or timing of our markets, inventory requirements, or our future financial results, our business, results of operations, and financial condition will be adversely affected.

We currently have and target many customers that are large corporations with substantial negotiating power, exacting product standards, 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 current and potential customers are large, multinational corporations with substantial negotiating power relative to us and, in some instances, may have internal solutions that are competitive to our products. These large, multinational corporations also have significant development resources, which may allow them to acquire or develop independently, or in partnership with others, competitive technologies. Meeting the technical requirements and securing design wins with any of these companies will require a substantial investment of our time and resources. We cannot assure you that our products will secure design wins from these or other companies or that we will generate meaningful revenue from the sales of our products to these key potential customers. If our products are not selected by these potential customers or if these potential customers develop or acquire competitive technology, it will have an adverse effect on our business.

Our business could be materially and adversely affected if we lost any of our large customers or strategic partners, if their demand for our products declined due to factors outside of our control, including component shortages (whether related to our products or otherwise) that impact our customers' overall production plans or product development plans, or if our customers were unable to pay their invoices.

Although we have and continue to pursue a broad customer base, we are dependent on a collection of customer relationships which are currently in development with strong purchasing power. Continental AG accounted for approximately 51% and 55% of our annual revenue in the years ended December 31, 2022 and 2021, respectively. The loss of business from any of our major customers (whether by lower overall demand for our products, component shortages that impact our customers' production plans or product development plans, cancellation of existing contracts or product orders, or the failure to design in our products, or an award of initial or new business) could have a material adverse effect on our business.

To the extent autonomous vehicle and ADAS become accepted by major automotive OEMs, we expect that we will rely increasingly for our revenue on Tier 1 suppliers through which automotive OEMs procure components. We expect that these Tier 1 suppliers will be responsible for certain hardware and software configuration activities specific to each automotive OEM, and they may not exclusively carry our 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 it experiences financial difficulties. If our customers face financial difficulties, they may also cancel current or future product programs that could materially and adversely impact our financial results. If a major customer were to enter into bankruptcy proceedings or similar proceedings whereby contractual commitments are subject to a stay and the possibility of 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 within our industry or we 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 others 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 our limited operating history, customer familiarity with our lidar solutions, any delays in scaling production, delivery, and service operations to meet demand, competition, uncertainty regarding the future of autonomous vehicles, and our production and sales performance compared with market expectations.

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 generally, or our solutions specifically. 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 may not be in a position to offset the costs of such efforts with revenue from 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.

We operate in a highly competitive market involving emerging technology. We compete against a number of competitors, some of whom have substantially greater resources than us.

The markets for sensing technology applicable to autonomous solutions across numerous industries are highly competitive. Our future success will depend on our ability to achieve a leadership position 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 compete with us directly by offering lidar products and indirectly by attempting to solve some of the same challenges with different technologies. Our current and future competitors may enjoy competitive advantages, such as greater name recognition, established relationships, or existing contracts with Tier 1 suppliers and/or OEMs, and substantially greater financial, technical, and other resources. We face competition from a number of sources including camera and radar companies, other developers of lidar products, Tier 1 suppliers, and other technology and automotive supply companies. In the automotive market, our competitors have commercialized both lidar and non-lidar-based ADAS technology that has achieved market adoption, strong brand recognition, and is expected to improve over time. Other competitors are working towards commercializing autonomous driving technology and either by themselves, or with a publicly announced partner, and 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. We do not know how close these competitors are to commercializing autonomous driving systems or novel ADAS applications. In markets outside of the automotive industry, our competitors 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, competition may result in pricing pressure and reduced margins, and may impede our ability to secure design wins, successfully enter into definitive agreements or other commercial arrangements, or successfully commercialize our products at scale, which may prevent us from achieving our projected market share. In particular, our competitors have in the past offered, and may in the future offer, their products and services on terms that we and/or our Tier 1 partners are unwilling to match, or our competitors could introduce new products with competitive price and performance characteristics, which may adversely affect our market share.

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 and lidar, and the markets for these products, including the ADAS and autonomous driving space, 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 cannot guarantee that such new products will be released in a timely manner, or at all, or achieve market acceptance. 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, to date, we have focused on the delivery of our solutions to R&D programs in which developers are investing substantial capital to develop new systems that incorporate our solutions. Our future success relies heavily on the outcome of the R&D efforts by these customers. As autonomous technology reaches 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 technologies.

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 that remain competitive with 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 technologies may adversely affect the demand for our 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 future 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 (or a failure to increase revenue and/or market share). 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.

The Common Stock Purchase Agreement, or CSPA, we entered into with Tumim Stone Capital LLC, or Tumim Stone, in December 2021 contains contractual limitations that may not allow us to draw all of the $125 million committed under the CSPA and to the extent we do draw under the CSPA, existing stockholders will be diluted.

In December 2021, we entered into the CSPA with Tumim Stone pursuant to which Tumim Stone committed to purchase, subject to certain limitations, up to $125 million of our common stock should we elect to sell our common stock to them. On May 6, 2022, we filed a Registration Statement on Form S-1, which relates to the offer and resale of up to 30,865,419 shares of our common stock to be purchased by Tumim Stone, pursuant to the CSPA. Should decide to sell our common stock to Tumim Stone, stockholders will experience dilution of their interest in us, which dilution will be heightened if the price at which we sell common stock is low, as there is no minimum price at which we can sell our common stock under the CSPA. Moreover, under the CSPA, with some exceptions, we can only sell to Tumim Stone the lesser of: (i) a total of 30,865,419 shares of our common stock or (ii) a number of shares where Tumim Stone would own no more than 9.99% of our outstanding shares, which at March 10, 2023 was 168,762,257 shares. At values below $4.05 per share, we would likely not be in a position to realize the full commitment of $125 million under the CSPA and existing stockholders would experience significant dilution. During the year ended December 31, 2022, the Company issued 1,145,000 shares of its common stock under the CSPA for proceeds of $2.9 million. Therefore, the actual number of shares we will be able to sell to Tumim Stone, the amount of dilution our stockholders will experience upon the sale of our common stock under the CSPA, and the total proceeds that we will derive from such sales, cannot be determined at this time.

The Securities Purchase Agreement, or SPA, we entered into with 3i, LP, or 3i, in September 2022, contemplates the ability for us to borrow up to $21 million; however, due to contractual limitations contained in the SPA, we may be unable to borrow the full amount contemplated under the SPA, and we may not have the option to repay the loan to 3i with stock if certain requirements are not met.

In September 2022, we entered into a SPA with 3i pursuant to which 3i committed to lend to us up to $21 million pursuant to related promissory notes. The transaction contemplated that the borrowings would occur in two tranches, each in the gross amount of $10.5 million. The first tranche, in the gross amount of $10.5 million, was lent to us at or about the time we entered into the SPA. The second tranche under the SPA, can be drawn at our option, subject to satisfaction of certain conditions specified in the SPA, including, without limitation, (i) absence of an uncured event of default, as defined, (ii) there being a sufficient number of authorized but unissued shares of our common stock available for issuance, (iii) the daily volume weighted average price of our common stock exceeding $1.50 for the twenty (20) trading days prior to the draw of the second tranche, (iv) the average daily trading volume of our common stock exceeding $1.5 million for twenty (20) days prior to the draw of the second tranche, and (v) the outstanding balance of the first tranche being less than $2 million. These conditions can be waived by the lender, but the lender has no obligation to do so. A number of the foregoing conditions are not satisfied as of March 10, 2023, and we can provide no assurance that such conditions will be satisfied in the future so we may borrow an additional $10.5 million under the SPA. In addition, to use equity rather than cash to repay the principal and interest under the promissory note, we must meet certain requirements, including that the average daily trading volume of our common stock exceeding $500,000 for the twenty (20) trading days prior to the due date of the promissory note. Our average daily trading volume has not consistently exceeded $500,000, and we can provide no assurances that we will be able to meet this condition prior to any of the payment dates under the promissory note. Unless the lender waives this condition, we will be required to make the payments under the promissory note in cash.

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.

We are subject to the reporting requirements of the Exchange Act of 1934, the Sarbanes-Oxley Act of 2002, 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 are recorded, processed, summarized, and reported within the time periods specified in the rules of and on the forms required by the SEC, 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, 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 the periodic reports we will file with the SEC under Section 404 of the Sarbanes-Oxley Act. Ineffective disclosure controls and procedures and a lack of 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 our 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 that we are unable to produce timely or accurate financial statements, investors may lose confidence in our operating results and the price of our common stock 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.

A significant portion of the components used in our products are manufactured abroad, which subjects us to various international risks and costs, including foreign trade issues, currency exchange rate fluctuations, shipment delays, supply chain disruptions, and political instability, any of which could adversely affect our business and financial condition.

Most of our products, and the components thereof, are manufactured abroad. Relaying on foreign-produced products subjects us to risks relating to changes in import duties, quotas, the potential for introduction of U.S. taxes on imported goods, the potential loss of "most favored nation" status with the U.S., and freight cost increases, as well as economic and political uncertainties. We may also experience shipment delays caused by shipping port constraints, labor strikes, work stoppages, acts of war, including the current conflict in Ukraine, and terrorism, or other supply chain disruptions, including those caused by extreme weather, natural disasters, and pandemics or other public health concerns. Specifically, the lingering effects of the COVID-19 pandemic has caused delays in the manufacturing and shipping of our products and the associated raw materials. To the extent the lingering effects of the COVID-19 pandemic results in continuation or worsening of manufacturing and shipping delays and constraints, our suppliers will continue to have challenges obtaining the materials necessary for the production of our products.

If any of these or other factors, including trade tensions between the U.S. and other nations, including China and Russia, as a result of the war in Ukraine or otherwise, were to cause a disruption of trade from other countries, and in particular, Taiwan, our ability to source products, components, or raw materials could be adversely affected. We may need to seek alternative suppliers or vendors, which may not be available, or make changes to our operations, any of which could have a material adverse effect on our business, results of operations, or financial condition. Also, the prices charged by foreign manufacturers for production or the acquisition of raw materials or components, may be affected by the fluctuation of their local currency against the U.S. dollar, which could cause the cost of our products to increase and negatively impact our business. In addition, if the supply of components for our products becomes more limited than we anticipated, competition to acquire the limited supply of components will drive prices higher than planned, negatively impacting our cash flows and gross margins.

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 (including tax rates) 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, or the Tax Act, was signed into law making significant changes to the U.S. Tax 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, or GILTI, and base erosion and anti-abuse tax, or BEAT. The new legislation had no effect on our 2022 or 2021 provision for income taxes because we generated net tax losses and offset our deferred tax assets on the consolidated balance sheets with a full valuation allowance due to our current loss position and forecasted losses for the near future. The overall impact of this tax reform is uncertain, and our business and financial condition, including with respect to our non-U.S. operations, could be adversely affected.

In addition to the impact of the Tax Act on our federal taxes, the Tax Act may impact our taxation in other jurisdictions, including with respect to state income taxes. State legislatures have not had sufficient time to respond to the Tax Act. Accordingly, 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 in reaction to the Tax Act that could result in changes to our global tax position and materially and adversely affect our business, results of operations, and financial condition. Additionally, the Internal Revenue Service, or 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.

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

As of December 31, 2022, we had approximately $184 million of U.S. federal, and approximately $128 million of state net operating loss carryforwards available to reduce future taxable income. Of the approximately $184 million in U.S. federal operating loss carryforwards, approximately $172 million will be carried forward indefinitely for U.S. federal tax purposes and approximately $12 million will begin to expire in 2033. All of our U.S. state net operating loss carryforwards will expire between 2029 and 2042. 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 U.S. Tax Code, respectively, and similar provisions of state law. Under those sections of the U.S. Tax Code, if a corporation undergoes an “ownership change,” the corporation’s ability to use our pre-change net operating loss carryforwards and other pre-change attributes, such as research tax credits, to offset our 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 are highly dependent on the services of our executive officers, in particular Luis Dussan, one of our founders and Chief Technology Officer, and Matthew Fisch, our Chief Executive Officer.

We are highly dependent on our executive officers, in particular, one of our founders, Luis C. Dussan, our Chief Technology Officer and Matthew Fisch, our Chief Executive Officer. Mr. Dussan created our solution platform and remains deeply involved in our business, particularly in technology development. Mr. Fisch recently joined us to lead our growth and expansion strategy and his exceptional leadership skills, technical knowledge, and industry insight are critical to us.

In addition, we are also dependent on the services of our other executive officers, including Robert A, Brown, our Chief Financial Officer, Andrew S. Hughes, our General Counsel, and T. R. Ramachandran, our Chief Operating Officer, as well as our other senior executives, such as Conor Tierney, our Chief Accounting Officer. The loss of any of our executive officers or other senior executives could adversely affect our business because the loss could make it more difficult to, among other things, compete with other market participants, continue to develop innovative product designs, and retain existing customers or cultivate new ones. Negative public perception of, or negative news related to any of our executive officers or senior executives may adversely affect our brand, relationship with customers, or standing in the industry.

Our business depends substantially on the efforts of our executive officers and highly skilled personnel, and our operations may be severely disrupted if we lost their services.

Competition for highly skilled personnel is often intense, especially in the San Francisco Bay Area, where we are headquartered, and we may incur significant costs to attract the highly skilled personnel we require. 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, especially those with engineering skills.

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 our equity awards decline, it may adversely affect our ability to retain highly skilled employees. If we fail to attract new personnel or we fail to retain and motivate our current personnel, our business and future growth prospects could be adversely affected.

Our business is subject to the risks of earthquakes, fires, floods, and other natural catastrophic events, pandemics, and interruptions by manufactured problems, such as terrorism. 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 lingering effects of the COVID-19 pandemic, could have an adverse effect on our business and operating results. The lingering effects of the 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 major operations are located in the San Francisco Bay Area of California, which experienced, and could experience again, a high number of COVID-19 pandemic cases and is also a region known for significant seismic activity. In addition, natural disasters, acts of terrorism, or war could cause disruptions in our operations, our or our customers' or channel partners' businesses, 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 manufactured problems, such as power disruptions, 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 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 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 services we may implement in the future.

We may, in the future, 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, telecommunication failures, viruses, denial or degradation of service attacks, ransomware, social engineering schemes, insider theft or misuse, or other attempts to harm our systems. We primarily utilize reputable third-party service providers and vendors for our data, including among other things, financial data, human resources data, manufacturing and production data, sales data, and electronic mail, other than for our source code and related materials that are managed internally. These third-party providers could also be vulnerable to issues 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 future in-vehicle services and functionality, if developed and deployed, are expected to be highly technical and complex technology which may contain errors or vulnerabilities that could result in interruptions in our business or the failure of our systems.

We, as well as our suppliers and partners, are subject to cybersecurity risks to operational systems, security systems, infrastructure, integrated software in our lidar solutions, and the data processed by those solutions, and any material failure, weakness, interruption, cyber event, incident, or breach of security could adversely affect our business by causing a disruption of our operations, a compromise or corruption of our confidential or other business-critical information, and/or damage our business relationships, all of which could negatively impact our business financial condition, and operating results.

We are at risk for interruptions, outages, and breaches of our operational systems, including our business, financial, accounting, product development, and production processes, owned by us, our suppliers. or our partners; our facility security systems, owned by us, our suppliers, or our partners; our in-product technology owned by us, our suppliers, or our partners; the integrated software in our lidar solutions; or the data that we process or our suppliers process on our behalf. In mid-2022, our partner, Continental, experienced a cyberattack in which data was improperly taken from their servers. To date, Continental has not notified us that any data belonging to us was compromised. A cyber incident is considered to be any adverse event that threatens the confidentiality, integrity, or availability of our information resources. These incidents may be an intentional attack or an unintentional event and could involve gaining unauthorized access to our information systems or those of our third-party vendors for purposes of misappropriating assets, stealing confidential information, corrupting data, or causing operational disruption. Such cyber incidents could materially disrupt operational systems; result in loss of intellectual property, trade secrets or other proprietary or competitively sensitive information; compromise certain information of employees, suppliers, 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, phishing, or other forms of deception. The risks of a cybersecurity breach against companies based in the U.S., like us, may be enhanced as a byproduct of the on-going war in Ukraine, or by state-sponsored actors, primarily located in, or sponsored by, China, Russia, or North Korea. Despite careful security and controls design, our information technology systems and the systems used by our third-party vendors, may be subject to security breaches and cyberattacks the result of which could include disrupted operations, misstated or unreliable financial data, liability for stolen assets or information, increased cybersecurity protection and insurance costs, litigation, and damage to business relationships.

The techniques used by cyber attackers change frequently and may be difficult to detect for long periods of time. Continental, for example, failed to notice the mid-2022 breach for about one month. Although we maintain information technology measures designed to protect us against intellectual property theft, data breaches, and other cyber incidents, such measures will require continual 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; produce, sell, deliver, or 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. As our reliance on technology has increased, so have the risks posed to our information systems, both internal and those provided by third-party service providers. We have implemented processes, procedures, and internal controls to help mitigate cybersecurity risks and cyber intrusions, but these measures, as well as our increased awareness of the nature and extent of a risk of a cyber-incident, do not guarantee that a cyber-incident will not occur and/or that our financial results, operations, or confidential information will not be negatively impacted by such an incident. Further, the remote working conditions resulting from the cultural shifts during and after the COVID-19 pandemic have heightened our vulnerability to a cybersecurity risk or incident.

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 and 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.

Our cash and cash equivalents could be adversely affected if the financial institutions in which we hold our cash and cash equivalents fail.

We regularly maintain cash balances at third-party financial institutions, including Silicon Valley Bank, in excess of the Federal Deposit Insurance Corporation insurance limit. Any failure of a depositary institution to return any of our deposits, or if a depository institution is subject to other adverse conditions in the financial or credit markets, could impact access to our invested cash or cash equivalents and could adversely impact our operating liquidity and financial performance.

Legal and Regulatory Risks Related to Our Business

We are subject to governmental import and export 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 import and export laws and regulations, including the U.S. Export Administration Regulations, other regulations issued by U.S. Customs and Border Protection, and various economic and trade sanctions administered by the U.S. Treasury Department’s Office of Foreign Assets Control. 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, and specified persons and entities. 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 the employees or officers responsible to prohibit such shipments and, in extreme cases, the incarceration of the employees or officers responsible.

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 currently purchase our components, sell our products, and conduct 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, and countries, and other government regulations affecting trade 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 U.S. 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 rare-earth metals), our ability to sell our products or license our product designs and software to customers outside of the U.S., and the overall 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 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 have been and may be, from time to time, involved in litigation, regulatory proceedings, and commercial or contractual disputes that may be significant. These matters may include disputes with our suppliers and customers, intellectual property claims, stockholder litigation, government investigations, class action lawsuits, personal injury claims, environmental issues, customs and value-added tax disputes, and employment and tax issues. Recently, we discovered that there may have been some uncertainty with respect to the validity of our Second Amended and Restated Certificate of Incorporation, which was approved by our stockholders at the special meeting of stockholders held on August 12, 2021. While this matter has been resolved, we cannot provide assurances that other matters similar in nature may not arise in the future.

We could face in the future, a variety of labor and employment claims against us, which could include, but is 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.

Any of these types of lawsuits, whether initiated by us or a third party, 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 or 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.

Unforeseen issues could result in damage to certain property which could result in adverse effects on our business and reputation.

Our lidar utilizes lasers for performing 3D sensing. While we have developed system components designed to prevent our lidar lasers from causing property damage (including to cameras), in the event an unforeseen issue arises that results in property damage, our reputation or brand may be damaged and we could face material legal claims for breach of contract, product liability, tort, or breach of warranty as a result. Defending a lawsuit, regardless of our 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 any claim and future coverage may be unavailable on acceptable terms, or at all.

We are subject to, and must remain in compliance with, numerous laws and governmental regulations concerning the manufacturing, use, distribution, and sale of our products. Some of our customers also require that we comply with the customers’ own unique requirements relating to these matters.

We manufacture and sell products that contain electronic components, and such components 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, ensuring simultaneous compliance in multiple jurisdictions is a complex process which requires continual monitoring of regulations and an ongoing compliance process to ensure we and our suppliers are in compliance with existing regulations in each market where we operate. If new, unanticipated regulations significantly impact our use and sourcing of various components or require more expensive components, those regulations could materially and adversely affect our business, results of operations, and financial condition.

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 and cause delays in building our production facilities.

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 and 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, and 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 regulations or laws 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 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 such laws and regulations. Capital and operating expenses needed to comply with environmental laws and regulations can be significant, and violations may result in substantial fines and penalties, damages, suspension of production, or a cessation of our operations.

Contamination at properties we currently operate at, where we formerly operated, or to which hazardous substances were sent by us, may subject us to liability pursuant to 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 remediating 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 requisite permit 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 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 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 imposed ever-more stringent safety regulations for automobiles and laser products. These safety regulations often require, or customers demand, automobiles have more safety features per vehicle and incorporate more advanced safety products.

While we believe increasing automotive and laser safety standards will present a market opportunity for our products, governmental safety regulations are subject to change based on a number of factors that are not within our control, including new scientific or technological data, adverse publicity regarding industry recalls and safety risks of autonomous driving and ADAS products, accidents involving our products, domestic and foreign political developments or considerations, and litigation relating to our products and our competitors' products. Changes in 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, state, and local regulators impose more stringent compliance and reporting requirements in response to product recalls and safety issues in the automotive industry. As the cars that utilize our sensors go into production, we will be subject to the existing stringent requirements of the National Traffic and Motor Vehicle Safety Act of 1966, or 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, or 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, or 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 Vehicle Safety Act authorizes the 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 adoption of autonomous and ADAS features by automotive OEMs may be delayed and our business impacted, as additional emissions and safety requirements are imposed on vehicle manufacturers.

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, automotive OEMs may need to dedicate technology and cost additions to new vehicle designs to meet these emissions and safety requirements and postpone the additional costs associated with new autonomous and ADAS features.

Our business may be adversely affected if we fail to comply with the regulatory requirements under the Federal Food, Drug, and Cosmetic Act or other requirements imposed by the Food and Drug Administration, or FDA.

As a lidar technology company, we are subject to the Electronic Product Radiation Control Provisions of the Federal Food, Drug, and Cosmetic Act. These requirements are enforced by the FDA. Electronic product radiation includes laser technology. Regulations governing these products are intended to protect the public from hazardous and unnecessary exposure. Manufacturers are required to certify by way of 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. 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 actions.

Failures, or perceived failures, to comply with privacy, data protection, and information security requirements in the variety of jurisdictions in which we operate, may adversely impact our business, and such legal requirements are evolving, uncertain, and may require improvements in, or changes to, our policies and operations.

Our current and potential future operations and sales subject us to existing and future laws and regulations addressing privacy and the collection, use, storage, disclosure, transfer, and protection of various types of data. For example, the European Commission has adopted the General Data Protection Regulation, or GDPR, and California enacted the California Consumer Privacy Act of 2018, both of which provide for potentially material penalties for non-compliance. These statutory 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 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 we have a business relationship in order to obtain data, or in a manner that disrupts our operations or compromises our products, or the systems into which our products are integrated.

We are assessing the continually evolving privacy and data security regimes and measures we believe are appropriate in response. Since these privacy and data security regimes are evolving, uncertain, and complex, especially for a global business like ours, we 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, which may be material. In addition, we may not be able to monitor and react to all developments in a timely manner. The compliance measures we 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 our 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 of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, or the Dodd-Frank Act, which requires us to determine, disclose, and report whether our products contain metals sourced from specified geographies; these metals are generally referred to as “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 take 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 depends in large 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 foreign jurisdictions. We rely on a combination of patent, trademark, copyright, and trade secret laws, as well as confidentiality agreements and other contractual restrictions, to establish and protect our proprietary rights, all of which can only provide limited protection.

We cannot guarantee 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 foreign 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. 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 can be difficult, particularly outside of the United States. 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 enforce the remedies, especially in the context of unauthorized parties copying or reverse engineering our solutions.

Further, many of our current and potential competitors may have the ability to dedicate substantially greater resources to defending intellectual property infringement claims and to enforcing their intellectual property rights than we can. 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 decision that invalidates or narrows the scope of our rights, in whole or in part. Effective patent, trademark, 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 believe we hold key patents related to our products, a number of companies, both within and outside of the lidar industry, hold other patents covering various 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 of our products by 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 the infringement of 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.

Our defense of intellectual property rights claims brought against us or our customers, suppliers, or 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 prohibiting us from continuing to sell certain products. An adverse determination also could invalidate our intellectual property rights and could 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, 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 regarding 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. 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 ultimately 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, processes, and know-how.

We rely on trade secrets, designs, manufacturing 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 information by entering into confidentiality agreements, or consulting services or employment agreements that contain non-disclosure and non-use provisions with our employees, consultants, contractors, commercial partners, vendors, and other 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 provide adequate protection, prevent disclosure, third-party infringement, or misappropriation of our trade secrets, 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. We 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 or designated in the agreements between such parties and us to be jointly owned, 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 will 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 employ third-party licensed software for use in our business, and the inability to maintain these licenses, errors in the software, or the terms of open source licenses could result in increased costs or reduced service levels, which would adversely affect our business.

Our business relies on certain third-party software obtained under licenses from other companies. We anticipate that it will continue to rely on such third-party software in the future. Although we believe that there are commercially reasonable alternatives to the third-party software we currently license, these alternatives may not always be available, or it may be difficult or costly to switch to an alternative. In addition, integration of new third-party software may require significant work and require substantial investment of our time and resources. Our use of additional or alternative third-party software would require us to enter into license agreements with third parties, which may not be available on commercially reasonable terms, or at all. Many of the risks associated with the use of third-party software cannot be eliminated, and these risks could negatively affect our business.

Some of the third-party software used by us is licensed under the terms of open source software licenses. Companies that incorporate open source software into their technologies have, from time to time, faced claims challenging the use of open source software and/or compliance with open source license terms. As a result, we could be subject to lawsuits by parties claiming ownership of what we believe to be open source software or claiming noncompliance with open source licensing terms. Some open source software licenses require users who distribute such software to publicly disclose all or part of the source code to such software and/or make available any derivative works of the open source code, which could include valuable proprietary code of the user, on unfavorable terms or at no cost. While we monitor the use of open source software and attempt to ensure that open source software is not used in a manner that would require us to disclose our internally developed source code or that would otherwise breach the terms of an open source agreement, such use could inadvertently occur. Any requirement to disclose our internally developed source code or pay damages for breach of contract could have a material adverse effect on our business, financial condition, and results of operations and could help our competitors develop services that are similar to or better than ours.

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

We may be subject to claims that we or our employees have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of an employee's former employer. Litigation may be necessary to defend against these claims. If we fail to adequately defend 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 new compliance initiatives.

We expect to incur significant legal, accounting, and other expenses that we did not incur as a private company, and these expenses will likely increase 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 will be 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. Our management and other personnel will need to devote a substantial amount of time to these compliance initiatives. 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. These increased costs will increase our net loss. For example, we expect these rules and regulations to make it more difficult and more expensive for us to obtain director and officer liability insurance and we may be forced to accept reduced policy limits or incur substantially higher costs to maintain the same or similar coverage. 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.

Additionally, there continues to be public interest and increased legislative pressure related to environmental, social, and governance, or ESG, activities of public companies. For example, there is a growing number of states requiring organizations to report their board composition as well as mandating gender diversity and representation from underrepresented communities, including New York and California. We risk negative stockholder reaction, including from proxy advisory services, as well as damage to our brand and reputation, if we do not act responsibly in a number of key areas, including diversity and inclusion, environmental stewardship, support for local communities, corporate governance and transparency, and considering ESG and human capital factors in our operations.

Our management team has limited experience managing a public company.

Most of the members of our management team have limited experience managing a publicly traded company, interacting with public company investors, and complying with the increasingly complex laws pertaining to public companies. Additionally, many members of our management team were recently hired, including our Chief Executive Officer, Matthew Fisch, who joined us in February 2023; our Chief Financial Officer, Robert Brown, who joined us in November 2020; our General Counsel, Andrew Hughes, who joined us in March 2021; our Chief Operating Officer, T.R. Ramachandran, who joined us in November 2021; and our Chief Accounting Officer, Conor Tierney, who joined us in January 2022. Our management team may not successfully or efficiently manage their new roles and responsibilities. Our transition to being a public company subjects us to significant regulatory oversight and reporting obligations under 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.

Our Charter provides, subject to limited exceptions, that the Court of Chancery of the State of Delaware and the federal district courts of the United States of America will be the sole and exclusive forums for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers, or employees.

Our Charter requires, unless we consent in writing to the selection of an alternative forum, that derivative actions brought in our name, actions against our directors, officers, and employees for breach of fiduciary duty, and other similar actions may be brought only in the Court of Chancery in the State of Delaware except any action (A) as to which the Court of Chancery in the State of Delaware determines that there is an indispensable party not subject to the jurisdiction of the Court of Chancery (and the indispensable party does not consent to the personal jurisdiction of the Court of Chancery within ten days following such determination), (B) which is vested in the exclusive jurisdiction of a court or forum other than the Court of Chancery, or (C) for which the Court of Chancery does not have subject matter jurisdiction. In regard to any action arising under the Exchange Act, our Charter provides that the federal district courts of the United States of America will be the sole and exclusive forum. In regard to any action arising under the Securities Act or the rules and regulations promulgated thereunder, our Charter provides that, unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States of America will, to the fullest extent permitted by law, be the sole and exclusive forum.

Section 27 of the Exchange Act creates exclusive federal jurisdiction over all lawsuits brought to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder. As a result, the exclusive forum provision will not apply to lawsuits brought to enforce any duty or liability created by the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction. Our Charter provides that the exclusive forum provision will be applicable to the Securities Act to the fullest extent permitted by applicable law. We note that there is uncertainty as to whether a court would enforce the exclusive forum provision and that this exclusive forum provision does not purport to waive compliance with any federal securities laws and the rules and regulations thereunder. 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 another jurisdiction, which could harm our business, operating results, and financial condition.

Any person or entity purchasing or otherwise acquiring any interest in shares of our common stock shall be deemed to have notice of and consented to the forum provisions in our Charter. This choice of forum provision may limit the ability of one of our stockholders to bring a claim in a judicial forum that such stockholder might believe is more 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 our compliance with federal securities laws and the rules and regulations thereunder. Alternatively, if a court were to find the choice of forum provision contained in our Charter to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in another jurisdiction, which could harm our business, financial condition, and results of operations.

The provision of our Charter that authorizes our board of directors to issue preferred stock from time to time based on terms approved by our board of directors may delay, defer, or prevent a tender offer or takeover attempt that stockholders might consider in their best interest.

The provision of our Charter that authorizes our board of directors to issue preferred stock from time to time based on terms approved by our board of directors may delay, defer, or prevent a tender offer or takeover attempt that stockholders might consider to be in their best interest.

If securities or industry analysts cease publishing research or reports about us, our business, our competitors, or our market, or if they change their recommendations regarding our common stock adversely, then the price and trading volume of our common stock could decline.

The trading market for our common stock will be influenced by the research and reports that industry or securities analysts may publish about us, our business, our market, or our competitors. If any of the analysts who may cover us change their recommendation regarding our stock adversely, or provide more favorable relative recommendations about our competitors, the price of our common stock would likely decline. If any analyst who may cover us were to cease coverage of us or fail to regularly publish reports on us, we could lose visibility in the financial markets, which could cause our stock price or trading volume to decline.

We do not expect to declare any dividends in the foreseeable future.

We do not anticipate declaring any cash dividends to holders of our common stock in the foreseeable future. Consequently, our stockholders may need to rely on sales of their shares after price appreciation, which may never occur, as the only way to realize any future gains on their investment.

Item 2. Properties

Our corporate headquarters is located in Dublin, California, where we lease 56,549 square feet pursuant to a lease that expires on December 1, 2026. The Dublin facility contains engineering, R&D, operations, customer support, marketing, and administrative functions. We also lease 10,198 square feet of office space in a facility in Palm Bay, Florida pursuant to a lease which expires on August 14, 2027. The Florida facility contains R&D functions. In addition, we also lease office/building space around the world, primarily in North America, Europe and Asia. We believe our existing facilities are in good condition and suitable for the conduct of our business.

Item 3. Legal Proceedings

From time to time, we may become involved in actions, claims, suits, and other legal proceedings arising in the ordinary course of our business, including assertions by third parties relating to intellectual property infringement, breaches of contract or warranties, or employment-related matters. We are not currently a party to any actions, claims, suits or other legal proceedings the outcome of which, if determined adversely to us, would individually or in the aggregate have a material effect on our business, financial condition, and results of operations.

On August 12, 2021, CF Finance Acquisition Corp. III, or the Pre-Merger Company, our predecessor, held a special meeting of stockholders to approve certain matters related to the business combination between the Pre-Merger Company and AEye Technologies, Inc. Among the proposals presented to the Pre-Merger Company stockholders were proposals to (i) adopt a certificate of amendment to the Pre-Merger Company's amended and restated certificate of incorporation to increase the number of authorized shares of its Class A Common Stock from 200,000,000 to 300,000,000, or the Authorized Share Amendment, and (ii) amend and restate the charter in connection with the business combination, which included eliminating its Class B Common Stock immediately prior to the closing of the business combination after giving effect to the conversion of each outstanding share of Class B Common Stock into one share of its Class A Common Stock, or the Class B Elimination Amendment. The proposals each received approval from the holders of a majority of the Pre-Merger Company's outstanding shares of Class A Common Stock and Class B Common Stock, voting together as a single class, that were outstanding as of the record date for such special meeting. Following the special meeting, the business combination was closed and the Pre-Merger Company changed its name to "AEye, Inc."

A recent ruling by the Court of Chancery of the State of Delaware, or Chancery Court, introduced uncertainty as to whether Section 242(b)(2) of the General Corporation Law of the State of Delaware, or DGCL, would have required the Authorized Share Amendment to be approved by a separate vote of the majority of the Pre-Merger Company's then-outstanding shares of Class A Common Stock and the Class B Elimination Amendment to be approved by a separate vote of the majority of the Pre-Merger Company's then-outstanding shares of Class B Common Stock.

Although we received no demands or inquiries from our stockholders regarding the potential uncertainty surrounding our Second Amended and Restated Certificate of Incorporation, or our Charter, which was adopted at the special meeting, and our own analysis determined that a separate class vote to adopt the Charter was not necessary, in light of the recent Chancery Court decision, and to resolve any potential uncertainty with respect to our Charter, or our capital structure, on February 23, 2023, we filed a petition in the Chancery Court under Section 205 of the DGCL, our Section 205 Petition, to seek validation of the Authorized Share Amendment, our Charter, and the shares we issued in reliance thereon. Section 205 permits the Chancery Court, in its discretion, to validate potentially defective corporate acts after considering a variety of factors. Concurrently with the filing of our Section 205 Petition, we filed a motion to expedite the hearing, which was granted. The hearing was set for March 14, 2023.

At the March 14, 2023 hearing on our Section 205 Petition, no objections were filed and the court granted our petition. The court order declared our Charter to be valid and effective as of the date and time it was originally filed and that all shares of our capital stock that we have issued in reliance on our Charter were valid as of the date such shares were issued, thereby eliminating any uncertainty with respect to our Charter or any shares we have issued or may issue in the future in reliance thereon.

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 for Common Stock

Our common stock has been listed on The Nasdaq Global Select Market under the symbol “LIDR” since we started trading on the public markets following the close of the Business Combination on August 16, 2021.

Stockholders

As of March 10, 2023, we had approximately 75 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 capital stock. We currently intend to retain any future earnings and do not expect to pay any dividends in the foreseeable future. Any future determination related to our dividend policy will be made at the discretion of our Board of Directors.

Recent Sales of Unregistered Securities

None, other than as previously disclosed by the Company.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

None.

Item 6. [Reserved]

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

Please read the following discussion and analysis of our financial condition and results of operations together with “Note about Forward-Looking Statements,” Part I, Item 1 “Business,” Part I, Item 1A “Risk Factors,” and our consolidated financial statements and related notes included under Item 8 of this Annual Report on Form 10-K.

Overview

This overview provides a high-level discussion of our operating results and some of the trends that affect our business. We believe that an understanding of these trends is important to understanding our financial results for fiscal year 2022, as well as our future prospects. This summary is not intended to be exhaustive, nor is it intended to be a substitute for the detailed discussion and analysis provided elsewhere in this Annual Report, including our consolidated financial statements and accompanying notes.

All dollar amounts expressed in this Management’s Discussion and Analysis of Financial Condition and Results of Operations are in thousands of dollars, except for per share amounts and unless otherwise specified.

Business Combination and Public Company Costs

As a result of the Business Combination, which closed on August 16, 2021, a subsidiary of CF Finance Acquisition Corp III, or CF III, Meliora Merger Sub, Inc., merged with and into AEye, Inc., then known as AEye Technologies, Inc., or AEye Technologies, with AEye Technologies continuing as the surviving entity as a wholly owned subsidiary of CF III, and CF III thereafter operating under the new name AEye, Inc., or AEye, or the combined entity.

The Business Combination was accounted for as a reverse recapitalization, in accordance with U.S. GAAP. Under this method of accounting, AEye Technologies was treated as the accounting acquirer, meaning CF III was treated as the acquired company for financial reporting purposes. This determination is primarily based on AEye Technologies’ stockholders comprising a relative 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. Additionally, AEye Technologies’ senior management comprises the senior management of the combined entity and AEye Technologies’ operations comprise the ongoing operations of the combined entity. Accordingly, for accounting purposes, the financial statements of the combined entity will represent a continuation of the financial statements of AEye Technologies, and the Business Combination will be treated as the equivalent of AEye Technologies issuing stock for the net assets of CF III, accompanied by a recapitalization. The most significant change in AEye Technologies’ financial position and results of the business combination was an increase in cash of $256,811 before transaction costs. Total non-recurring transaction costs incurred for this transaction were $52,661.

Upon the closing of the Business Combination, our common stock and warrants began trading under the symbols “LIDR” and “LIDRW,” respectively, on the Nasdaq Stock Market LLC, or Nasdaq. We anticipate that we will continue to hire additional personnel and implement procedures and processes to address public company regulatory requirements and customary practices. We have incurred and expect 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.

Key Factors Affecting AEye’s 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 the risk factors described in the section of this Annual Report on Form 10-K entitled “Risk Factors.”

We are subject to those risks common in the technology industry and also those risks common to early stage companies including, but not limited to, the possibility of not being able to successfully develop or commercialize our products; secure additional capital in a timely manner in order to meet operating cash flow needs; secure a "design win" with automotive OEMs and their suppliers; attract new customers and retain our existing customers; develop and protect our intellectual property; comply with existing and new or modified laws and regulations applicable to our business; maintain and enhance the value of our reputation and brand; hire, integrate, and retain talented people at all levels of our organization; and successfully develop new solutions to enhance the experience of, and deliver value to, our customers.

Market Trends and Uncertainties

We anticipate growing demand for our 4Sight^{TM} Intelligent Sensing Platform across two major markets, Automotive and Industrial. We also anticipate the total addressable market for lidar-based perception technology will grow to $42 billion by 2030. Within those markets, we are targeting attractive segments including advanced driver-assistance systems, or ADAS, autonomous driving, commercial trucking, robo-taxis, and various Industrial market segments such as mining, aerospace, defense, railway, and intelligent transportation systems, or ITS. This provides us with multiple opportunities for sustained growth by enabling new applications and product features across these market segments. However, as our customers continue R&D projects to commercialize solutions that rely on lidar technology, it is difficult to estimate the timing of ultimate end market and customer adoption. In the Automotive market for example, which accounted for 52% and 76% of revenue in 2022 and 2021, respectively, our growth and financial performance will be heavily influenced by our ability to successfully integrate into OEM programs that require years of development, testing, and validation. Because of the size and complexity of these OEM programs, we see our existing Tier 1 partnerships as a substantial competitive advantage given their large scale, mass-production capabilities, and existing OEM customer relationships. Our primary focus in the Automotive market is on ADAS for passenger and commercial vehicle autonomy, particularly highway autonomy applications. We believe that growth in that market is driven by both more stringent safety regulations and consumer demand for vehicles offering increased safety. We will need to anticipate and adapt to any changes in the regulatory environment, as well as changes in consumer demand in order to take advantage of this opportunity.

Additionally, we are increasing our investments in international operations and partnerships that will position us to expand our business globally and meet growing demand in international markets. This is an important part of our core strategy and may expose us to additional factors such as foreign currency risk, additional operating costs, and other risks and challenges that may impact our ability to meet projected sales and margin targets.

Partnerships and Commercialization

Our technology is designed to be a key enabler of in certain Automotive and Industrial market applications. Because our technology must be integrated into a broader solution by our customers, it is critical that we achieve design wins with these customers. The timing of these design wins varies based on the market and application. Achieving a design win with an OEM within the Automotive market may take considerably longer than a design win with customers in the Industrial market. We consider design wins to be critical to our future success, although the revenue generated by each design win and the time necessary to achieve such a win can vary significantly, making it difficult to predict our financial performance.

We believe our revenue and profitability will also be dependent upon our success in licensing our technology to Tier 1 automotive suppliers, such as Continental, which represented 51% and 55% of 2022 and 2021 revenue, respectively, that intend to use our technology in volume production of lidar sensors for OEMs. Delays of autonomy programs by OEMs that we are currently or will be working with through our Tier 1 partners could result in us being unable to achieve our revenue and profitability targets in the timeframe we anticipate. Our overall revenue and profitability will also be dependent upon both our success in selling our lidar solutions to customers in the Industrial market.

Gross Margin Improvement

Our gross margins will depend on numerous factors, including, among others, the selling price of our products, pricing of our development contracts with customers, royalty rates on licenses we grant to our customers, unit volumes, product mix, component costs, personnel costs, contract manufacturing costs, overhead costs, and product features. In the future, we expect to generate attractive gross margins from licensing our lidar technology and software to our Tier 1 partners in the Automotive market. We also sell our own lidar solutions to customers in the Industrial market utilizing lower-cost components that are sourced, in part, from the Tier 2 automotive supply chain and assembled by our contract manufacturing partners. If our Tier 1 partners in the Automotive market do not achieve the volumes that we expect, then the cost of the components we use to address the Industrial market may not decrease to the extent we anticipate and may impact our gross margins and our ability to achieve profitability in the future.

To date, our revenue has been generated through development contracts with OEMs and Tier 1 suppliers, as well as unit sales of our products to Industrial customers. These development contracts primarily focus on customization of our proprietary 4Sight capabilities to our customers’ applications, typically involving software implementation to assist with sensor connection and control, customization of scan patterns, and enhancement of particular perception capabilities to meet specific customer needs. In general, development contracts that require more complex configurations have higher prices. We expect development contracts to remain a significant part of our business in the near-term, but represent a smaller share of our total revenue over time, as we increase our focus on technology licensing and product sales. We expect our gross margins from the sale of products to improve over time as we outsource volume production of our lidar sensors to contract manufacturers, which we anticipate will both increase unit volumes and reduce the cost per unit. In September 2021, we commenced our transition process to contract manufacturers, and we completed the first phase of this transition in late 2022.

Investment and Innovation

Our proprietary adaptive, intelligent lidar technology delivers industry-leading performance that helps to solve the most difficult challenges in delivering partial or full autonomy. While traditional sensing systems passively collect data, our active 4Sight™ Intelligent Sensing Platform leverages principles from automated targeting systems and biomimicry to scan the environment, while intelligently focusing on what matters most in order to enable safer, smarter, and faster decisions in complex scenarios.

We believe our financial performance is significantly dependent on our ability to maintain a technology leadership position. This is further dependent on the investments we make in R&D. It is essential that we continually identify and respond to rapidly evolving customer requirements, develop and introduce innovative new products, enhance and service existing products, and generate strong market demand for our products. If we fail to do this, our leading market position and revenue may be adversely affected, and our investments in that area will not be recovered.

Basis of Presentation

We currently conduct our business through one operating segment.

Components of Results of Operations

Total Revenues

We categorize our revenue as (1) prototype sales and (2) development contracts. In 2022 and 2021, our prototype sales revenue primarily related to unit sales of the company's 4Sight product. Revenue from prototype sales is typically recognized at a point in time when the control of goods is transferred to the customer, generally upon delivery or shipment to the customer.

Development contracts represented the majority of our total revenues in 2022 and 2021. Revenue from development and/or collaboration arrangement contracts are earned from R&D activities and collaboration with OEMs and Tier 1 suppliers. These contracts primarily focus on customization of our proprietary 4Sight capabilities to our customers' applications, typically involving software implementation to assist with sensor connection and control, customization of scan patterns, and enhancement of perception capabilities to meet specific customer needs. Revenue from development contracts is recognized when we satisfy performance obligations in the contract, which can result in recognition at either a point in time or over time. This assessment is made at the outset of the arrangement for each performance obligation.

Cost of Revenue

Cost of revenue includes the costs directly associated with the production of prototypes and certain costs associated with development contracts. Such costs for prototypes include direct materials, direct labor, indirect labor, inventory write downs, warranty expense, and allocation of overhead. Costs associated with development contracts include the direct costs and allocation of overhead costs involved in the execution of the contracts.

Operating Expenses

Research and Development

Our research and development, or R&D efforts are focused primarily on hardware, software, and system engineering related to the design and development of our advanced lidar solutions. R&D expenses include:

- personnel-related expenses, including salaries, benefits, bonuses, and stock-based compensation expense;
- third-party engineering and contractor costs;

- lab equipment;
- engineering parts and test units;
- new hardware and software expenses; and
- allocated overhead expenses.

R&D costs are expensed as they are incurred. We expect our investment in R&D will continue to grow over time because we believe that investment in R&D is essential to maintain our position as a provider of one of the most advanced lidar solutions available.

Sales and Marketing

Our sales and marketing, or S&M, efforts are focused primarily on sales, business development, and marketing programs in pursuit of revenue contracts from potential and existing customers. S&M expenses include:

- personnel-related expenses, including salaries, benefits, bonuses, and stock-based compensation expense;
- demonstration equipment;
- trade shows expenses, advertising, and promotions expenses for press releases and other public relations services; and
- allocated overhead expenses.

We expect our S&M expenses to grow over time as we continue to expand our sales and marketing efforts to support the anticipated growth of our business.

General and Administrative

Our general and administrative, or G&A, spending supports all business functions. G&A expenses include:

- personnel-related costs, including salaries, benefits, bonuses, and stock-based compensation expense for executive, finance, legal, human resources, technical support, and other administrative personnel;
- consulting, accounting, audit, legal, and other professional fees;
- insurance premiums, software and computer equipment costs, general office expenses; and
- allocated overhead expenses.

We expect our G&A expenses to increase for the foreseeable future as we support the growth of our business, and as a result of operating as a public company, including additional costs and expenses associated with compliance with the rules and regulations of the SEC, legal, audit, insurance, investor relations, and other administrative and professional services.

Change in Fair Value of Convertible Note, Embedded Derivative Liability, and Warrant Liabilities

Changes in fair value of the convertible note, embedded derivative, and warrant liabilities are the result of the change in fair value at each reporting date. The convertible note, embedded derivative, and warrant liabilities are recorded at fair value for each reporting period, and the changes in fair value are reported as other income (expense) during the period. We have also elected to record interest expense on the 2022 convertible note as changes in fair value. Upon the closing of the Business Combination, the embedded derivative was settled, the pre-combination common stock warrants and Series A preferred stock warrants were net settled and converted to Class A common stock and private placement warrants were acquired.

Interest Income, Interest Expense and Other

Interest income consists primarily of interest earned on our cash, cash equivalents, and marketable securities. These amounts will vary based on our cash and cash equivalents balances and market rates. Interest expense consists primarily of convertible note issuance costs and amortization of premiums on marketable securities, net of accretion discounts.

Upon the closing of the Business Combination, our borrowings were repaid with any remaining debt issuance costs and discounts expensed. The pre-Business Combination convertible notes and accrued interest were settled and converted to Class A common stock. See additional discussion in Note 2 to our consolidated financial statements.

Results of Operations

Comparison of 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 years ended December 31, 2022 and 2021 (in thousands, except for percentages):

	Year ended December 31,		Change	Change
	2022	2021	$	%
Prototype sales	$ 1,743	$ 1,004	$ 739	74 %
Development contracts	1,904	2,003	(99)	(5)%
Total revenue	3,647	3,007	640	21 %
Cost of revenue	8,732	3,637	5,095	140 %
Gross loss	(5,085)	(630)	(4,455)	707 %
Research and development	37,644	26,543	11,101	42 %
Sales and marketing	19,317	10,548	8,769	83 %
General and administrative	36,762	25,514	11,248	44 %
Total operating expenses	93,723	62,605	31,118	50 %
Loss from operations	(98,808)	(63,235)	(35,573)	56 %
Change in fair value of convertible note, embedded derivative liability, and warrant liabilities	(14)	223	(237)	(106)%
Gain on PPP loan forgiveness	—	2,297	(2,297)	(100)%
Interest income and other	1,545	561	984	175 %
Interest expense and other	(1,379)	(4,857)	3,478	(72)%
Total other income (expense), net	152	(1,776)	1,928	(109)%
Provision for income tax expense	58	—	58	100 %
Net loss	$ (98,714)	$ (65,011)	$ (33,703)	52 %

Revenue

Prototype Sales

Prototype sales increased by $739, or 74%, to $1,743 for the year ended December 31, 2022 from $1,004 for the year ended December 31, 2021. This increase was primarily due to an increase in 4Sight unit sales.

Development Contracts

Development contracts decreased by $99, or 5%, to $1,904 for the year ended December 31, 2022, from $2,003 for the year ended December 31, 2021. The decrease was primarily due to less revenue recognized in the current year from a large Tier 1 Automotive Supplier contract.

Cost of Revenue

Cost of revenue increased by $5,095, or 140%, to $8,732 for the year ended December 31, 2022, from $3,637 for the year ended December 31, 2021. This increase was primarily due to the cost of revenue associated with the Tier 1 Automotive Supplier contract in the current period, increased prototype sales, and increased labor and warranty costs.

Operating Expenses

Research and Development

Research and development expenses increased by $11,101, or 42%, to $37,644 for the year ended

December 31, 2022, from $26,543 for the year ended December 31, 2021. This increase was primarily driven by increases in stock-based compensation expense of $5,026, personnel costs of $4,804, information technology expense of $780, engineering parts of $757, rent and facilities expense of $953, and travel expense of $377. These increases were offset by decreases in third party research and development work of $1,530.

Sales and Marketing

Total sales and marketing expenses increased by $8,769, or 83%, to $19,317 for the year ended December 31, 2022, from $10,548 for the year ended December 31, 2021. This increase was primarily due to increases in stock-based compensation of $3,315, personnel costs of $2,813, marketing program spend of $973, travel expense of $809, information technology expense of $428, and rent and facilities expense of $306.

General and Administrative

Total general and administrative expenses increased by $11,248, or 44%, to $36,762 for the year ended December 31, 2022, from $25,514 for the year ended December 31, 2021. This increase was primarily due to an increase in stock-based compensation of $5,471, directors' and officers' insurance premium of $2,467, professional accounting and legal fees of $2,387, investor and stock related expenses of $622, and travel expense of $348.

Change in Fair Value of Convertible Note, Embedded Derivative, and Warrant Liabilities

Change in fair value of convertible note, embedded derivative, and warrant liabilities (see Note 3) decreased by $237, or 106%, to $14 for the year ended December 31, 2022, from $223 for the year ended December 31, 2021. This decrease was primarily due to a decrease in the fair values of the warrant liabilities compared to prior period, offset by an increase in fair value of the 2022 convertible note.

Gain on PPP Loan Forgiveness

Gain on PPP loan forgiveness decreased by $2,297, or 100%, for the year ended December 31, 2022. In June 2021 the full principal and interest of the PPP loan was forgiven.

Interest Income and Other

Interest income and other increased by $984, or 175%, to $1,545 for the year ended December 31, 2022, from $561 for the year ended December 31, 2021. This increase was primarily due to the interest earned on our marketable securities of $1,545.

Interest Expense and Other

Interest expense and other decreased by $3,478, or 72%, to $1,379 for the year ended December 31, 2022, from $4,857 for the year ended December 31, 2021. This decrease was primarily due to $2,818 of prior period interest expense not recurring in the current year due to the payoff of the loan balances in the prior year, as well as $1,583 of costs associated with the Tumim Stone Common Stock Purchase Agreement in the prior year which did not recur in the current year. This is offset by $474 in convertible note issuance costs and an increase of $322 in amortization of premiums on marketable securities, net of accretion of discounts, in the current period.

Provision for Income Tax Expense

Provision for income tax expenses increased to $58 for the year ended December 31, 2022, from $0 for the year ended December 31, 2021. This increase is due to changes in pretax income (loss) in the U.S. and certain foreign entities and changes in tax rates.

Net Loss

Net loss increased by $33,703, or 52%, to $98,714 for the year ended December 31, 2022, from $65,011 for the year ended December 31, 2021. This increase was primarily due to an increase in operating expenses.

Liquidity and Capital Resources

Sources of Liquidity

Our capital requirements will depend on many factors, including sales volume, the timing and extent of spending to support R&D efforts, investments in information technology systems, the expansion of sales and marketing activities, and market adoption of new and enhanced products and features. As of December 31, 2022, our cash, cash equivalents, and marketable securities totaled $94.2 million.

To date, our principal sources of liquidity have been proceeds received from the issuance of equity. In December 2021, we entered into a Common Stock Purchase Agreement, or CSPA, with Tumim Stone Capital LLC, or Tumim Stone, pursuant to which we have the right, but not the obligation, to issue and sell to Tumim Stone over a 36-month period up to $125,000 of the Company’s common stock. On May 6, 2022, the Company filed a Registration Statement on Form S-1, which related to the offer and resale of up to 30,865,419 shares of our common stock to be purchased by Tumim Stone, pursuant to the CSPA. As of December 31, 2022, 1,145,000 shares were issued under this CSPA. In September 2022, we entered into a Securities Purchase Agreement, or SPA, with an investor allowing for the sale and issuance of two convertible notes, each with cash proceeds of $10,000, for a total of $20,000 in proceeds between the two issuances (each, a "Note Closing"). On September 15, 2022, we closed the first Note Closing with the investor and received proceeds of $9,850 (net of fees paid to the investor). The second Note Closing may occur, at our option, after the ninetieth (90^{th}) calendar day after the first Note Closing provided that we meet certain equity conditions. Until we can generate sufficient revenue from the sale of our products to cover operating expenses, working capital, and capital expenditures, we expect the funds raised in the Business Combination and PIPE financing, as well as any future funds from the CSPA and SPA, and other potential sources of capital, to fund our near-term cash needs.

If we are required to raise additional funds by issuing equity securities, dilution of stockholders will result. Any debt securities issued may also have rights, preferences, and privileges senior to those of holders of our common stock. The terms of debt securities or borrowings could impose significant restrictions on our operations. The credit market and financial services industry have in the past, and may in the future, experience periods of uncertainty that could impact the availability and cost of equity and debt financing.

For the years ended December 31, 2022 and 2021, we had a net loss of $98,714 and $65,011, respectively. We anticipate that we will continue to incur losses for at least the next several years. We expect that our research and development, selling and marketing, and general and administrative expenses will continue to be significant and, as a result, we may need additional capital resources to fund our operations. We believe that the net proceeds from the Business Combination, CSPA, and SPA, together with our existing cash, cash equivalents, and marketable securities will enable us to fund our operating expenses, working capital, and capital expenditure requirements for a period of at least twelve months from the date of this Annual Report on Form 10-K. Our plans for the use of cash in the long-term (beyond twelve months from this Annual Report) are similarly related to funding operating expenses and capital expenditure requirements as we continue to scale the business. For additional information regarding our cash requirements from lease obligations and contractual obligations, see Notes 7 and 21 in the Notes to the Consolidated Financial Statements in Item 8 of Part II of this Annual Report on Form 10-K.

On March 10, 2023, Silicon Valley Bank, or SVB, was closed by the California Department of Financial Protection and Innovation, and the Federal Deposit Insurance Corporation, or FDIC, was appointed as receiver. We have deposit accounts at SVB. The standard deposit insurance amount is up to $250 thousand per depositor, per insured bank, for each account ownership category. As of March 10, 2023, we had approximately $9.6 million in deposit accounts at SVB, of which approximately $2.2 million is held as collateral for a letter of credit under our lease agreements. We do not maintain any other material accounts or lines of credit with SVB. On March 12, 2023, the U.S. Treasury, Federal Reserve, and FDIC announced that SVB depositors will have access to all of their money starting March 13, 2023.

Cash Flow Summary

	Twelve months ended December 31,	
	2022	2021
	(in thousands)	
Net cash provided by (used in):		
Operating activities	$ (71,649)	$ (55,703)
Investing activities	$ 68,463	$ (151,546)
Financing activities	$ 8,067	$ 207,084

Operating Activities

For the year ended December 31, 2022, net cash used in operating activities was $71,649. Factors affecting our operating cash flows during this period were net loss of $98,714, offset by stock-based compensation of $23,959, depreciation and amortization of $1,422, noncash lease expense of $1,338, amortization of premiums on marketable securities, net of change in accrued interest, of $1,086, inventory write-downs of $675, and issuance costs of $474. Within operating activities, the net changes in operating assets and liabilities were cash used of $1,980, primarily driven by increases in inventories and prepaid and other current assets of $2,634 and $1,130, respectively, and decreases in operating lease liabilities and contract liabilities of $1,341 and $1,931, respectively. Cash used was offset by cash provided by decreases in accounts receivable and other noncurrent assets of $3,605 and $527, respectively, and increases in accounts payable of $839.

For the year ended December 31, 2021, net cash used in operating activities was $55,703. Factors affecting our operating cash flows during this period were net loss of $65,011 and gain on PPP loan forgiveness of $2,297, offset by stock-based compensation of $10,018 and depreciation and amortization of $1,014. Within operating activities, the net changes in operating assets and liabilities were cash used of $4,064, primarily driven by increases in prepaids and other current assets of $3,655, accounts receivable of $5,496, and accounts payable of $557.

Investing Activities

For the year ended December 31, 2022, net cash provided by investing activities was $68,463. The primary factors affecting net cash provided by investing activities during this period were proceeds from redemptions and maturities of marketable securities of $96,592, offset by the purchases of available-for-sale debt securities of $23,929 and property and equipment purchases of $4,200.

For the year ended December 31, 2021, net cash used in investing activities was $151,546. The primary factor affecting net cash used in investing activities during this period was the purchase of available-for-sale debt securities of $150,525.

Financing Activities

For the year ended December 31, 2022, net cash provided by financing activities was $8,067. The primary factors affecting our financing cash flows during this period were net proceeds from the issuance of convertible notes of $9,850, proceeds from issuance of common stock under the CSPA of $2,891, and proceeds from the exercise of stock options of $1,174, offset by taxes paid related to the net share settlement of equity awards of $4,621 and payments for convertible note redemptions of $874.

For the year ended December 31, 2021, net cash provided by financing activities was $207,084. The primary factors affecting our financing cash flows during this period were the proceeds from the Business Combination and PIPE financing of $256,811 and proceeds from a bank loan of $10,000, partially offset by transaction costs related to the Business Combination of $52,372 and principal payments on bank loans of $13,333.

Critical Accounting Policies and Estimates

Our consolidated financial statements are in accordance with GAAP. We are required to make estimates and assumptions that affect the reported amounts of assets and liabilities as of the date of the consolidated financial statements, the reported amounts of revenues and expenses during the reporting periods, fair value measures, and the related disclosures in the consolidated financial statements. Our actual results may differ significantly from these estimates due to changes in judgments, assumptions and conditions as a result of unforeseen events or otherwise, which could have a material impact on our financial position and results of operations. We believe our critical accounting policies involve the greatest degree of judgement and complexity and have the greatest potential impact on our consolidated financial statements.

Revenue

We recognize revenues from R&D and development arrangements with OEMs and suppliers to the OEMs and from the sale of prototype products. 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 our activities 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 that are satisfied at a point in time, we also consider the following indicators to assess whether control of a promised good or service is transferred to the customer: (i) right to payment; (ii) transfer of legal title; (iii) physical possession; (iv) significant risks and rewards of ownership; and (v) acceptance of the goods 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 development 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 are capable of being distinct and accounted for as separate performance obligations. Determining whether products or services are considered distinct performance obligations that should be accounted for separately versus together may sometimes require significant judgment. 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. For multiple element arrangements, the transaction price is allocated to each performance obligation using the relative stand-alone selling price, or SSP. Judgment is required to determine SSP for each distinct performance obligation. We use a range of amounts to estimate SSP when products and services are sold separately. In instances where SSP is not directly observable, we determine SSP using information that may include other observable inputs, or use a residual approach to estimate the SSP for performance obligations where SSP is highly variable or uncertain. Changes in judgments with respect to these assumptions and estimates could impact the timing or amount of revenue recognition.

Emerging Growth Company Status

Section 102(b)(1) of the Jumpstart Our Business Startups Act of 2012, or 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 has elected to take advantage of the benefits of the extended transition period for new or revised financial accounting standards. Following the closing of the Business Combination, we will remain an emerging growth company until the earliest of (i) the last day of the fiscal year in which the market value of common stock that is held by non-affiliates exceeds $700 million as of the end of that year’s second fiscal quarter, (ii) the last day of the fiscal year in which the Company has total annual gross revenue of $1.07 billion or more during such fiscal year (as indexed for inflation), (iii) the date on which the Company has issued more than $1.0 billion in non-convertible debt in the prior three-year period, or (iv) December 31, 2025. We expect to continue to take advantage of the benefits of the extended transition period, although we may decide to adopt such new or revised accounting standards early 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.

Recent Accounting Pronouncements

See Note 1 to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K for recently adopted accounting pronouncements and recently issued accounting pronouncements not yet adopted as of the date of this Annual Report on Form 10-K.

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 prices and rates.

We do not believe that inflation has had a material effect on our business, results of operations, or financial condition. 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, results of operations or financial condition.

Interest Rate Risk

As of December 31, 2022, we had cash, cash equivalents, and marketable securities of $94,199, which consisted primarily of deposits in our bank accounts, money market funds, and marketable securities. Such interest-earning instruments carry a degree of interest rate risk. Our 2022 Convertible Note bears a fixed interest rate, and therefore is not subject to interest rate risk. Our investment policy is focused on the preservation of capital and supporting our liquidity needs. We invest in highly rated securities, while limiting the amount of credit exposure to any one issuer other than the U.S. government. 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 cash, cash equivalents and marketable securities.

Credit Risk

Our concentration of credit risk is determined by evaluating each customer and each vendor that accounts for more than 10% of our accounts receivable and accounts payable, respectively. As of December 31, 2022, there were four customers each accounting for 10% or more of our accounts receivable and two vendors each accounting for 10% or more of our accounts payable.

We perform credit evaluations as needed and generally do not require collateral for our customers. We analyze accounts receivable, historical percentages of uncollectible accounts, and changes in payment history when evaluating the adequacy of the allowance for doubtful accounts for potential credit losses on customers’ accounts. At December 31, 2022 and 2021, we did not have write-offs and did not record an allowance for doubtful accounts on the consolidated balance sheets.

Foreign Currency Exchange Risk

Our foreign currency exchange gains and losses have been generated primarily from fluctuations in the euro versus the US dollar, and the Japanese yen versus the US dollar. The functional currency of all our entities is the US dollar. Monetary assets and liabilities and transactions denominated in currencies other than an entity’s functional currency are remeasured into its functional currency using current exchange rates, whereas non-monetary assets and liabilities are remeasured using historical exchange rates. We recognize gains and losses from such remeasurements within interest income and other, or interest expense and other, as applicable on the consolidated statements of operations and comprehensive loss in the period of occurrence. We have in the past experienced, and in the future expect to experience, foreign currency exchange gains and losses on our non-functional currency-denominated balances. Foreign currency exchange gains and losses could have a material adverse effect on our business, operating results and financial condition. To date, we have not engaged in exchange rate hedging activities, and we do not expect to do so in the foreseeable future.

Item 8. Financial Statements and Supplementary Data

AEye, Inc.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the stockholders and Board of Directors of AEye, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of AEye, Inc. and subsidiaries (the “Company”) as of December 31, 2022 and 2021, the related consolidated statements of operations and comprehensive loss, stockholders’ equity (deficit), and cash flows for each of the two years in the period ended December 31, 2022, and the related notes (collectively referred to as the “financial statements”). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2022, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s 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 financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the 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 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 financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ DELOITTE & TOUCHE LLP

San Francisco, California

March 15, 2023

We have served as the Company’s auditor since 2018.

AEYE, INC.
CONSOLIDATED BALANCE SHEETS
(In thousands, except share and par value)

	As of December 31,	
	2022	**2021**
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$ 19,064	$ 14,183
Marketable securities	75,135	149,824
Accounts receivable, net	617	4,222
Inventories, net	4,553	4,085
Prepaid and other current assets	6,181	5,051
Total current assets	105,550	177,365
Right-of-use assets	15,502	—
Property and equipment, net	7,665	5,129
Restricted cash	2,150	2,150
Other noncurrent assets	2,473	1,509
Total assets	$ 133,340	$ 186,153
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Accounts payable	3,218	$ 2,542
Accrued expenses and other current liabilities	9,764	8,739
Contract liabilities	987	2,287
Convertible notes	8,594	—
Total current liabilities	22,563	13,568
Operating lease liabilities, noncurrent	16,681	—
Deferred rent, noncurrent	—	3,032
Other noncurrent liabilities	126	786
Total liabilities	39,370	17,386
COMMITMENTS AND CONTINGENCIES (Note 21)		
STOCKHOLDERS' EQUITY:		
Preferred stock—$0.0001 par value: 1,000,000 shares authorized; no shares issued and outstanding	—	—
Common stock—$0.0001 par value: 300,000,000 shares authorized; 163,099,124 and 155,137,237 shares issued and outstanding at December 31, 2022 and 2021	16	16
Additional paid-in capital	345,742	320,937
Accumulated other comprehensive loss	(1,279)	(391)
Accumulated deficit	(250,509)	(151,795)
Total stockholders' equity	93,970	168,767
Total liabilities and stockholders' equity	$ 133,340	$ 186,153

The accompanying notes are an integral part of these consolidated financial statements.

AEYE, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(In thousands, except share and per share data)

	Twelve Months Ended December 31,	
	2022	**2021**
REVENUE:		
Prototype sales	$ 1,743	$ 1,004
Development contracts	1,904	2,003
Total revenue	3,647	3,007
Cost of revenue	8,732	3,637
Gross loss	(5,085)	(630)
OPERATING EXPENSES:		
Research and development	37,644	26,543
Sales and marketing	19,317	10,548
General and administrative	36,762	25,514
Total operating expenses	93,723	62,605
LOSS FROM OPERATIONS	(98,808)	(63,235)
OTHER INCOME (EXPENSE):		
Change in fair value of convertible note, embedded derivative liability, and warrant liabilities	(14)	223
Gain on PPP loan forgiveness	—	2,297
Interest income and other	1,545	561
Interest expense and other	(1,379)	(4,857)
Total other income (expense), net	152	(1,776)
Provision for income tax expense	58	—
Net loss	$ (98,714)	$ (65,011)
Change in net unrealized loss on available-for-sale securities, net of tax	(940)	(391)
Change in fair value due to instrument-specific credit risk, net of tax	(25)	—
Net losses reclassified into income during the period, net of tax	77	—
Comprehensive loss	$ (99,602)	$ (65,402)
PER SHARE DATA		
Net loss per common share (basic and diluted)	$ (0.63)	$ (0.60)
Weighted average common shares outstanding (basic and diluted)	157,368,707	109,055,894

The accompanying notes are an integral part of these consolidated financial statements.

AEYE, INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)
(In thousands, except share data)

	Preferred Stock		Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount	Shares	Amount				
BALANCE—December 31, 2021	—	$ —	155,137,237	$ 16	$ 320,937	$ (391)	$ (151,795)	$ 168,767
Stock-based compensation	—	—	—	—	23,959	—	—	23,959
Issuance of common stock upon exercise of stock options	—	—	3,219,957	—	1,174	—	—	1,174
Issuance of common stock upon vesting of restricted stock units	—	—	3,908,031	—	—	—	—	—
Taxes related to net share settlement of equity awards	—	—	(1,340,810)	—	(3,790)	—	—	(3,790)
Issuance of common stock under the Common Stock Purchase Agreement	—	—	1,145,000	—	2,891	—	—	2,891
Transaction costs related to the Common Stock Purchase Agreement	—	—	—	—	(29)	—	—	(29)
Issuance of common stock upon exercise of public warrants	—	—	10	—	—	—	—	—
Conversions of convertible note into common stock	—	—	1,029,699	—	600	—	—	600
Other comprehensive loss, net of tax	—	—	—	—	—	(888)	—	(888)
Net loss	—	—	—	—	—	—	(98,714)	(98,714)
BALANCE—December 31, 2022	—	—	163,099,124	16	$ 345,742	$ (1,279)	$ (250,509)	$ 93,970

	Preferred Stock		Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount				
BALANCE—December 31, 2020 (as previously reported)	16,383,725	$ 62,639	10,838,010	$ —	$ 5,920	$ —	$ (86,784)	$ (18,225)
Retroactive application of recapitalization (Note 2)	(16,383,725)	(62,639)	90,448,635	10	62,629	—	—	—
Balance as of December 31, 2020, as adjusted (Note 2)	—	—	101,286,645	10	68,549	—	(86,784)	(18,225)
Stock based compensation	—	—	—	—	10,018	—	—	10,018
Issuance of common stock upon exercise of stock options	—	—	312,037	—	150	—	—	150
Conversion of convertible notes and accrued interest into Class A common stock	—	—	20,778,097	2	39,093	—	—	39,095
Business combination and PIPE financing	—	—	31,894,635	3	256,808	—	—	256,811
Transaction costs related to Business Combination and PIPE financing	—	—	—	—	(52,661)	—	—	(52,661)
Net settlement of common stock and Series A preferred stock warrants	—	—	240,806	—	—	—	—	—
Assumption of the private placement warrant liability in connection with Business Combination	—	—	—	—	(268)	—	—	(268)
Commitment shares for Common Stock Purchase Agreement	—	—	302,634	—	1,583	—	—	1,583
Repurchase of stock options	—	—	—	—	(1,500)	—	—	(1,500)
Issuance of common stock upon vesting of restricted stock units	—	—	448,604	1	—	—	—	1
Taxes related to net share settlement of equity awards	—	—	(126,221)	—	(835)	—	—	(835)
Unrealized loss on available-for-sale debt securities	—	—	—	—	—	(391)	—	(391)
Net Loss	—	—	—	—	—	—	(65,011)	(65,011)
BALANCE—December 31, 2021	—	—	155,137,237	16	$ 320,937	$ (391)	$ (151,795)	$ 168,767

The accompanying notes are an integral part of these consolidated financial statements.

AEYE, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)

	Twelve months ended December 31,	
	2022	**2021**
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	$ (98,714)	$ (65,011)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	1,422	1,014
Noncash lease expense relating to operating lease right-of-use assets	1,338	—
Noncash common stock purchase agreement costs	—	1,583
Inventory write-downs, net of scrapped inventory	675	1,203
Change in fair value of convertible note, embedded derivative liability, and warrant liabilities	14	(223)
Noncash gain on PPP loan forgiveness	—	(2,297)
Stock-based compensation	23,959	10,018
Convertible note issuance costs	474	—
Amortization of debt issuance costs	—	725
Amortization of debt discount	—	752
Realized loss on redemption of marketable securities	77	—
Amortization of premiums on marketable securities, net of change in accrued interest	1,086	310
Other	—	287
Changes in operating assets and liabilities:		
Accounts receivable, net	3,605	(4,066)
Inventories, current and noncurrent, net	(2,634)	(2,633)
Prepaid and other current assets	(1,130)	(3,655)
Other noncurrent assets	527	(1,483)
Accounts payable	839	557
Accrued expenses and other current liabilities	85	5,496
Operating lease liabilities	(1,341)	—
Deferred rent	—	(538)
Contract liabilities	(1,931)	2,258
Net cash used in operating activities	(71,649)	(55,703)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchase of property and equipment	(4,200)	(1,021)
Proceeds from redemptions and maturities of marketable securities	96,592	—
Purchase of available-for-sale securities	(23,929)	(150,525)
Net cash provided by (used in) investing activities	68,463	(151,546)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from exercise of stock options	1,174	150
Proceeds from Business Combination and PIPE financing	—	256,811
Transaction costs related to Business Combination and PIPE financing	—	(52,372)
Proceeds from the issuance of convertible notes	9,850	8,045
Payments for convertible note redemptions	(874)	—
Payment of 2022 convertible note issuance costs	(324)	—
Proceeds from bank loan	—	10,000
Principal payments on bank loans	—	(13,333)
Payment of debt issuance costs	—	(717)
Taxes paid related to the net share settlement of equity awards	(4,621)	—
Repurchase of stock options	—	(1,500)
Proceeds from issuance of common stock under the Common Stock Purchase Agreement	2,891	—
Payment of transaction costs related to the Common Stock Purchase Agreement	(29)	—
Net cash provided by financing activities	8,067	207,084
NET INCREASE (DECREASE) IN CASH, CASH EQUIVALENTS AND RESTRICTED CASH	4,881	(165)
CASH, CASH EQUIVALENTS AND RESTRICTED CASH—Beginning of period	16,333	16,498
CASH, CASH EQUIVALENTS AND RESTRICTED CASH—Ending	$ 21,214	$ 16,333
SUPPLEMENTAL CASH FLOW INFORMATION:		
Cash paid for interest	$ 133	$ 358
Cash paid for income taxes	20	—
SUPPLEMENTAL DISCLOSURE OF NONCASH INVESTING AND FINANCING ACTIVITIES:		
Purchases of property and equipment included in accounts payable and accrued liabilities	28	270
Operating lease right-of-use assets obtained in exchange for lease obligations upon adoption of ASC 842	16,284	—
Conversion of Series A and Series B preferred stock into Class A common stock	—	62,639
Conversion of convertible notes and accrued interest into Class A common stock	600	39,095
Operating lease right-of-use assets obtained in exchange for lease obligations	556	—
Taxes related to net share settlement of equity awards included in accrued liabilities	4	835

Assumption of the private placement warrant liability in connection with Business Combination	—	268
Transaction costs paid in 2020, previously recorded to other non-current assets and reclassified to additional paid-in capital in 2021	—	289

The accompanying notes are an integral part of these consolidated financial statements.

1. ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

AEye, Inc. (the “Company” or “AEye”) is a provider of high-performance, active lidar systems for vehicle autonomy, advanced driver-assistance systems (ADAS), and robotic vision applications. AEye’s software-definable 4Sight^{TM} Intelligent Sensing Platform combines solid-state active lidar, an optionally fused low-light HD camera, and integrated deterministic artificial intelligence to capture more intelligent information with less data, enabling faster, more accurate, and more reliable perception of the surroundings.

On February 17, 2021, AEye Technologies, Inc., then known as AEye, Inc. (“AEye Technologies”), entered into the Agreement and Plan of Merger (the “Merger Agreement”) with CF Finance Acquisition Corp. III, a Delaware corporation (“CF III”), now known as AEye, Inc., and Meliora Merger Sub, Inc., a Delaware corporation and a wholly owned subsidiary of CF III (“Merger Sub”). Based on CF III’s business activities, it was a “shell company” as defined under the Securities Exchange Act of 1934, as amended (the “Exchange Act”). On August 16, 2021 (the “Closing Date”), CF III closed the business combination (the “Business Combination,” and together with the other transactions contemplated by the Merger Agreement, the “Transactions”) pursuant to the Merger Agreement, and Merger Sub was merged with and into AEye Technologies with AEye Technologies surviving the merger as a wholly owned subsidiary of CF III. On the Closing Date, and in connection with the closing of the Transactions (the “Closing”), CF III changed its name to AEye, Inc.

The Company’s common stock and public warrants are now listed on the Nasdaq Stock Market LLC (“Nasdaq”) under the symbols “LIDR” and “LIDRW”, respectively. Unless otherwise specified, “we,” “us,” “our,” “AEye,” and the “Company” refers to AEye, Inc., the combined entity following the Business Combination. Refer to Note 2 for further discussion of the Business Combination.

Principle of Consolidation and Liquidity

The accompanying consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. All intercompany balances and transactions have been eliminated in consolidation.

The Company has funded its operations primarily through the Business Combination and issuances of stock. As of December 31, 2022, the Company’s existing sources of liquidity included cash, cash equivalents and marketable securities of $94.2 million. The Company has incurred losses and negative cash flows from operations. As the Company incurs additional losses in the future, it may need to raise additional capital through issuances of equity and debt. However, management believes that the Company’s existing sources of liquidity are adequate to fund its operations for at least the next 12 months.

Reclassification of Prior Year Presentation

Certain prior year amounts have been reclassified for consistency with the current year presentation. Advances to suppliers has been broken out from Other within Footnote 6, Prepaid and other current assets. Amortization of premiums on marketable securities, net within Footnote 13, Interest Expense and Other is now presented as Amortization of premiums on marketable securities, net of accretion and discounts.

Emerging Growth Company

The Company is an “emerging growth company,” as defined in Section 2(a) of the Securities Act, as modified by the Jumpstart Our Business Startups Act of 2012 (the “JOBS Act”), and it may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies including, but not limited to, not being required to comply with the independent registered public accounting firm attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in its periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved.

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 election to opt out is irrevocable. The Company has elected to take advantage of the benefits of the extended transition period for new or revised financial accounting standards. This may make it difficult or impossible to compare the Company's 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.

Use of Estimates

The preparation of consolidated financial statements in conformity with 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. Actual results could differ from those estimates. Significant items subject to such estimates and assumptions include investments, fair value of the 2022 convertible note, embedded derivative and warrant liabilities, and stock-based compensation.

Segment Reporting

The Company manages its business on the basis of one reportable and operating segment. Operating segments are defined as components of an enterprise with separate financial information, and are evaluated regularly by the chief operating decision maker, which is the Company's Chief Executive Officer ("CEO"). The CEO decides how to allocate resources and assesses the Company's performance based upon consolidated financial information. All of the Company's sales were made to customers (in USD) located in the U.S., Europe, and Asia through AEye, Inc. Of the $7,665 of net property and equipment as of December 31, 2022, $7,207 is located in the United States, $108 is located in Europe, and $350 is located in Asia.

Cash, Cash Equivalents, and Marketable Securities

The Company considers all highly liquid investments, such as treasury bills, commercial paper, certificates of deposit, and money market instruments with maturities of three months or less at the time of acquisition to be cash equivalents. Cash equivalents primarily consist of amounts held in interest-bearing money market accounts that are readily convertible to cash. Cash equivalents are stated at cost, which approximates fair market value.

Marketable securities have been classified as available-for-sale and are carried at estimated fair value as determined based upon quoted market prices or pricing models for similar securities. Unrealized gains and losses in fair value of the available-for-sale ("AFS") debt securities are reported in other comprehensive income (loss). When the AFS debt securities are sold, cost is based on the specific identification method, and the realized gains and losses are included in other income (expense), net in the consolidated statements of operations and comprehensive loss. The Company determines the appropriate classification of its investments at the time of purchase and reevaluates such designation at each balance sheet date. The Company considers all AFS debt securities as available for use to support current operations, including those with maturity dates beyond one year and are classified as current assets under marketable securities in the accompanying consolidated balance sheets. AFS debt securities included in marketable securities on the consolidated balance sheets consist of securities with original maturities greater than three months at the time of purchase. Interest on marketable securities is included within interest income.

Restricted Cash

Restricted cash of $2,150 and $2,150 as of December 31, 2022 and 2021, respectively consists of funds that are contractually restricted as to usage or withdrawal due to a contractual agreement. The Company has a letter of credit to the amount of $2,150 with Silicon Valley Bank as security for the payment of rent on its headquarters in Dublin, CA which require lease payments through 2026.

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

Concentration of Credit Risk

Financial instruments which potentially subject the Company to concentration of credit risk consist primarily of cash, cash equivalents, and marketable securities, and accounts receivable. The Company places its cash and cash equivalents with major financial institutions, which management assesses to be of high credit quality, to limit the exposure of each investment. The Company's marketable securities have investment grade ratings when purchased which mitigates risk.

The Company's accounts receivables are derived from customers located in the U.S., Europe, and Asia. The Company mitigates its credit risks by performing ongoing credit evaluations of its customers' financial conditions. The Company generally does not require collateral.

The Company's concentration of risk related to accounts receivable and accounts payable was determined by evaluating the number of customers and vendors accounting for 10% or more of accounts receivable ("AR") and accounts payable ("AP"). As of December 31, 2022, AEye had four customers, each accounting for 10% or more of AR and two vendors, each accounting for 10% or more of AP. As of December 31, 2021, AEye had one customer accounting for 10% or more of AR and two vendors accounting for 10% or more of AP. During the years ended December 31, 2022 and 2021, the Company did not have any write offs of accounts receivable and at December 31, 2022 and 2021, did not record an allowance for doubtful accounts as all accounts receivable amounts were expected to be collected.

For the years ended December 31, 2022 and 2021, revenue from the Company's major customers representing 10% or more of total revenue was as follows:

	Twelve months ended December 31,	
	2022	**2021**
Customer A	51 %	55 %
Customer B	13 %	*
Customer C	10 %	*

*Customer accounted for less than 10% of total revenue in the period.

Fair Value of Financial Instruments

The Company defines fair value as an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. As such, fair value is a market-based measurement that is determined based on assumptions that market participants would use in pricing an asset or liability. For additional discussion on fair value of financial instruments, see Note 3.

Derivatives

The Company accounts for derivative instruments in accordance with Financial Accounting Standards Board's (FASB) Accounting Standards Codification (ASC) Topic 815, *Derivatives and Hedging* ("ASC 815"). The Company's objectives and strategies for using derivative instruments, and how the derivative instruments and related hedged items are accounted for affect the financial statements.

The Company does not use derivative instruments to hedge exposures to cash flow, market, or foreign currency risk. Terms of convertible debt instruments are reviewed to determine whether they contain embedded derivative instruments that are required under ASC 815 to be accounted for separately from the host contract and recorded on the consolidated balance sheets at fair value.

An evaluation of specifically identified conditions is made to determine whether the fair value of the derivative issued is required to be classified as equity or as a derivative liability. The fair value of derivative liabilities is required to be revalued at each reporting date, with corresponding changes in fair value recorded in current period operating results. For additional discussion of derivatives, see Note 3.

Accounts Receivable, net

Accounts receivable are recorded at the invoiced amount and do not bear interest. Amounts collected on accounts receivable are included in net cash provided by operating activities in the consolidated statements of cash flows.

If necessary, accounts receivable are reduced by an allowance for doubtful accounts, which is the Company’s best estimate of the amount of credit losses inherent in its existing accounts receivable. The Company reviews the need for an allowance for doubtful accounts quarterly based on historical experience with each customer and the specifics of each arrangement. During the years ended December 31, 2022 and 2021, the Company did not have any write-offs and at December 31, 2022 and 2021 did not record an allowance for doubtful accounts as all accounts receivable amounts are expected to be collected.

Inventories, net

Inventories consist of raw materials, work in progress, and finished goods. Inventories are stated at the lower of cost and net realizable value and costs are computed under the standard cost method. Inventories that are not expected to be consumed in the next 12 months are classified within Other noncurrent assets. Prototype inventory cost consists of the associated raw material, direct labor, indirect labor and other overhead costs. The Company evaluates the need for inventory write-downs associated with obsolete, slow moving, and non-sellable inventory by reviewing estimated net realizable values on a periodic basis and records a provision for excess and obsolete inventory to adjust the carrying value of inventory as needed. The Company's inventory as of December 31, 2022 and 2021 was written down by $833 and $1,122, respectively, in order to record inventory at its estimated net realizable value.

Deferred Transaction Costs

The Company capitalized qualified legal, accounting, and other direct costs related to the Business Combination which were deferred until completion of the Business Combination. In August 2021, upon the completion of the Business Combination, all deferred costs were offset against proceeds from the Business Combination and the private investment in public equity (“PIPE”) financing.

Property and Equipment, net

Property and equipment are stated at cost, less accumulated depreciation and amortization. Depreciation is computed using the straight-line method over the estimated useful lives of the assets, which range from 2 to7 years. Leasehold improvements are amortized over the shorter of the lease term or expected useful life of the improvements. Construction in progress is the construction or development of property and equipment that have not yet been placed in service. Maintenance and repairs are charged to expense as incurred, and improvements are capitalized. When assets are retired or otherwise disposed of, the cost and accumulated depreciation and amortization are removed from the consolidated balance sheet and any resulting gain or loss is reflected in the consolidated statements of operations and comprehensive loss in the period realized.

Impairment of Long-Lived Assets

The Company evaluates its long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to future undiscounted net cash flows expected to be generated by the asset. If such assets are impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the fair value of the assets. There are no impairment charges recorded in the consolidated statements of operations and comprehensive loss for the years ended December 31, 2022 and 2021.

Warrant Liability

The company accounts for warrants as either equity-classified or liability-classified instruments based on an assessment of the warrant's specific terms and applicable authoritative guidance. The warrants assumed in connection with the 2022 convertible note are accounted for in accordance with ASC 815-40, Derivatives and Hedging—Contracts in Entity’s Own Equity, under which the warrants do not meet the criteria for equity treatment and must be recorded as liabilities. The Private Placement Warrants issued in connection with the IPO are classified as liabilities. The Company adjusts the warrants to fair value at each reporting period. The warrant liabilities are subject to remeasurement at each balance sheet date until exercised, and any change in fair value is recognized in the consolidated statements of operations.

Leases

The Company determines if an arrangement is or contains a lease at inception. The Company evaluates the classification of leases at commencement, and, as necessary, at modification. Operating leases, consisting of office leases, are included in Right-of-use ("ROU") assets, Accrued expenses and other current liabilities, and Operating lease liabilities, noncurrent, on the Company's consolidated balance sheets. The Company did not have any finance leases as of December 31, 2022 and December 31, 2021. ROU assets represent the Company's right to 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 ROU assets and liabilities are recognized at the commencement date based on the present value of lease payments over the lease term. The operating lease ROU asset also includes any lease payments made prior to lease commencement and initial direct costs and excludes lease incentives. Variable lease payments not dependent on an index or a rate are expensed as incurred and are not included within the ROU asset and lease liability calculation. Variable lease payments primarily include reimbursements of costs incurred by lessors for common area maintenance and utilities. As most of the Company's leases do not include an implicit rate, the Company uses the incremental borrowing rate based on the estimated rate of interest for collateralized borrowing over a similar term of the lease payments at commencement date in determining the present value of future payments. The incremental borrowing rate is a hypothetical rate based on the Company's understanding of what its credit rating would be for a secured borrowing when the lease was executed. The Company's lease term includes the noncancelable period, any rent-free periods provided by the lessor, and options to extend or terminate the lease when it is reasonably certain that it will exercise that option. At lease inception, and in subsequent periods as necessary, the Company estimates the lease term based on its assessment of extension and termination options that are reasonably certain to be exercised. Operating lease expense for lease payments is recognized on a straight-line basis over the lease term and is included in operating expenses on the consolidated statements of operations and comprehensive loss. The Company elected to exclude from its balance sheets recognition of leases having a term of 12 months or less (short-term leases) and elected to not separate lease components and non-lease components for its long-term real estate leases.

Convertible Notes

The Company elected to early adopt Accounting Standards Update ("ASU") 2020-06, Debt—Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging—Contracts in Entity's Own Equity (Subtopic 815-40): Accounting for Convertible instruments and Contracts in an Entity's Own Equity ("ASU 2020-06"). The Company has elected to apply the fair value measurement option to the 2022 convertible note on the date that the Company first recognized the convertible note on September 15, 2022. The Company acknowledges that its election to apply the fair value option is irrevocable. The Company recognized costs incurred upon issuance of the 2022 convertible note as an expense in its consolidated income statement for the twelve months ended December 31, 2022. The 2022 convertible note is classified and presented as a current liability on the Consolidated Balance Sheet as of December 31, 2022. Changes in fair value are recorded in the consolidated statements of operations and changes in fair value related to credit risk are recorded in other comprehensive loss. The Company reports interest expense, including accrued interest, related to this convertible debt under the fair value option, within the change in fair value of convertible notes in the consolidated statement of operations.

Revenue Recognition

The Company generates revenues from the sale of prototypes and from development arrangements with automakers and suppliers to automakers. Under FASB ASC Topic 606, *Revenue from Contracts with Customers* ("ASC 606"), the Company accounts for such arrangements as contracts with customers and accordingly recognizes revenue by applying the following steps:

- Identification of the contract, or contracts, with a customer
- Identification of the performance obligations in the contract
- Determination of the transaction price
- Allocation of the transaction price to the performance obligations in the contract
- Recognition of revenue when, or as, the Company satisfies a performance obligation

Revenue from the sale of prototypes is generally recognized at a point in time when control of the goods is transferred. Certain prototype sales contracts include services to install and commission or customize the prototypes for customers. Revenues from these services are categorized as prototype revenue and recognized either over time as the services are being performed, or at a point in time, depending on the nature of the services and whether the criteria for recording revenue over time are met in accordance with ASC 606.

Revenue from development arrangements is either recognized at a point in time or over time depending on the performance obligations in the contract. For performance obligations that are satisfied over time, such as services which require engineering and development based on customer requirements, the Company recognizes revenue using an input method based on contract costs incurred to date compared to total estimated contract costs.

See Note 18, Revenue, for additional information related to the application of ASC 606 to the Company's primary revenue streams.

Sales taxes collected from customers and remitted to governmental authorities are accounted for on a net basis and therefore are excluded from revenues in the consolidated statements of operations and comprehensive loss.

Arrangements with Multiple 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. The consideration is allocated between separate performance obligations in proportion to their estimated standalone selling price (SSP). The SSP reflects the price the Company would charge for a specific product or service if it were sold separately in similar circumstances and to similar customers. If the selling price is not directly observable, the Company determines SSP using information that may include other observable inputs, such as the cost plus margin approach, to estimate SSP. In instances where SSP is not directly observable, the Company determines SSP using information that may include other observable inputs such as expected costs plus margin, or uses the residual approach for performance obligations whose SSP is highly variable or uncertain.

The Company provides standard product warranties for a term of typically one year to ensure that its products comply with agreed-upon specifications. Standard warranties are considered to be assurance type warranties and are not accounted for as separate performance obligations. Estimated future warranty costs are accrued and charged to cost of sales in the period that the related revenue is recognized. These estimates are based on historical warranty experience and any known or expected changes in warranty exposure, such as trends of product reliability and costs of repairing and replacing defective products. The Company assesses the adequacy of its recorded warranty liabilities on a quarterly basis and adjusts the amounts as necessary. Warranty costs are included within accrued expenses and other liabilities on the consolidated balance sheets. Refer to Note 10 for further information on warranty reserve amounts.

Other Policies, Judgments and Practical Expedients

Contract assets and liabilities. Contract assets primarily represent revenues recognized for performance obligations that have been satisfied but for which amounts have not been billed. The Company did not have any contract assets as of December 31, 2022. Contract liabilities relate to deferred revenue. Deferred revenue consists of amounts that have been invoiced and/or cash received but for which revenue has not been earned. This generally includes unrecognized revenue balances for development arrangements. Deferred revenue that will be realized during the succeeding 12-month period is recorded within current liabilities and the remaining deferred revenue is recorded as noncurrent liabilities.

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 at contract price upon product shipment or delivery.

Significant financing component. In certain arrangements, the Company receives 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 all 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 on transaction price. 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.

Contract modifications. The Company may modify contracts to offer customers additional products or services. Each of the additional products and services are generally considered distinct from those products or services transferred to the customer before the modification. The Company evaluates whether the contract price for the additional products and services reflects the standalone selling price as adjusted for facts and circumstances applicable to that contract. In these cases, the Company accounts for the additional products or services as a separate contract. In other cases where the pricing in the modification does not reflect the standalone selling price as adjusted for facts and circumstances applicable to that contract, the Company accounts for the additional products or services as part of the existing contract primarily on a prospective basis.

Judgments and estimates. Accounting for contracts recognized over time under ASC 606 involves the use of various techniques to estimate total contract revenue and costs. Due to uncertainties inherent in the estimation process, it is possible that estimates of costs to complete a contract will be revised in the near-term. The Company reviews and updates its contract-related estimates quarterly, and records adjustments as needed. For those performance obligations for which revenue is recognized using a cost-to-cost input method, changes in total estimated costs, and related progress towards complete satisfaction of the performance obligation, are recognized in the period in which the revisions to the estimates are made.

Cost of Revenue

Cost of revenue primarily consists of costs directly associated with the production of those prototypes that are held for sale and certain costs associated with development arrangements. Such costs for prototypes are direct materials, direct labor, indirect labor, warranty expense, and allocation of overhead. Direct and indirect labor includes personnel-related costs and packaging and procurement respectively associated with the production of prototypes. Other costs such as indirect manufacturing costs are recognized in research and development and general and administrative expenses on the consolidated statements of operations and comprehensive loss. Costs associated with development arrangements include the direct costs and allocation of overhead costs involved in the execution of the contract.

Research and Development Expenses

Research and development expenses include personnel costs (including salaries, benefits, bonuses, and stock-based compensation), new hardware and software materials to the extent no future economic benefits are expected, other related expenses such as lab equipment, third party development-related contractors, and allocated overhead expenses. Substantially all the R&D expenses are related to the development of new products and services, including contract development expenses. They are expensed as incurred and included in the consolidated statements of operation and comprehensive loss.

Stock-Based Compensation

The Company accounts for stock-based compensation by measuring and recognizing compensation expense for all share-based awards based on estimated grant-date fair values. The Company uses the straight-line attribution method to allocate compensation cost to reporting periods over each awardee’s requisite service period, which is generally the vesting period of the award. The Company measures nonemployee awards at the date of grant, which generally is the date at which a grantor and a grantee reach a mutual understanding of the key terms and conditions of a share-based payment award. The Company’s policy is to recognize the effect of forfeitures in the period they occur. The grant-date fair value of the restricted stock units, or “RSUs,” is equal to the fair market value of the Company’s common stock on the grant date. The grant-date fair value for stock options and stock purchase rights under the employee stock purchase plan ("ESPP") is estimated using the Black-Scholes option-pricing model. The Black-Scholes option-pricing model requires the input of subjective assumptions, including the option’s expected term and the price volatility of the underlying stock.

Stock options and RSUs for all periods prior to the Business Combination have been retroactively restated to give effect to the recapitalization. Refer to Note 2 for further discussion of the equity recapitalization resulting from the Business Combination.

Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statements carrying amounts of existing assets and liabilities and their respective tax bases, as well as net operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

The Company recognizes deferred tax assets to the extent that these assets are more likely than not to be realized. In making such a determination, the Company considers all available positive and negative evidence, including future reversals of existing taxable temporary differences, projected future taxable income, tax-planning strategies, and results of recent operations. If the Company determines that it would be able to realize deferred tax assets in the future in excess of their net recorded amount, an adjustment to the deferred tax asset valuation allowance would be made to reduce the provision for income taxes.

The Company records uncertain tax positions in accordance with FASB ASC Topic 740, *Income Taxes* (“ASC 740”) on the basis of a two-step process in which determinations are made (1) whether it is more likely than not that the tax positions will be sustained on the basis of the technical merits of the position and (2) for those tax positions that meet the more-likely-than-not recognition threshold, the Company recognizes the largest amount of tax benefit that is more than 50% likely to be realized upon ultimate settlement with the related tax authority.

The Company recognizes interest and penalties related to unrecognized tax benefits on the income tax expense line in the accompanying consolidated statements of operations and comprehensive loss. Accrued interest and penalties are included on the related tax liability line in the consolidated balance sheets. As of and for the year ended December 31, 2022 and 2021 there were no interest or penalties recorded.

Net Loss per Share

Basic net loss per share is computed using net loss available to common stockholders divided by the weighted average number of common shares outstanding during the period. Diluted net loss per share reflects the dilutive effects of stock options, restricted stock units, preferred stock, stock to be issued under the ESPP, convertible notes, and warrants outstanding during the period to the extent such securities would not be anti-dilutive and is determined using the if-converted and treasury stock methods.

The Company calculates weighted average number of common shares outstanding during the period using the Company’s Class A common stock outstanding. As the merger has been accounted for as a reverse capitalization, the consolidated financial statements of the merged entity reflects the continuation of the pre-merger AEye Technologies financial statements, which has been retroactively adjusted to the earliest period presented to reflect the legal capital of the legal acquirer, CF III. As a result, net loss per share was also restated for periods ended prior to the Business Combination. See Note 2 for details on this recapitalization and Note 16 for the retroactive restatement of net loss per share.

Basic and diluted net loss per share attributable to common stockholders was the same for all periods presented as the inclusion of all potentially dilutive securities outstanding was anti-dilutive, as AEye is currently operating in a net loss position.

Comprehensive Loss

Comprehensive loss includes all changes in equity (net assets) from non-owner sources during a period, changes in fair value due to instrument-specific credit risk, and net unrealized gains (losses) on available-for-sale debt securities.

Recent Accounting Pronouncements

In June 2016, the FASB issued ASU 2016-13, *Measurement of Credit Losses on Financial Instruments*, which has subsequently been amended by ASU No. 2018-19, ASU No. 2019-04, ASU No. 2019-05, ASU No. 2019-10, and ASU No. 2019-11. The objective of the guidance in ASU 2016-13 is to allow entities to recognize estimated credit losses in the period that the change in valuation occurs. ASU 2016-13 requires an entity to present financial assets measured on an amortized cost basis on the balance sheet net of an allowance for credit losses. Available-for-sale and held to maturity debt securities are also required to be held net of an allowance for credit losses. For public business entities, this standard is effective for fiscal years beginning after December 15, 2019. For smaller reporting companies, the standard is effective for fiscal years beginning after December 15, 2022, including interim periods within those fiscal years. Early adoption is permitted. The Company is currently evaluating the impact this standard will have on its consolidated financial statements and related disclosures and will adopt the guidance on January 1, 2023 as permitted for smaller reporting companies.

Recently Adopted Accounting Guidance

In February 2016, the FASB established Topic 842, Leases, by issuing ASU No. 2016-02. FASB ASC Topic 842, *Leases* (“ASC 842”) supersedes the previous accounting guidance for leases included within ASC 840. The new guidance generally requires an entity to recognize operating and financing lease liabilities and corresponding right-of-use assets on its balance sheet, as well as recognize the associated lease expenses on its statements of operations in a manner similar to that required under current accounting rules. The guidance requires a modified retrospective transition approach with application in all comparative periods presented (the “Comparative Method”), or alternatively, as of the effective date as the date of initial application without restating comparative period financial statements (the “Effective Date Method”).

The Company adopted the new standard on January 1, 2022 using the Effective Date Method. Upon adoption, the Company recorded net ROU assets and lease liabilities totaling approximately $16,284 and $19,921, respectively, and a reversal of deferred rent of $3,032; there were no cumulative effect adjustments as of January 1, 2022. The standard did not have a material effect on the Company's consolidated statements of operations and comprehensive loss and the consolidated statement of cash flows. The Company elected the transition practical expedient package which, among other things, allows the carryforward of historical lease classifications. The Company will continue to apply Topic 840 prior to January 1, 2022, including Topic 840 disclosure requirements, in the comparative periods presented. The company did not elect to apply the hindsight practical expedient, which permits entities to use hindsight in determining the lease term and assessing impairment of right-of-use assets.

In December 2019, the FASB issued ASU 2019-12, *Income Taxes* (Topic 740): *Simplifying the Accounting for Income Taxes*. This standard simplifies the accounting for income taxes by, among other things, eliminating certain exceptions related to the approach for intra-period tax allocation, the methodology for calculating income taxes in an interim period and the recognition of deferred tax liabilities for outside basis differences. ASU 2019-12 is effective for public business entities for fiscal years beginning after December 15, 2021. The Company adopted ASU 2019-12 as of January 1, 2022, and the Company's adoption did not have a material impact on the 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 guidance on accounting for convertible debt instruments by removing the separation models for: (1) convertible debt with a cash conversion feature; and (2) convertible instruments with a beneficial conversion feature. Also, ASU 2020-06 requires the application of the if-converted method for calculating diluted earnings per share and the treasury stock method will be no longer available. The provisions of ASU 2020-06 are applicable for fiscal years beginning after December 15, 2023 for smaller reporting companies, with early adoption permitted no earlier than fiscal years beginning after December 15, 2020. The Company adopted this standard using the modified retrospective method, effective January 1, 2022, and the Company's adoption did not have a material impact on the consolidated financial statements.

2. RECAPITALIZATION

As discussed in Note 1, on August 16, 2021, AEye Technologies and CF III closed the Business Combination, with AEye Technologies surviving the Business Combination as a wholly owned subsidiary of CF III. As part of the closing of the Business Combination, CF III changed its name to AEye, Inc. (the “Combined Entity”).

Immediately prior to the closing of the Business Combination, 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 301,000,000 shares, of which 300,000,000 shares were designated common stock, $0.0001 par value per share, and of which 1,000,000 shares were designated preferred stock, $0.0001 par value per share.

The Business Combination is accounted for as a reverse recapitalization, with no goodwill or other intangible assets recorded, in accordance with US GAAP. Under this method of accounting, AEye Technologies was treated as the accounting acquirer and CF III was treated as the acquired company for financial reporting purposes under FASB ASC Topic 805, *Business Combinations* (“ASC 805”). This determination is primarily based on AEye Technologies’ 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, AEye Technologies’ senior management comprising the senior management of the Combined Entity and AEye Technologies’ operations comprising the ongoing operations of the Combined Entity. Accordingly, for accounting purposes, the financial statements of the Combined Entity represented a continuation of the financial statements of AEye Technologies and the Business Combination was treated as the equivalent of AEye Technologies issuing stock for the net assets of CF III, accompanied by a recapitalization. The net assets of CF III are stated at historical cost, with no goodwill or other intangible assets recorded. Operations prior to the Business Combination will be those of AEye Technologies in future reports of the Combined Entity. Loss per share and stockholders’ equity (deficit), prior to the Business Combination, have been retroactively converted into 3.7208 shares (the “Exchange Ratio”).

Immediately prior to the closing of the Business Combination, all outstanding principal and unpaid accrued interest of the 2020 Notes were ultimately converted into 5,584,308 shares of AEye Technologies' common stock and subsequently converted to Class A common stock of the Company (see Note 14). Separately, each issued and outstanding share of AEye Technologies' 16,383,725 redeemable convertible preferred stock was converted into shares of AEye Technologies' common stock based on a one-to-one ratio. The consolidated financial statements are accounted for with a retrospective application of the Business Combination that results in 16,383,725 shares of redeemable convertible preferred stock converting into common stock of the Company. Upon the closing of the Business Combination, each share of AEye Technologies common stock issued and outstanding was canceled and converted into the right to receive 3.7208 shares of CF III's common stock (the "Per Share Merger Consideration").

Immediately prior to the closing of the Business Combination, the Board approved the net-exercise of common stock warrants and Series A preferred warrants which provides for the cashless exercise of 61,612 common stock warrants into 57,770 shares of AEye Technologies common stock and 7,353 Series A preferred warrants into 6,949 shares of AEye Technologies common stock at the Transaction Price of 37.21 per share. Upon the Closing, the combined 64,719 shares were cancelled and exchanged for 240,806 shares of the Company's Class A common stock, after giving effect to the Exchange Ratio.

Immediately prior to the closing of the Business Combination, CF III's amended and restated certificate of incorporation, dated November 12, 2020 (the "Charter"), was further amended and restated to eliminate the Class B common stock (after giving effect to the conversion of each outstanding share of Class B common stock immediately prior to the closing of the Business Combination into one share of Class A common stock).

PIPE Subscription Agreement

Contemporaneously with the execution of the Merger Agreement, CF III entered into separate PIPE Subscription Agreements in a private placement with a number of PIPE investors, pursuant to which the PIPE Investors agreed to purchase, and CF III agreed to sell to the PIPE Investors, an aggregate of 22,000,000 shares of common stock, for a purchase price of $10.00 per share and an aggregate purchase price of $220,000. CF III also entered into a PIPE Subscription Agreement for 500,000 shares of common stock, for a purchase price of $10.00 per share and an aggregate purchase price of $5,000 with an investor who defaulted on the Closing under the PIPE Subscription Agreement. The Company has initiated litigation to enforce the terms of that investor's PIPE Subscription Agreement.

Redemption

Certain CF III shareholders exercised their right to redeem certain of their outstanding shares for cash, resulting in the redemption of 19,355,365 shares of CF III Class A common stock for an aggregate payment of $195,498, at a redemption price of $10.10 per share based on the Trust Account balance as of August 11, 2021.

Public and Private Placement Warrants

CF III Warrants issued in connection with the IPO ("Public Warrants") and in connection with the private placement units held by the Sponsor ("Private Placement Warrants") to purchase shares of the Company's common stock, at an exercise price of $11.50 per share, remained outstanding after the closing of the Business Combination. The warrants became exercisable 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 classified as equity and valued based on the instrument's publicly listed trading price. The Private Placement Warrants are classified as liabilities and measured at fair value, with changes in fair value each period reported in the consolidated statements of operations and comprehensive loss. The Company uses the Public Warrants listed trading price to value the Private Placement Warrants each reporting period.

Transaction Costs

In connection with the Business Combination, the Company incurred direct and incremental costs of approximately $52,661 related to the 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 upon the closing of the Business Combination. Transaction costs that were not directly related to the Business Combination of approximately $2,198 were expensed.

Transaction Proceeds

Upon closing of the Business Combination, the Company received gross proceeds of $256,811 from the Business Combination and PIPE financing, offset by offerings costs of $52,661. The following table reconciles the elements of the Business Combination to the consolidated statements of cash flows and the consolidated statements of changes in stockholders' deficit for period ended December 31, 2021 (in thousands, except share data):

Cash - CF III's trust and cash (net of redemption)	$	36,811
Cash - Private offering		220,000
Less: transaction costs and advisory fees paid		(52,661)
Net Business Combination and private offering	$	204,150

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

CF III Class A common stock, outstanding prior to Business Combination	23,000,000
Less: redemption of CF III Class A common stock	19,355,365
Class A common stock of CF III	3,644,635
CF III founder shares	5,750,000
CF III Private Placement shares	500,000
CF III Shares issued in PIPE	22,000,000
Business Combination and PIPE shares	31,894,635
Legacy AEye shares	122,509,667
August 16, 2021	154,404,302

The number of Legacy AEye shares was determined as follows:

	AEye shares	**AEye shares, effected for Exchange Ratio**
Balance at December 31, 2019	11,283,838	41,984,908
Recapitalization applied to Convertible preferred stock outstanding at December 31, 2019	16,383,725	60,960,574
Exercise of common stock options - 2020	504,524	1,877,233
Repurchase of common stock - 2020	(950,352)	(3,536,070)
Exercise of common stock options - 2021 (pre-Closing)	54,859	204,119
Conversion of Convertible Notes and Accrued Interest – 2021	5,584,308	20,778,097
Exercise of common stock and Series A preferred stock warrants - 2021	64,719	240,806
Total		122,509,667

3. FAIR VALUE MEASUREMENTS

The fair value of the Company's financial assets and liabilities is determined in accordance with the fair value hierarchy established in FASB ASC Topic 820, *Fair Value Measurements and Disclosures* ("ASC 820"). ASC 820 defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. The fair value hierarchy of ASC 820 requires an entity to maximize the use of observable inputs when measuring fair value and classifies those inputs into three levels:

Level 1—Observable inputs, such as quoted prices in active markets for identical assets or liabilities.

Level 2—Observable inputs, other than Level 1 inputs, which are observable either directly or indirectly or can be corroborated by observable market data using quoted prices for similar assets or liabilities.

Level 3—Unobservable inputs in which there is little or no market data, which require the reporting entity to develop its own assumptions.

The Company's financial instruments that are not re-measured at fair value include accounts receivable, prepaid and other current assets, accounts payable, accrued expenses and other current liabilities, 2020 convertible notes, and long-term debt. The carrying values of these financial instruments approximate their fair values.

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

	Fair Value Measured as of December 31, 2022 Using:				
	Adjusted Cost	Unrealized losses	Fair Value	Cash and Cash Equivalent	Marketable Securities
Assets					
Level 1					
Money market funds	$ 14,253	$ —	$ 14,253	$ 14,253	$ —
Level 2					
Asset-backed securities	$ 3,507	$ (119)	$ 3,388	$ —	$ 3,388
Corporate bonds	22,139	(240)	21,899	—	21,899
Commercial paper	20,760	—	20,760	—	20,760
U.S. Government securities	29,983	(895)	29,088	—	29,088
Total financial assets	$ 90,642	$ (1,254)	$ 89,388	$ 14,253	$ 75,135
Liabilities					
Level 2					
Private placement warrant liability	$ —	$ —	$ 7	$ —	$ —
Level 3					
Convertible notes	—	—	8,594	—	—
Derivative warrant liability	—	—	119	—	—
Total financial liabilities	$ —	$ —	$ 9,200	$ —	$ —

	Fair Value Measured as of December 31, 2021 Using:				
	Adjusted Cost	Unrealized losses	Fair Value	Cash and Cash Equivalent	Marketable Securities
Assets					
Level 1					
Money market funds	$ 4,863	$ —	$ 4,863	$ 4,863	$ —
Level 2					
Asset-backed securities	$ 26,491	$ (68)	$ 26,423	$ —	$ 26,423
Corporate bonds	48,643	(150)	48,493	—	48,493
Commercial paper	45,145	—	45,145	—	45,145
U.S. Government securities	29,936	(173)	29,763	—	29,763
Total financial assets	$ 155,078	$ (391)	$ 154,687	$ 4,863	$ 149,824
Liabilities					
Level 2					
Private placement warrant liability	$ —	$ —	$ 155	$ —	$ —
Total financial liabilities	$ —	$ —	$ 155	$ —	$ —

As of December 31, 2022, the Company's financial assets and liabilities subject to fair value procedures were comprised of the following:

Money Market Funds: The Company holds financial assets consisting of money market funds. These securities are valued using observable inputs, such as quoted prices in active markets for identical assets or liabilities.

Marketable Securities: The Company holds financial assets consisting of fixed-income U.S. government agency securities, corporate bonds, commercial paper and asset-backed securities. The securities are valued using prices from independent pricing services based on quoted prices of identical instruments in less active or inactive markets. Additionally, quoted prices of similar instruments in active market or industry models using data inputs such as interest rates and prices that can be directly observed or corroborated in active markets are used to value marketable securities.

2022 Convertible Note: On September 15, 2022, the Company entered into a convertible note agreement with a face value of $10,500,000 (the "2022 Note"). The Company elected the fair value option to account for the 2022 Note. The fair value estimate of the 2022 Note was based on a binomial lattice model, which represents Level 3 measurements. Significant assumptions include the discount rate used in the model, remaining term, stock price, and volatility. The discount rate is derived from the estimated credit spread and the risk-free interest rate, which is based on interpolated U.S. Treasury rates, commensurate with a similar term to the Note. The remaining term is calculated as the remaining contractual term of the Note. The stock price is based on the publicly traded price of our Common Stock as of the measurement date. The Company estimated the volatility for the Note based on the historical and implied volatilities of the Company's publicly traded common stock under the symbol "LIDR." The changes in fair value are recognized in other income (expense) for each reporting period. Refer to Note 12 for details of the terms and conditions of the 2022 Note.

Derivative Warrant Liability: The Company's derivative warrant liability includes the warrants that were issued by the Company as part of the 2022 Note. The warrants are recorded on the consolidated balance sheets at fair value. The fair value is based on unobservable inputs, which represent Level 3 measurements within the fair value hierarchy. The fair value estimate of the warrants was based on a Monte-Carlo simulation model. Inherent in a Monte-Carlo simulation model are assumptions related to price, volatility, risk-free interest rate, term to expiration, and dividend yield. The price is based on the publicly traded price of our Common Stock as of the measurement date. The Company estimated the volatility for the warrants based on the historical and implied volatilities of the Company's publicly traded common stock under the symbol "LIDR." The risk-free interest rate is based on interpolated U.S. Treasury rates, commensurate with a similar term to the warrants. The term to expiration was calculated as the contractual term of the warrants of 4 years. Finally, the Company does not anticipate paying a dividend. Any changes in these assumptions can change the valuation significantly. Changes in fair value are recognized in other income (expense) for each reporting period. Derivative Warrant Liability is included within other noncurrent liabilities on the consolidated balance sheets.

Private Placement Warrant Liability: The Private Placement Warrants are recorded on the consolidated balance sheets at fair value. The fair value is based on observable Level 2 inputs, specifically, the observable input of AEye public warrants traded under the symbol "LIDRW". Any changes in the fair value of the liability are reflected in other income (expense), net, on the consolidated statements of operations and comprehensive loss. Private Placement Warrant liability is included within other noncurrent liabilities on the consolidated balance sheets.

For the years ended December 31, 2022 and 2021, there were no transfers between Level 1 and Level 2 inputs.

The following table presents a summary of the changes in fair value of the Company's Level 3 financial instruments for the year ended December 31, 2022:

	2022 Convertible Note	Derivative Warrant Liability	Total
Balance at December 31, 2021	$ —	$ —	$ —
Additions	9,512	488	10,000
Payments or conversions	(1,474)	—	(1,474)
Change in fair value included in other income (expense)	531	(369)	162
Change in fair value due to instrument specific credit risk included in other comprehensive income	25	—	25
Balance at December 31, 2022	$ 8,594	$ 119	$ 8,713

The key inputs into the binomial-lattice model for the convertible note valued at December 31, 2022 are as follows:

	December 31, 2022
Remaining term (years)	1.2
Expected volatility	90.4 %
Risk-free interest rate	4.6 %
Dividend yield	— %
Estimated credit spread	37.7 %

The key inputs into the Monte-Carlo simulation model for the derivative warrant liability valued at December 31, 2022 are as follows:

	December 31, 2022
Expected term (years)	3.7
Expected volatility	90.4 %
Risk-free interest rate	4.1 %
Dividend yield	— %
Exercise price	$ 3.50

If factors or assumptions change, the estimated fair values could be materially different. The value of the Company’s derivative warrant liability would increase if a higher risk-free interest rate was used, and would decrease if a lower risk-free interest rate was used. Similarly, a higher volatility assumption would increase the value of the liability, and a lower volatility assumption would decrease the value of the liability. The value of the Company's convertible note liability would increase if a lower discount rate was used, and would decrease if a higher discount rate was used.

4. CASH, CASH EQUIVALENTS, AND RESTRICTED CASH

Cash, cash equivalents (which consists entirely of money market funds) and restricted cash as of December 31, 2022 and 2021 were as follows (in thousands):

	As of December 31,	
	2022	2021
Cash and cash equivalents	$ 19,064	$ 14,183
Restricted cash	2,150	2,150
Total cash, cash equivalents, and restricted cash	$ 21,214	$ 16,333

5. INVENTORIES

Inventory, net of write-downs, as of December 31, 2022 and 2021 were as follows (in thousands):

	As of December 31,	
	2022	2021
Raw materials	$ 2,022	$ 1,544
Work in-process	2,484	2,447
Finished goods	47	94
Total inventory, net	$ 4,553	$ 4,085

The Company also had $1,491 and $0 of non-current inventory (raw materials) classified within Other noncurrent assets on the consolidated balance sheet as of December 31, 2022 and December 31, 2021, respectively.

6. PREPAID AND OTHER CURRENT ASSETS

Prepaid and other current assets as of December 31, 2022 and 2021 were as follows (in thousands):

	As of December 31,	
	2022	2021
Prepaid expenses	$ 4,203	$ 3,980
Demonstration units	281	224
Advances to suppliers	984	745
Other	713	102
Total prepaid and other current assets	$ 6,181	$ 5,051

7. LEASES

The Company primarily leases office facilities in Northern California under noncancelable operating leases expiring at various dates through November 2026. Some of the Company's leases include options to renew, with renewal terms that, if exercised by the Company, extend the lease term from two to five years. The exercise of these renewal options is at the Company's discretion. The Company's lease agreements do not contain any material terms and conditions of residual value guarantees or material restrictive covenants. The Company's short-term lease expense was determined to not be material.

The components of operating lease expenses for the twelve months ended December 31, 2022 were as follows (in thousands):

	Twelve months ended December 31, 2022
Operating lease cost	$ 2,382
Variable lease cost	241
Total operating lease cost	$ 2,623

Supplemental cash flow information for the twelve months ended December 31, 2022 were as follows (in thousands):

	December 31, 2022
Cash paid for operating leases included in operating cash flows	$ (1,341)

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

		December 31, 2022
Operating lease right-of-use assets	$	15,502
Operating lease liabilities:		
Operating lease liabilities, current	$	2,455
Operating lease liabilities, non-current		16,681
Total operating lease liabilities	$	19,136

	December 31, 2022
Weighted average remaining lease term (in years)	9.26
Weighted average discount rate	5.35 %

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

Years ended - December 31:		
2023	$	2,516
2024		2,570
2025		2,583
2026		2,660
2027		2,701
Thereafter		11,116
Total lease payments		24,146
Less amount to discount to present value		(5,010)
Present value of lease liabilities	$	19,136

Disclosures under ASC 840, Leases

The company recognizes rent expense on a straight-line basis over the lease period. Rent expense is principally the leased office space and was $1,876 within operating expenses in the consolidated statements of operations and comprehensive loss for the twelve months ended December 31, 2021. Deferred rent liabilities, including unamortized leasehold improvement incentives was $3,637 as of December 31, 2021 within the consolidated balance sheet.

Future minimum payments as of December 31, 2021 under the noncancellable operating leases are as follows (in thousands):

	Operating Leases
Years ended:	
2022	2,393
2023	2,341
2024	2,412
2025	2,484
2026 and after	2,340
Total minimum lease payments	11,970

8. PROPERTY AND EQUIPMENT, NET

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

	As of December 31,	
	2022	**2021**
Machinery and equipment	$ 2,528	$ 1,444
Computers, software and related equipment	432	268
Office furniture and equipment	651	341
Vehicles	846	342
Leasehold improvements	4,830	4,725
Construction in progress	1,401	213
Total property and equipment	10,688	7,333
Less accumulated depreciation and amortization	(3,023)	(2,204)
Property and equipment, net	$ 7,665	$ 5,129

Depreciation and amortization expense related to property and equipment amounted to $1,422 and $1,014 recognized within research and development, sales and marketing, and general and administrative expenses within the consolidated statements of operations and comprehensive loss for the years ended December 31, 2022 and 2021. $604 of property and equipment was disposed in the year ended December 31, 2022. Disposals of property and equipment were not material the year ended December 31, 2021.

9. OTHER NONCURRENT ASSETS

Other noncurrent assets as of December 31, 2022 and 2021 were as follows (in thousands):

	As of December 31,	
	2022	**2021**
Non-current inventory	$ 1,491	$ —
Long-term prepaid expenses	901	1,376
Security deposits	81	133
Total other noncurrent assets	$ 2,473	$ 1,509

10. ACCRUED EXPENSES AND OTHER CURRENT LIABILITIES

Accrued expenses and other current liabilities as of December 31, 2022 and 2021 were as follows (in thousands):

	As of December 31,	
	2022	2021
Accrued purchases and other	$ 4,092	$ 1,947
Operating lease liabilities - current	2,455	—
Accrued bonuses	1,022	3,408
Accrued payroll	1,148	957
Accrued payroll taxes	526	1,547
Warranty reserve	480	275
Income tax payable	41	—
Deferred rent - current	—	605
Total accrued expenses and other current liabilities	$ 9,764	$ 8,739

11. BORROWINGS

Silicon Valley Bank Financing Facility

On April 26, 2021, the Company entered into a loan and security agreement (the “Loan Agreement”) with an affiliate of Silicon Valley Bank (“SVB” or the “Lender”) in connection with the non-binding term sheet for a financing facility of up to $10,000 entered into on March 18, 2021. Under the Loan Agreement, the Lender was obligated to make a term loan advance to the Company of $4,000. Subject to the terms and conditions of the Loan Agreement and, upon the Company’s request, the Lender was obligated to make one term loan advance to the Company of $6,000. The interest rate on the term loan advance is calculated at 8% per annum and payable monthly, in arrears. Upon entering the Loan Agreement, $4,000 was drawn. On May 13, 2021, the additional $6,000 was drawn. The balance of $10,540 for the financing facility, including interest, was repaid on August 20, 2021.

Silicon Valley Bank Credit Facility

On August 16, 2019, the Company entered into a loan and security agreement with SVB. Borrowings under this facility are secured by substantially all the Company’s assets, excluding intellectual property. The term loan’s borrowings are subject to certain financial covenants and restrictions. The Company complied with all financial covenants and restrictions.

The balance of $2,333 for the term loan was repaid on September 7, 2021.

Paycheck Protection Program (PPP) Loan

On June 19, 2021, the Company received notice of the Paycheck Protection Program (PPP) forgiveness payment made to SVB by the Small Business Administration in the amount of $2,270 in principal and $27 in interest. This amount represents the forgiveness of the total PPP loan the Company received in 2020 under the PPP Loan provisions of the Coronavirus Aid, Relief and Economic Security (CARES) Act.

As of December 31, 2022 and 2021, there were no borrowings outstanding.

12. CONVERTIBLE NOTES

2020 Convertible Notes

During 2020, the Company entered into various convertible note agreements (“2020 Notes”) under which the Company may issue convertible equity instruments having an aggregate principal amount of up to $40,000, a 3% accruing dividend (“accrued interest”) and a maturity date of October 31, 2021.

In connection with the Business Combination on August 16, 2021, all outstanding principal of $38,045 and unpaid accrued interest on the 2020 Notes were converted into AEye Technologies’ preferred stock and subsequently were converted into 20,778,097 shares of the Company's Class A common stock. Accordingly, at December 31, 2022 and December 31, 2021, the convertible notes balance was $0.

2022 Convertible Note

On September 14, 2022, the Company entered into a Securities Purchase Agreement with an investor allowing for the sale and issue of two convertible notes, each with a principal balance of $10,500 and cash proceeds of $10,000, for a total of $20,000 in proceeds between the two issuances (each, a "Note Closing"). The first Note Closing ("First Closing") occurred on September 15, 2022, and the Company entered into a Senior Unsecured Convertible Note with the investor pursuant to which the Company issued to the investor one convertible note ("2022 Note") with a principal balance of $10,500 for cash proceeds of $10,000. As part of the First Closing, the Company also issued warrants to the investor - see Note 14 for further details. The second Note Closing ("Second Closing") may occur, at the Company's option, no earlier than the ninetieth (90th) calendar day after the First Closing, provided that the Company meets certain equity conditions. Additional warrants would be issued to the investor upon the Second Closing.

The 2022 Note bears interest at an annual rate of 5.0%, in addition to an original issue discount of 4.76%, and has a maturity date of March 15, 2024 ("Maturity Date"). The interest may be settled in cash or shares at the option of the Company and is payable together with monthly redemptions of the outstanding principal amount of the Note.

Beginning December 15, 2022, and the first of each subsequent month (each a "Monthly Redemption Date" or an "Installment Date"), the Company shall redeem the Monthly Redemption Amount until the 2022 Note is fully redeemed, payable in cash or, so long as certain equity conditions are met, shares of Common Stock at the option of the Company. The equity conditions that must be met in order for the Company to settle the Monthly Redemption Amount in shares include requirements for the daily volume weighted average price of the Company's Common Stock to exceed $0.33 and the average daily trading volume of the Company's Common Stock to exceed $500,000 for the twenty (20) trading days prior to the applicable Installment Notice Date (which is the sixth (6^{th}) trading day prior to each Installment Date). The Monthly Redemption Amount, in most instances, will be $1/15^{th}$ of the original principal amount, plus any amount accelerated pursuant to the 2022 Note, accrued but unpaid interest, and late fees, if any. If the Company elects to settle such redemptions in shares of Common Stock, the number of shares to be settled shall be based on an Installment Conversion Price equal to the lower of (i) $2.50 or (ii) 95% of the lowest daily volume weighted average price of the Common Stock during the five (5) trading days immediately preceding the applicable Monthly Redemption Date. If the Company elects to settle redemptions in cash, the Monthly Redemption Amount shall include a 5% premium.

The investor is permitted to accelerate up to four (4) Monthly Redemption Amounts in any calendar month (each, an "Acceleration," and each such amount, an "Acceleration Amount", and the Conversion Date of any such Acceleration, each an "Acceleration Date") at the Acceleration Conversion Price, subject to a $2,800 limit per month. The Acceleration Conversion Price shall be the lower of (i) the Installment Conversion Price for such current Installment Date or (ii) the greater of $0.30 and 95% of the lowest daily volume weighted average price of the Common Stock during the five (5) trading days immediately preceding the Acceleration Date.

If, at any time while the 2022 Note is outstanding, the Company carries out one or more capital raises in excess of $5,000 in gross proceeds each, the investor shall have the right to require the Company to first use up to 30% of the gross proceeds of each capital raise to redeem all or a portion of the 2022 Note for an amount in cash (such amount, the "Mandatory Redemption Amount") equal to the sum of (a) 1.05 multiplied by the sum of the principal amount subject to the Mandatory Redemption and accrued but unpaid interest and (b) 1.00 multiplied by the sum of the Make-Whole amount, if any, and any other amounts, if any, then owing to the investor in respect of the 2022 Note (a "Mandatory Redemption"). The Make-Whole amount is defined as an amount equal to the additional interest that would accrue under the 2022 Note assuming for calculation purposes that the principal of the 2022 Note remained outstanding through the Maturity Date.

The 2022 Note may not be converted into Common Stock to the extent such conversion would result in the investor and its affiliates having beneficial ownership of more than 9.99% of our then outstanding shares of Common Stock.

The Company and investor entered into a registration rights agreement (the "Registration Rights Agreement") to which the Company is required to file a registration statement registering the resale by the investor of any shares of the Company's common stock issuable upon conversion, including the resale of shares issuable upon exercise of the associated warrants. The Company is required to meet certain obligations with respect to the timeliness of the filing and effectiveness of the registration statement. The Company filed such registration statement on October 19, 2022, which was declared effective by the U.S. Securities and Exchange Commission on October 27, 2022.

The Company elected to apply the fair value option to the measurement of the 2022 Note. As a result of adopting the fair value option no embedded derivatives should be bifurcated from the 2022 Note. The Company classifies the 2022 Note as a liability at fair value and will remeasure the 2022 Note to fair value at each reporting period. The total proceeds received from the investor of $10,000 should be allocated between the 2022 Note and the related warrants issued using the relative fair value method at issuance date. This resulted in an initial fair value of $9,512 being allocated to the 2022 Note, and $488 allocated to the associated warrants (see Note 3 for further details). The Company recorded total issuance costs of $474, representing placement agent and legal fees, within Interest expense and other on the consolidated statement of operations. The fair value measurement includes the assumption of accrued interest and expense and thus a separate amount is not reflected on the consolidated statement of operations.

As of December 31, 2022, the 2022 Note has outstanding principal of $9,200 and is recorded as a current liability at fair value of $8,594.

The Company evaluated the Second Closing and associated warrants to be a contingently issuable financial asset with a fair value of zero at inception in accordance with ASC 815-40 *Contracts in an Entity's own Equity.* The contingently issuable warrants are considered issued for accounting purposes - see Note 14 for further details.

Embedded Derivative Liability

As outlined in the indenture governing the 2020 Notes, the 2020 Notes are automatically convertible, contingent upon the occurrence of certain events, most notably a financing (a “Next Financing”), defined as the issuance and sale of additional preferred stock (“Financing Stock”). The redemption price is defined as a price per share equal to 90% of the price per share paid by the other purchasers of the Financing Stock sold in the Next Financing. The 2020 Notes are redeemable into the number of shares of Financing Stock needed to settle the aggregate amount of principal and unpaid interest owed to the holder of such notes, which is based on the ultimate price per share associated with the Financing Stock. Consequently, the 2020 Notes are considered stock settled debt.

This redemption feature embedded in the 2020 Notes is considered to be a derivative that is required to be separately accounted for at fair value and subsequently remeasured to fair value at each reporting date. Accordingly, upon issuance of the 2020 Notes, the Company recognized the fair value associated with the embedded derivative which resulted in an embedded derivative liability of approximately $1,520, with an equal and offsetting debt discount. Upon the closing of the Business Combination on August 16, 2021, the embedded derivative was settled. Accordingly, at December 31, 2022 and December 31, 2021, the fair value of the embedded derivative liability was $0.

13. INTEREST EXPENSE AND OTHER

Interest expense and other for the years ended December 31, 2022 and 2021 consisted of the following (in thousands):

	Twelve months ended December 31,	
	2022	**2021**
Interest on term loan debt	$ —	$ 630
Interest on PPP loan	—	11
Interest on 2020 convertible note	—	700
Amortization of debt issuance costs	—	725
2022 convertible note issuance costs	474	—
Amortization of debt discount	—	752
Amortization of premiums on marketable securities, net of accretion of discounts	778	456
Realized losses on redemptions of marketable securities	77	—
Common stock purchase agreement transaction costs	29	1,583
Other	21	—
Interest expense and other	$ 1,379	$ 4,857

14. STOCKHOLDERS' EQUITY

The Company is authorized to issue 300,000,000 shares of common stock, par value $0.0001 per share. As of December 31, 2022, the Company had 163,099,124 shares of common stock issued and outstanding.

Class A Common Stock — Class A common stock has the following rights:

Voting rights: Each holder of Class A common stock will be entitled to one (1) vote in person or by proxy for each share of the Class A common stock held of record by such holder. The holders of shares of the Class A common stock will not have cumulative voting rights. Except as otherwise required in the Amended Charter or by applicable law, the holders of the Class A common stock vote together as a single class on all matters on which stockholders are generally entitled to vote.

Dividend rights: Subject to any other provisions of the Amended Charter, each holder of Class A common stock will be entitled to receive, in proportion to the number of shares of the Class A common stock held, such dividends and other distributions in cash, stock or property of the Company when, as and if declared thereon by the Board from time to time out of assets or funds of the Company legally available therefor.

Rights upon liquidation: In the event of any liquidation, dissolution or winding up (either voluntary or involuntary) of the Company, after payments to creditors of the Company that may at the time be outstanding, and subject to the rights of any holders of the Company preferred stock that may then be outstanding, holders of shares of the Class A common stock will be entitled to receive ratably, in proportion to the number of shares of the Class A common stock held by them, all remaining assets of the Company available for distribution.

Preferred Stock — The Company has the authority, without stockholder approval, to issue shares of preferred stock from time to time on terms it may determine, to divide shares of preferred stock into one or more class or series and to fix for each such class or series the designations, preferences, privileges, and restrictions of preferred stock, including dividend rights, conversion rights, voting rights, terms of redemption, liquidation preference, and the number of shares constituting any series or the designation of any series to the fullest extent permitted by the Delaware General Corporation Law. The issuance of the Company's preferred stock could have the effect of decreasing the trading price of the Class A common stock, restricting dividends on the capital stock of the Company, diluting the voting power of the Class A common stock, impairing the liquidation rights of the capital stock of the Company, or delaying or preventing a change in control of the Company. Although the Company does not currently intend to issue any shares of preferred stock, the Company may choose to do so in the future.

As discussed in Note 2, Recapitalization, the Company has retroactively adjusted the preferred shares issued and outstanding prior to August 16, 2021 to give effect to the Exchange Ratio established in the Merger Agreement to determine the number of shares of common stock into which they were converted.

Upon the Closing on August 16, 2021, all of the outstanding shares of preferred stock were cancelled and exchanged for shares of the surviving Company's Class A common stock at the Exchange Ratio of 3.7208, the exchange rate established in the Merger Agreement.

	August 16, 2021 (Closing)		
	Preferred stock shares	**Exchange ratio**	**Common stock shares**
Series A Convertible preferred stock (pre-combination)	9,226,734	3.7208	34,330,838
Series B Convertible preferred stock (pre-combination)	7,156,991	3.7208	26,629,736
Total	16,383,725		60,960,574

The Company is authorized to issue up to 1,000,000 shares of preferred stock, each with a par value of $0.0001 per share. As of December 31, 2022, no shares of preferred stock were issued and outstanding.

Warrants — As of December 31, 2022, the Company had 166,666 Private Placement warrants and 7,666,656 Public warrants outstanding. Each warrant entitles the registered holder to purchase one share of the Company's common stock at a price of $11.50 per share.

On September 15, 2022, in connection with the issuance of the 2022 Note, the Company issued warrants to the investor. The warrants are immediately exercisable and entitle the investor to purchase up to 1,750,000 shares of Common Stock at a price of $3.50 per share, subject to a four (4) year term. As of December 31, 2022, no shares were exercised pursuant to the warrants.

Contingent Warrants - As of December 31, 2022, the Company had 1,750,000 contingently issuable warrants outstanding associated with the potential Second Closing under the Securities Purchase Agreement. These warrants will become exercisable by the investor if and when the Second Closing occurs. They will entitle the investor to purchase up to 1,750,000 shares of Common Stock at a price of $3.50 per share, subject to a four (4) year term.

Tumim Stone Common Stock Purchase Agreement — On December 8, 2021, the Company entered into a Common Stock Purchase Agreement (the “CSPA”) and a Registration Rights Agreement with Tumim Stone Capital LLC (“Tumim Stone”). Under the terms and subject to the conditions of the CSPA, the Company has the right, but not the obligation, to sell to Tumim Stone, and Tumim Stone is obligated to purchase up to the lesser of (i) $125,000 of the Company’s common stock, or (ii) the Exchange Cap equal to 19.99% of the shares of the Company’s common stock outstanding immediately prior to the execution of the CSPA, unless the Company’s stockholders approve the issuance of shares in excess of the Exchange Cap, or the average price of all applicable sales of common stock to Tumim Stone under the CSPA equals or exceeds $4.9485. Upon the satisfaction of various commencement conditions, such as the filing of the registration statement which provides for the resale of such shares pursuant to the Registration Rights Agreement, the Company has sole discretion to initiate such sales of common stock over the period of 36 months commencing December 8, 2021. In all instances, the Company may not sell shares of its common stock to Tumim Stone under the CSPA if doing so would result in Tumim Stone beneficially owning more than 9.99% of its common stock.

The purchase price per share to be purchased by Tumim is equal to the volume-weighted average price for common stock on the applicable purchase date multiplied by 0.9615 (to be adjusted for any reorganization, recapitalization, non-cash dividend, stock split, reverse stock split, or similar transaction). The maximum number of shares the Company may sell to Tumim Stone on any single business day is the lesser of (i) $20,000 divided by the closing sale price of the common stock on the trading day immediately preceding the purchase date, and (ii) 0.15 multiplied by the average daily trading volume in common stock for the three trading days preceding the purchase date.

In connection with the CSPA, the Company issued to Tumim Stone 302,634 restricted common shares in the Company. At issuance, the 302,634 shares of common stock had a fair value of $1,583 and were recorded to Interest expense and other in the Company’s consolidated statements of operations and comprehensive loss. The Company determined that the right to sell additional shares represents a freestanding put option under ASC 815 *Derivatives and Hedging*, and as such, the financial instrument was classified as a derivative asset with a fair value of zero at inception of the CSPA on December 8, 2021.

On May 6, 2022, the Company filed a Registration Statement on Form S-1, which relates to the offer and resale of up to 30,865,419 shares of AEye's common stock by to Tumim Stone, the selling stockholder. During the twelve months ended December 31, 2022, the company issued 1,145,000 shares of its common stock under the CSPA for proceeds of $2,891.

15. ACCUMULATED OTHER COMPREHENSIVE LOSS

The changes in accumulated other comprehensive loss by component for the twelve months ended December 31, 2022 and 2021 are as follows (in thousands):

	Unrealized gains (losses) on available-for-sale securities	Change in fair value due to instrument-specific credit risk	Total
Balance at December 31, 2020	$ —	$ —	$ —
Other comprehensive loss, net of tax	(391)	—	(391)
Balance at December 31, 2021	(391)	—	(391)
Other comprehensive loss before reclassifications, net of tax	(940)	(25)	(965)
Amounts reclassified from accumulated other comprehensive loss, net of tax	77	—	77
Net other comprehensive loss	(863)	(25)	(888)
Balance at December 31, 2022	$ (1,254)	$ (25)	$ (1,279)

The $77 reclassified out of accumulated other comprehensive loss in the twelve months ended December 31, 2022 is included within Interest expense and other on the consolidated statement of operations.

16. NET LOSS PER SHARE

The following table sets forth the basic and diluted net loss per share attributable to common stockholders for the periods presented (in thousands, except per share data):

	Twelve months ended December 31,	
	2022	2021
Numerator:		
Net loss attributable to common stockholders	$ (98,714)	$ (65,011)
Denominator:		
Weighted average common shares outstanding- Basic	157,368,707	109,055,894
Dilutive effect of potential common shares	—	—
Weighted average common shares outstanding- Diluted	157,368,707	109,055,894
Net loss per share attributable to common stockholders - Basic and Diluted	$ (0.63)	$ (0.60)

Due to net losses for the years ended December 31, 2022 and 2021, basic and diluted net loss per share were the same, as the effect of all potentially dilutive securities would have been anti-dilutive. The following table sets forth the anti-dilutive common share equivalents for the periods listed:

	Twelve months ended December 31,	
	2022	2021
Warrants	9,583,322	7,833,332
Common stock options issued and outstanding	25,393,540	29,238,432
Unvested restricted stock units	12,771,096	7,434,743
Conversion of convertible notes	16,293,602	—
ESPP	2,000,000	—
Total	66,041,560	44,506,507

17. STOCK-BASED COMPENSATION

The Company has four equity incentive plans, the 2014 US LADAR Inc. Equity Incentive Plan (the “2014 Plan”), the 2016 Stock Plan (the “2016 Plan”), the 2021 Equity Incentive Plan (the “Incentive Plan”) and the 2022 Employee Stock Purchase Plan (the "ESPP"). On August 16, 2021, the Company’s 2014 Plan and 2016 Plan were terminated in connection with the closing of the Business Combination as defined in Note 1, but continue to govern the terms of outstanding equity awards that were granted prior to the termination of the plans.

2014 Plan and 2016 Plan

The 2014 and 2016 Plan provide for the grant of incentive stock options to employees only and non-statutory stock options and RSUs to employees, directors, and consultants of the Company. As of August 16, 2021, the Company no longer grants equity awards pursuant to the 2014 Plan or 2016 Plan, and as of December 31, 2022, 1,741,689 RSUs were granted.

Under the 2016 Plan, options to purchase common stock generally vest over four years with 25% vesting at the end of the first year and the rest vesting ratably over the next three years. RSUs generally vest 25% at the end of the first year with the remaining RSUs vesting ratably over the next three years or they vest ratably over the four years. Under the 2014 Plan, the vesting period for options to purchase common stock range from immediate to four years. Under each plan, the options expire ten years from the date of grant.

In connection with the Closing on August 16, 2021, $1,500 was paid to a former executive as consideration for repurchasing 542,615 of his vested options under the Company's 2016 Plan.

2021 Equity Incentive Plan

The Incentive Plan became effective immediately upon the Closing on August 16, 2021 and initially reserved 15,440,430 shares of common stock for issuance thereunder. The Incentive Plan includes an evergreen provision that provides for an annual increase in the number of shares of common stock available for issuance thereunder beginning on January 1, 2022 and ending on January 1, 2032, equal to 5% of the shares of the Company’s common stock outstanding on December 31, 2021 for the first year and by 3% of the total number of shares of common stock outstanding on December 31 of the preceding calendar year for each year thereafter, or a lesser number of shares as determined by the Board of Directors. After January 1, 2022, the Board of Directors authorized the addition of 7,743,413 shares of common stock to be added to the Incentive Plan for issuance.

Under the Incentive plan, RSU’s vest depending on their vesting schedule. For newly hired employees, RSU’s generally vest 25% during the quarterly release date following the recipient’s one year anniversary of their start date. The remaining amounts generally vest quarterly over the next three years. For existing employees, these RSUs generally vest quarterly over three years. The fair value of the RSU is equal to the fair value of the Company’s common stock on the date of grant.

As of December 31, 2022, 17,891,938 RSUs were granted to certain individuals under the Incentive Plan.

2022 Employee Stock Purchase Plan

On May 10, 2022, the Company's stockholders approved the 2022 Employee Stock Purchase Plan (the "ESPP"), authorizing 2,000,000 shares of common stock to be reserved for issuance under the ESPP. The number of shares reserved and available for issuance under the ESPP shall be cumulatively increased by the 1% of the number of shares issued and outstanding on December 31 of the preceding calendar year for each year thereafter, or a lesser number of shares as determined by the Board of Directors. The ESPP provides an offering period of 24 months, with four purchase periods that are generally six months long and end on April 30 and October 31 of each year. The first purchase period to the Company's employees to purchase shares under the ESPP began on November 1, 2022. Each employee who is a participant in the ESPP may purchase shares by authorizing contributions at a minimum of 1% up to a maximum of 10% of his or her compensation for each pay period, to a maximum of $15 per purchase period and $25 per year, which will then be used to purchase shares on the last business day of the purchase period at a price equal to 85% of the fair market value of common stock on the offering date or the exercise date whichever is less.

During the year ended December 31, 2022, no shares were purchased under the ESPP. As of December 31, 2022, the Company has withheld $188 of contributions from its employees.

A summary of stock option activity related to the Plans as of December 31, 2022 is as follows:

	Outstanding Stock Options	Weighted Average Exercise Price	Weighted Average Contractual Life (Years)	Aggregate Intrinsic Value
Balance at December 31, 2021	29,238,432	$ 0.48	7.35	$ 127,345
Granted	—	—		
Exercised	(3,219,957)	0.36		
Forfeited	(569,123)	0.60		
Expired	(55,812)	0.17		
Repurchased	—	—		
Balance at December 31, 2022	25,393,540	$ 0.49	6.45	$ 2,277
Vested and expected to vest as of December 31, 2022	25,393,540	$ 0.49	6.45	$ 2,277
Vested and exercisable as of December 31, 2022	20,356,221	$ 0.47	6.14	$ 2,277

The aggregate intrinsic value is the difference between the current fair value of the underlying common stock and the exercise price for in-the-money stock options. The Company did not grant any options during the years ended December 31, 2022 and 2021.

The following table summarizes the RSU award activity under the Plans:

	Shares	Weighted Average Grant date Fair Value per Share
Unvested at December 31, 2021	7,434,743	$ 5.80
Granted	11,719,867	3.49
Forfeited	(2,475,483)	4.37
Vested	(3,908,031)	4.99
Unvested at December 31, 2022	12,771,096	$ 4.00

The total fair value of RSUs that vested during the year ended December 31, 2022 was $10,992.

Stock-Based Compensation Expense —The following table summarizes stock-based compensation expense recorded in each component of operating expenses in the Company's consolidated statements of operations and comprehensive loss for the year ended December 31, 2022 and 2021 (in thousands):

	Twelve months ended December 31,	
	2022	2021
Research and development	$ 7,201	$ 2,175
Sales and marketing	4,696	1,381
General and administrative	11,931	6,462
Cost of revenue	131	—
Total stock-based compensation	$ 23,959	$ 10,018

As of December 31, 2022, the Company had $5,418 of unrecognized compensation expense for related stock option grants. This cost is expected to be recognized over an estimated weighted average period of 1.35 years. The total unrecognized compensation expense for RSUs was $47,007 as of December 31, 2022 which is expected to be recognized over an estimated weighted average period of 2.44 years. The total unrecognized compensation expense for the ESPP was $1,152 as of December 31, 2022 which is expected to be recognized over an estimated weighted average period of 1.83 years.

The Company uses the Black-Scholes option-pricing model to estimate the grant-date fair value of ESPP purchase rights, which requires the input of subjective assumptions such as expected term, expected stock price volatility, risk-free interest rate and dividend yield as discussed below. The fair value of each of the four purchase periods is estimated separately.

Expected Term—The expected term for ESPP is the length of time from the grant date to the date on which the stock is purchased by the employees.

Expected Volatility—Expected volatility is estimated using a combination of the average historical volatility of the Company's own stock and those of comparable companies' stock.

Risk-Free Interest Rate—The risk-free interest rates are based on US Treasury yields in effect at the grant date for notes with comparable terms as the awards.

Dividend Yield—The expected dividend-yield assumption is based on the Company's current expectations about its anticipated dividend policy.

The following table summarizes the range of valuation assumptions used in estimated the fair value of the ESPP during the period:

	Year Ended December 31, 2022
Expected term (years)	0.5 - 2
Expected volatility	94.8% - 105.3%
Risk-free interest rate	4.5% - 4.8%
Dividend yield	— %

18. REVENUE

Sale of Prototypes

The Company recorded revenue for prototype sales of $1,743 and $1,004 in 2022 and 2021 respectively. The Company does not incur significant contract costs in fulfilling or obtaining their contracts with customers.

Development Contracts

The Company has entered into research and development contracts with companies primarily in the automotive industry. The Company assessed the number of performance obligations associated with the promises under each agreement, primarily the delivery of customized 4Sight^{TM} perception-related goods and services, and recognized $1,904 and $2,003 in revenue for performance obligations satisfied during years ended 2022 and 2021 respectively, in the consolidated statements of operations and comprehensive loss.

Disaggregation of Revenue

The Company recognized the following revenues by geographic area based on the primary billing address of the customer and by the timing of the transfer of goods or services to customers (point in time or over time), as it believes such criteria best depict how the nature, amount, timing and uncertainty of its revenue and cash flows are affected by economic factors. Total revenue based on the disaggregation criteria described above are as follows (in thousands):

	Twelve months ended December 31,	
	2022	2021
Revenue by primary geographical market:		
United States	$ 2,471	$ 2,215
Germany	65	536
Europe	855	111
Asia	256	145
Total	$ 3,647	$ 3,007
Revenue by timing of recognition:		
Recognized at a point in time	$ 1,982	$ 2,991
Recognized over time	1,665	16
Total	$ 3,647	$ 3,007

Contract Liabilities

Contract liabilities consisted of the following as of December 31, 2022 and 2021 (in thousands):

	As of December 31,	
	2022	2021
Contract liabilities, current	$ 987	$ 2,287
Contract liabilities, noncurrent	—	631
Total	$ 987	$ 2,918

Contract liabilities, noncurrent are included in other noncurrent liabilities on the consolidated balance sheet.

The following table shows the significant changes in contract liabilities balance as of December 31, 2022 and 2021 (in thousands):

	Twelve months ended December 31,	
	2022	2021
Beginning balance	$ 2,918	$ 660
Revenue recognized that was included in the contract liabilities beginning balance	(1,931)	(570)
Increase due to cash received and not recognized as revenue and billings in excess of revenue recognized during the period	—	2,828
Ending balance	$ 987	$ 2,918

Remaining Performance Obligations

Revenue allocated to remaining performance obligations represents the transaction price allocated to the performance obligations that are unsatisfied, or partially unsatisfied. It includes unearned revenue and amounts that will be invoiced and recognized as revenue in future periods and does not include contracts where the customer is not committed. The customer is not considered committed where they are able to terminate for convenience without payment of a substantive penalty under the contract. Additionally, as a practical expedient, the Company has not disclosed the value of unsatisfied performance obligations for contracts with an original expected length of one year or less. The contract liabilities balance represents the remaining performance obligations for contracts with an original duration of greater than one year.

19. EMPLOYEE BENEFIT PLAN

Employees of the Company may participate in the AEYE, Inc. 401(k) Plan (the "401(k) Plan"), a defined contribution plan, which qualifies under Section 401(k) of the Internal Revenue Code. Participating employees may contribute into a traditional plan with pretax salary or into a Roth plan with after tax salary up to statutory limits. In 2022, the 401(k) Plan provides for Company safe harbor matching contributions of 100% of the employee contribution, up to 5% of each employee's earnings, which vest upon the first day of employment. In 2021, the 401(k) Plan provided for Company safe harbor matching contributions of 100% of the first 3% of employee earnings, and 50% of the next 2% of earnings. The Company made contributions of $1,177 and $565 for the years ended December 31, 2022 and 2021, respectively.

20. INCOME TAXES

For the years ended December 31, 2022 and 2021, the Company recognized $58 and $0 provision for income taxes, respectively. The provision for the year ended December 31, 2022 was comprised of $9 and $49 in state and foreign taxes, respectively. Utilization of net operating loss carryforwards, tax credits, and other attributes may be subject to future annual limitations due to the ownership change limitations provided by Section 382 of the Internal Revenue Code and similar state provisions.

The following table presents a reconciliation of the federal statutory rate of 21.0% to our effective tax rate for the periods presented:

	Twelve months ended December 31,	
	2022	2021
U.S. federal tax benefit at statutory rate	21.0 %	21.0 %
State income taxes, net of federal benefit	0.0 %	11.8 %
Non-deductible expenses and other	(1.0)%	(0.3)%
Stock-based compensation	(2.3)%	(1.1)%
Research and development credits	3.5 %	1.2 %
Transaction Cost	0.0 %	3.9 %
Foreign rate differential	(4.1)%	(3.1)%
Change in valuation allowance, net	(17.2)%	(33.4)%
Effective tax rate	(0.1)%	0.0 %

For 2022 and 2021, our effective tax rate differs from the amount computed by applying the statutory federal and state income tax rates to net loss before income tax, primarily as the result of state income taxes, R&D credits and changes in our valuation allowance.

Significant components of the Company’s deferred tax assets as of December 31, 2022 and December 31, 2021 are presented below:

	As of December 31,	
	2022	2021
Deferred tax assets:		
Net operating loss carryforwards	$ 49,669	$ 41,856
Research and development credit carryforward	7,967	4,545
Stock-based compensation	1,048	1,040
Property and equipment	234	178
Operating lease liabilities	4,435	—
Section 174 R&D capitalization	9,053	—
Other accruals	630	734
Gross deferred tax assets	73,036	48,353
Valuation allowance	(68,868)	(48,353)
Deferred tax assets net of valuation allowance	4,168	—
Deferred tax liabilities:		
Right-of-use assets	(4,168)	—
Gross deferred tax liabilities	(4,168)	—
Total deferred tax assets (liabilities)—net	$ —	$ —

Realization of deferred tax assets is dependent on future earnings, if any, the timing and amount of which are uncertain. The Company could not conclude that it was more likely than not that tax benefits from operating losses would be realized, and accordingly, has provided a full valuation allowance against its net deferred tax assets. The valuation allowance as of December 31, 2022 was $68,868 which increased from $48,353 at December 31, 2021. The increase in the valuation allowance is primarily due to additional reserve required against net operating losses and research credits generated during the year ended December 31, 2022.

The Company has not provided deferred taxes on unremitted earnings attributable to foreign subsidiaries because these earnings are intended to be reinvested indefinitely. No deferred tax asset was recognized since the Company does not believe the deferred tax asset will be realized in the foreseeable future. The accumulated foreign earnings of the Company's foreign subsidiaries totaled $111 as of December 31, 2022. If the Company's foreign earnings were repatriated, additional tax expense might result. The Company determined that the calculation of the amount of unrecognized deferred tax liability related to these cumulative unremitted earnings attributable to foreign subsidiaries is not practicable.

As of December 31, 2022, the Company had $184,007 and $127,624 of federal and state net operating losses available to reduce future taxable income, respectively, of which $12,256 will begin to expire in 2033 for federal tax purposes and $5,033 will begin to expire in 2029 for state tax purposes. Approximately $171,751 of federal net operating loss included above can be carried forward indefinitely.

As of December 31, 2021, the Company had $156,584 and $104,555 of federal and state net operating losses available to reduce future taxable income, which will begin to expire on 2033 for federal and 2035 for state tax purposes.

The Company also has federal and state research and development tax credit carryforwards of $6,193 and $4,597 as of December 31, 2022 and $3,373 and $2,854 as of December 31, 2021. The federal credits begin to expire in 2034 and the state credits have no expiration date.

The Company has completed a Section 382 study through December 31, 2021 to determine whether it had experienced a change in ownership and, if so, whether the tax attributes (NOL and credits) were impaired. As a result of this study, the Company concluded all of its NOLs and credits would be available to use as of December 31, 2021. However future change in ownership may limit the ability to use tax attributes under Section 382. Under Section 382 of the Internal Revenue Code of 1986, as amended, the Company’s ability to utilize NOL or other tax attributes, such as research tax credits, in any taxable year, may be limited if the Company has experienced an “ownership change.” Generally, a Section 382 ownership change occurs if there is a cumulative increase of more than 50 percentage points in the stock ownership of one or more stockholders or groups of stockholders who owns at least 5% of a corporation's stock within a specific testing period. Similar rules may apply under state tax laws.

Unrecognized Tax Benefits—The following is a tabular reconciliation of the total amounts of unrecognized tax benefits:

	Twelve months ended December 31,	
	2022	**2021**
Unrecognized tax benefits as of the beginning of the year	$ 1,681	$ 1,210
Increases related to prior year tax provisions	182	40
Increase related to current year tax provisions	959	431
Unrecognized tax benefits as of the end of the year	$ 2,822	$ 1,681

The Company recognizes interest and penalties related to income tax matters as a component of income tax expense. As of December 31, 2022 and December 31, 2021 there was no accrued interest nor penalties related to uncertain tax positions.

The Company reports income taxes in accordance with ASC 740, which requires an asset and liability approach in accounting for income taxes. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases, as well as net operating loss and tax credit carryforwards. Deferred tax amounts are determined by using the enacted tax rates expected to be in effect when the temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. A valuation allowance reduces the deferred tax assets to the amount that is more likely than not to be realized.

The Company has a history of operating losses and has incurred cumulative book losses since its formation. Based upon the history of losses, the Company has determined that it is more likely than not that the net deferred tax assets will not be realized, and accordingly, a full valuation allowance has been recorded.

The Company files income tax returns in the U.S., various state jurisdictions, and foreign jurisdictions. The U.S., state and foreign jurisdictions have statutes of limitations that generally range from three to five years. Due to the Company's net losses, substantially all of its federal, state and local income tax returns are subject to examination for federal and state purposes since inception. The Company is not currently under examination for federal or state income tax purposes.

Effective for tax years beginning on or after January 1, 2022, pursuant to the Tax Cuts and Jobs Act of 2017, companies are required to capitalize Internal Revenue Code ("IRC") Section 174 research and experimental expenses paid or incurred during the year. These expenses are amortized over 5 years for research and development performed in the United States and over 15 years for expenses related to research and development performed outside of the United States. As a result of the IRC Section 174 research and development capitalization, the Company recognized a deferred tax asset for the future tax benefit of the amortization deductions.

21. COMMITMENTS AND CONTINGENCIES

Legal Matters—The Company may be subject to legal proceedings and claims that arise in the ordinary course of business. Management is not currently aware of any matters that will have a material effect on the financial position, results of operations, or cash flows of the Company.

22. RELATED PARTIES

Since November 2016, the Company has employed a sibling of Mr. Dussan, the Company's Chief Technology Officer, who held the position of Director, Human Resources and Sr. Manager of Human Resources at December 31, 2022 and 2021, respectively. For the years ended December 31, 2022 and 2021, Mr. Dussan's sibling received total cash compensation of $162 and $136, respectively. For the years ended December 31, 2022 and 2021, Mr. Dussan's sibling was granted 22,500 and 1,860 RSUs, respectively. In addition, he participates in all other benefits that the Company generally offers to all of its employees.

23. SUBSEQUENT EVENTS

Management has evaluated subsequent events through March 15, 2023 and determined that there were no such events requiring recognition or disclosure in the financial statements other than the below.

DGCL 205 Petition

On August 12, 2021, CF Finance Acquisition Corp. III, or the Pre-Merger Company, our predecessor, held a special meeting of stockholders to approve certain matters related to the business combination between the Pre-Merger Company and AEye Technologies, Inc. Among the proposals presented to the Pre-Merger Company stockholders were proposals to (i) adopt a certificate of amendment to the Pre-Merger Company's amended and restated certificate of incorporation to increase the number of authorized shares of its Class A Common Stock from 200,000,000 to 300,000,000, or the Authorized Share Amendment, and (ii) amend and restate the charter in connection with the business combination, which included eliminating its Class B Common Stock immediately prior to the closing of the business combination after giving effect to the conversion of each outstanding share of Class B Common Stock into one share of its Class A Common Stock, or the Class B Elimination Amendment. The proposals each received approval from the holders of a majority of the Pre-Merger Company's outstanding shares of Class A Common Stock and Class B Common Stock, voting together as a single class, that were outstanding as of the record date for such special meeting. Following the special meeting, the business combination was closed and the Pre-Merger Company changed its name to "AEye, Inc."

A recent ruling by the Court of Chancery of the State of Delaware, or Chancery Court, introduced uncertainty as to whether Section 242(b)(2) of the General Corporation Law of the State of Delaware, or DGCL, would have required the Authorized Share Amendment to be approved by a separate vote of the majority of the Pre-Merger Company's then-outstanding shares of Class A Common Stock and the Class B Elimination Amendment to be approved by a separate vote of the majority of the Pre-Merger Company's then-outstanding shares of Class B Common Stock.

Although we received no demands or inquiries from our stockholders regarding the potential uncertainty surrounding our Second Amended and Restated Certificate of Incorporation, or our Charter, which was adopted at the special meeting, and our own analysis determined that a separate class vote to adopt the Charter was not necessary, in light of the recent Chancery Court decision, and to resolve any potential uncertainty with respect to our Charter, or our capital structure, on February 23, 2023, we filed a petition in the Chancery Court under Section 205 of the DGCL, our Section 205 Petition, to seek validation of the Authorized Share Amendment, our Charter, and the shares we issued in reliance thereon. Section 205 permits the Chancery Court, in its discretion, to validate potentially defective corporate acts after considering a variety of factors. Concurrently with the filing of our Section 205 Petition, we filed a motion to expedite the hearing, which was granted. The hearing was set for March 14, 2023.

At the March 14, 2023 hearing on our Section 205 Petition, no objections were filed and the court granted our petition. The court order declared our Charter to be valid and effective as of the date and time it was originally filed and that all shares of our capital stock that we have issued in reliance on our Charter were valid as of the date such shares were issued, thereby eliminating any uncertainty with respect to our Charter or any shares we have issued or may issue in the future in reliance thereon.

Silicon Valley Bank Closure

On March 10, 2023, Silicon Valley Bank, or SVB, was closed by the California Department of Financial Protection and Innovation, and the Federal Deposit Insurance Corporation, or FDIC, was appointed as receiver. We have deposit accounts at SVB. The standard deposit insurance amount is up to $250 per depositor, per insured bank, for each account ownership category. As of March 10, 2023, we had approximately $9,600 in deposit accounts at SVB, of which $2,150 was held as collateral for letters of credit under our lease agreement. We do not maintain any other material accounts or lines of credit with SVB. On March 12, 2023, the U.S. Treasury, Federal Reserve, and FDIC announced that SVB depositors will have access to all of their money starting March 13, 2023. We began the process of withdrawing our deposits from SVB on March 13, 2023.

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

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 evaluation, our principal executive officer and principal financial officer have concluded that these disclosure controls and procedures were effective at the reasonable assurance level as of December 31, 2022.

Remediation of Previously Reported Material Weaknesses

A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting, such that a reasonable possibility exists that a material misstatement of our annual or interim financial statements would not be prevented or detected in a timely basis.

As previously reported in Item 9A of our Annual Report on Form 10-K for the fiscal year ended December 31, 2021, management identified material weaknesses in our internal control over financial reporting. The material weaknesses related to a lack of a sufficient number of qualified personnel within our accounting and IT functions who possessed an appropriate level of expertise to effectively identify, select and apply GAAP sufficiently to provide reasonable assurance that transactions were being appropriately recorded; and to assess risk and design appropriate control activities over information technology systems and financial and reporting processes necessary to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements.

As part of the remediation process, we implemented additional measures including the hiring of qualified accounting and finance personnel with technical public company accounting and financial reporting assistance and the engagement of external consultants to assist us with designing, implementing, and monitoring an appropriate system of internal controls. We also evaluated our IT systems and related processes which enhanced our financial statement close process, reduced the number of manual journal entries, and facilitated review controls related to our significant classes of transactions. The applicable measures have been implemented for a sufficient period of time and management has concluded, through testing, that the enhanced controls are operating effectively, and that the material weaknesses were remediated as of December 31, 2022.

Management’s Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rule 13a-15(f) and 15d-15(f) under the Exchange Act. Under the supervision of and with the participation of our principal executive officer and principal financial officer, our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2022 based on the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in *Internal Control-Integrated Framework* (2013). Based on this assessment, management has concluded that our internal control over financial reporting was effective as of December 31, 2022.

This Annual Report on Form 10-K does not include an attestation report of our independent registered public accounting firm on our internal control over financial reporting. Management’s report was not subject to attestation by the Company’s registered public accounting firm pursuant to the rules of the SEC that permit emerging growth companies such as our company to provide only management’s report in the Annual Report on Form 10-K.

Inherent Limitations on Effectiveness of Controls

Our management, including our principal executive officer and principal financial officer, has determined that our internal controls are reasonably designed and implemented to assure reliable financial reporting and preparation of our financial statements. However, because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, have been detected. The design of any system of controls is based in part on certain assumptions about the likelihood of future events and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Projections of any evaluation of the effectiveness of controls to future periods are subject to risks. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with policies or procedures.

Changes in Internal Control Over Financial Reporting

Other than described 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 quarterly period 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 information required by this item is incorporated herein by reference our Proxy Statement for the 2023 Annual Meeting of Stockholders to be filed with the SEC within 120 days of the year ended December 31, 2022.

Item 11. Executive Compensation

The information required by this item is incorporated herein by reference our Proxy Statement for the 2023 Annual Meeting of Stockholders to be filed with the SEC within 120 days of the year ended December 31, 2022.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information required by this item is incorporated herein by reference our Proxy Statement for the 2023 Annual Meeting of Stockholders to be filed with the SEC within 120 days of the year ended December 31, 2022.

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required by this item is incorporated herein by reference our Proxy Statement for the 2023 Annual Meeting of Stockholders to be filed with the SEC within 120 days of the year ended December 31, 2022.

Item 14. Principal Accounting Fees and Services

The information required by this item is incorporated herein by reference our Proxy Statement for the 2023 Annual Meeting of Stockholders to be filed with the SEC within 120 days of the year ended December 31, 2022.

Part IV

Item 15. Exhibits, 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 Number	Description	Form	File Number	Exhibit/Appendix Reference	Filing Date	Filed Herewith
2.1†	Merger Agreement, dated as of February 17, 2021, by and among CF Finance Acquisition Corp. III, Merger Sub and AEye	S-4	333-256058	2.1	5/13/2021	
2.2	Amendment to the Merger Agreement, dated as of April 30, 2021, by and among CF Finance Acquisition Corp. III, merger Sub and AEye Technologies.	S-4	333-256058	2.2	5/13/2021	
3.1	Second Amended and Restated Certificate of Incorporation of AEye, Inc.	8-K	001-39699	3.1	08/23/2021	
3.2	Amended and Restated Bylaws of AEye, Inc.	8-K	001-39699	3.2	08/23/2021	
4.1	Registration Rights Agreement by and between AEye, Inc. and Tumim Stone Capital LLC, dated December 8, 2021.	8-K/A	001-39699	4.1	12/15/2021	
4.2	Warrant Agreement dated November 12, 2020, between Continental Stock Transfer & Trust Company and CF Finance Acquisition Corp. III.	S-4	333-256058	4.1	05/13/2021	
4.3	Specimen Warrant Certificate	S-4	333-256058	4.2	05/13/2021	
4.5	Description of Securities Registered under Section 12 of the Securities Exchange Act of 1934	10-K	001-39699	4.5	03/28/2022	
10.1	Form of PIPE Subscription Agreement	S-4	333-256058	10.1	05/13/2021	
10.2	Form of Stockholder Support Agreement, by and among CF Finance Acquisition Corp. III and certain stockholders of AEye, Inc.	8-K	001-39699	10.2	02/17/2021	
10.3	Form of Amended and Restated Stockholder Support Agreement, by and	S-4	333-256058	10.2	05/13/2021	

	Agreement, by and among CF Finance Acquisition Corp. III and certain stockholders of AEye, Inc.					
10.4	Form of Sponsor Support Agreement, by and among CF Finance Acquisition Corp. III, CF Finance Holdings III, LLC and AEye, Inc.	S-4	333-256058	10.3	05/13/2021	
10.5	Form of Amendment to Sponsor Support Agreement, by and among CF Finance Acquisition Corp. III, CF Finance Holdings III, LLC and AEye, Inc.	S-4	333-256058	10.4	05/13/2021	
10.6	Form of Lock-Up Agreement, by and among CF Finance Acquisition Corp. III, AEye, Inc. and the holder signatory thereto.	S-4	333-256058	10.5	05/13/2021	
10.7	Promissory Note dated April 30, 2021.	8-K	001-39699	10.3	05/03/2021	
10.8	2021 Equity Incentive Plan	8-K	001-39699	10.1	10/29/2021	
10.9	Form of Indemnification Agreement	8-K	001-39699	10.2	08/23/2021	
10.10	Office Lease by and between TRT NOIP DUBLIN LP and the company, dated April 26, 2019.	S-4	333-256058	10.8	05/13/2021	
10.11	Form of Change in Control Severance Agreement	8-K	001-39699	10.1	03/18/2022	
10.12	Common Stock Purchase Agreement by and between AEye, Inc. and Tumim Stone Capital LLC, dated December 8, 2021.	8-K/A	001-39699	10.1	12/15/2021	
10.13	Registration Rights Agreement, by and among CF Finance Acquisition Corp. III and the investors listed thereto.	S-4	333-256058	10.6	05/13/2021	
10.14	Form of Senior Unsecured Convertible Note, dated September 15, 2022	8-K	001-39699	4.1	09/16/2022	
10.15	Form of Common Stock Purchase Warrant, dated September 15, 2022	8-K	001-39699	4.2	09/16/2022	
10.16	Securities Purchase Agreement by and among AEye, Inc. and 3i, LP, dated September 15, 2022	8-K	001-39699	10.1	09/16/2022	
10.17	Registration Rights Agreement by and among AEye, Inc. and 3i, LP, dated September 15, 2022	8-K	001-39699	10.2	09/16/2022	
21.1	List of Significant Subsidiaries					X
23.1	Consent of Deloitte					X

23.1	Consent of Deloitte & Touche LLP					X
31.1	Certification of Principal Executive Officer pursuant to Rules 13a-14(a) and 15(d)-14(a) under the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
31.2	Certification of Principal Financial Officer pursuant to Rules 13a-14(a) and 15(d)-14(a) under the Securities Exchange Act of 1934, as adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					X
32.1*	Certification of Principal Executive Officer and Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					X
101.INS	XBRL Instance Document					X
101.SCH	XBRL Taxonomy Extension Schema Document					X
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document					X
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document					X
101.LAB	XBRL Taxonomy Extension Label Linkbase Document					X
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document					X
104	Cover Page Interactive Data File (formatted as Inline XBRL)					X

† Certain of the exhibits and schedules to this Exhibit have been omitted in accordance with Regulation S-K Item 601(a)(5). The Registrant agrees to furnish a copy of all omitted exhibits and schedules to the SEC upon its request.

* The certifications attached as Exhibit 32.1 that accompanies this Annual Report on Form 10-K is deemed furnished and not filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of AEye, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date of this Annual Report on Form 10-K, irrespective of any general incorporation language contained in such filing.

Item 16. Form 10-K Summary

Signatures

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

Dated: March 15, 2023

AEye, Inc.

By: /s/ Matthew Fisch
Matthew Fisch
Chief Executive Officer and Director
(Principal Executive Officer)

By: /s/ Robert Brown
Robert Brown
Chief Financial Officer and Treasurer
(Principal Financial Officer)

POWER OF ATTORNEY

By signing this Annual Report on Form 10-K below, I hereby appoint each of Matthew Fisch and Robert Brown as my attorney-in-fact to sign all amendments to this Form 10-K on my behalf, and to file this Form 10-K (including all exhibits and other documents related to the Form 10-K) with the Securities and Exchange Commission. I authorize each of my attorneys-in-fact to (1) appoint a substitute attorney-in-fact for himself and (2) perform any actions that he believes are necessary or appropriate to carry out the intention and purpose of this Power of Attorney. I ratify and confirm all lawful actions taken directly or indirectly by my attorneys-in-fact and by any properly appointed substitute attorneys-in-fact.

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, this report has been signed below by the following persons on behalf of the registrant and in the capacity and on the dates indicated.

By: /s/ Matthew Fisch
Matthew Fisch
Chief Executive Officer and Director
(Principal Executive Officer)
March 15, 2023

By: /s/ Robert Brown
Robert Brown
Chief Financial Officer and Treasurer
(Principal Financial Officer)
March 15, 2023

By: /s/ Carol DiBattiste
Carol DiBattiste
Chair of the Board
March 15, 2023

By: /s/ Timothy J. Dunn
Timothy J. Dunn
Director
March 15, 2023

By: /s/ Luis C. Dussan
Luis C. Dussan
Chief Technology Officer and Director
March 15, 2023

By: /s/ Prof. Dr. Bernd Gottschalk
Prof. Dr. Bernd Gottschalk
Director
March 15, 2023

By: /s/ Wen H. Hsieh
Wen H. Hsieh
Director
March 15, 2023

By: /s/ Sue E. Zeifman
Sue E. Zeifman

Exhibit 21.1

LIST OF SIGNIFICANT SUBSIDIARIES

Legal Name	**Jurisdiction of Organization**
AEye Technologies, Inc.	Delaware
US LADAR, Inc.	Delaware
AEye International, Ltd.	Cayman Islands
AEye International IP LLC	Delaware
AEye Germany GmbH	Germany
AEye Japan G.K.	Japan
AEye Korea	South Korea

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement Nos. 333-259554, 333-264727 and 333-267937 on Form S-3 and Registration Statement Nos. 333-265064 and 333-260601 on Form S-8 of our report dated March 15, 2023, relating to the financial statements of AEye, Inc. appearing in the Annual Report on Form 10-K of AEye, Inc. for the year ended December 31, 2022.

/s/ Deloitte & Touche LLP

San Francisco, California
March 15, 2023

Exhibit 31.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Matthew Fisch, certify that:

1. I have reviewed this Annual Report on Form 10-K of AEye, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: March 15, 2023

By: /s/ Matthew Fisch
Matthew Fisch
Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Robert A. Brown, certify that:

1. I have reviewed this Annual Report on Form 10-K of AEye, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 15, 2023

By: /s/ Robert A. Brown
Robert A. Brown
Chief Financial Officer
(Principal Financial Officer)

Exhibit 32.1

CERTIFICATION OF THE CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with this Annual Report on Form 10-K of AEye, Inc. (the "Company") for the fiscal year ended December 31, 2022, as filed with the Securities and Exchange Commission on the date hereof (the "Report), the undersigned, Matthew Fisch, Chief Executive Officer of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that (i) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, and (ii) that information contained in such Report fairly presents in all material respects the financial condition and results of operations of the Company.

Date: March 15, 2023

By: /s/ Matthew Fisch
Matthew Fisch
Chief Executive Officer
(Principal Executive Officer)

In connection with this Annual Report on Form 10-K of AEye, Inc. (the "Company") for the fiscal year ended December 31, 2022, as filed with the Securities and Exchange Commission on the date hereof (the "Report), the undersigned, Robert A. Brown, Chief Financial Officer of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that (i) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, and (ii) that information contained in such Report fairly presents in all material respects the financial condition and results of operations of the Company.

Date: March 15, 2023

By: /s/ Robert A. Brown
Robert A. Brown
Chief Financial Officer
(Principal Financial Officer)

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