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

## FORM S-1

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

## AEYE, INC.

(Exact name of registrant as specified in its charter)

Delaware

3714

37-1827430

(State or other jurisdiction of incorporation or organization)

(Primary Standard Industrial Classification Code Number)

(I.R.S. Employer Identification No.)

4670 Willow Road, Suite 125 Pleasanton, CA 94588 (925) 400-4366

(Address, including zip code, and telephone number, including area code, of principal executive offices)

Matthew Fisch Chief Executive Officer 4670 Willow Road, Suite 125 Pleasanton, CA 94588 (925) 400-4366

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Chris Forrester Yian Huang Allen Overy Shearman Sterling US LLP 1460 El Camino Real, Floor 2 Menlo Park, CA 94025 Tel: (650) 838-3600

**Approximate date of commencement of proposed sale to the public:** From time to time after this registration statement becomes effective, as determined by the Selling Stockholders.

If any of the securities being registered on this Form are to be 1933, check the following box. $\boxtimes$	offered	d on a delayed or continuous basis pursuant to Rule 415 under the	Securities Act of
If this Form is filed to register additional securities for an offer Securities Act registration statement number of the earlier effe		arsuant to Rule 462(b) under the Securities Act, check the following egistration statement for the same offering. $\Box$	ng box and list the
If this Form is a post-effective amendment filed pursuant to Ruregistration statement number of the earlier effective registration		$2(c)$ under the Securities Act, check the following box and list the ement for the same offering. $\Box$	Securities Act
If this Form is a post-effective amendment filed pursuant to Ruregistration statement number of the earlier effective registration		$2(d)$ under the Securities Act, check the following box and list the ement for the same offering. $\Box$	Securities Act
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Large accelerated filer		Accelerated filer	
Non-accelerated filer	$\boxtimes$	Smaller reporting company	$\boxtimes$
		Emerging growth company	$\boxtimes$
	or un	es that this Registration Statement shall thereafter become effectil the Registration Statement shall become effective on such ction 8(a), may determine.	
		2	

The information in this prospectus is not complete and may be changed. The Selling Stockholders may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities, and it is not soliciting offers to buy these securities in any jurisdiction where such offer or sale is not permitted.

Subject to Completion, dated January 16, 2025

**PROSPECTUS** 

## AEYE, INC.

Up to 5,353,710 Shares of Common Stock Offered by the Selling Stockholders

This prospectus relates to the offer and resale of up to 5,353,710 shares of our common stock, par value \$0.0001 per share (the "Common Stock") by certain selling stockholders named herein (the "Selling Stockholders"). The shares of Common Stock being offered by the Selling Stockholders have been and may be issued pursuant to certain securities purchase agreements that we entered into with each Selling Stockholder. The shares registered for resale include (a) (i) 330,823 shares of Common Stock that we issued to a Selling Stockholder pursuant to the Dowslake Purchase Agreement (as defined below) and (ii) 1,319,316 shares of Common Stock issued or issuable to a Selling Stockholder pursuant to the terms of the Dowslake Note (as defined below) and (b) 3,703,571 shares of Common Stock issuable upon the conversion of the Convertible Note (as defined below) or exercise of the Warrant (as defined below) issued to a Selling Stockholder. We are not selling any securities under this prospectus and will not receive any of the proceeds from the sale of our Common Stock by the Selling Stockholders, although we will receive the exercise price of the Warrant exercised by the Selling Stockholders for cash.

We are registering the offer and resale of the Common Stock held by the Selling Stockholders to satisfy the registration rights granted to the Selling Stockholders in connection with each of the Transactions (as defined below).

The Selling Stockholders may sell, transfer or otherwise dispose of any or all of the shares of Common Stock offered by this prospectus from time to time on The Nasdaq Capital Market or any other stock exchange, market, or trading facility on which the shares are traded, or in private transactions. Sales of the shares of Common Stock by the Selling Stockholders may occur at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices. The Selling Stockholders may sell the shares of the Common Stock to or through underwriters, broker-dealers or agents, who may receive compensation in the form of discounts, concessions or commissions from the Selling Stockholders, the purchasers of the shares, or both. If required, the number of shares to be sold, the public offering price of those shares, the names of any underwriters, broker-dealers or agents and any applicable commission or discount will be included in a supplement to this prospectus, called a prospectus supplement. See the disclosure under the heading "Plan of Distribution" elsewhere in this prospectus for more information about how the Selling Stockholders may sell or otherwise dispose of its shares hereunder.

You should read this prospectus, the applicable prospectus supplement and any related free writing prospectus carefully, as well as any documents incorporated by reference, before you invest in any of the securities being offered.

We are an "emerging growth company" as defined in Section 2(a) of the Securities Act, and are subject to reduced public company reporting requirements. This prospectus complies with the requirements that apply to an issuer that is an emerging growth company.

Our Common Stock is listed on The Nasdaq Stock Market LLC ("Nasdaq") under the symbols "LIDR". On January 16, 2025, the closing price of our Common Stock was \$1.28 per share.

Our business and investment in our Common Stock involve significant risks. These risks are described in the section titled "<u>Risk Factors</u>" beginning on page 14 of this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is , 2025.

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#### ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the U.S. Securities and Exchange Commission, or the SEC, using a "shelf" registration process. Under the shelf registration process, the Selling Stockholders may, from time to time, offer and sell the shares described in this prospectus in one or more offerings. Information about the Selling Stockholders may change over time. We will not receive any of the proceeds from the sale of our Common Stock by the Selling Stockholders under this prospectus.

We may also file a prospectus supplement or post-effective amendment to the registration statement of which this prospectus forms a part that may contain material information relating to these offerings. The prospectus supplement or post-effective amendment may also add, update, or change information contained in this prospectus with respect to that offering. If there is any inconsistency between the information in this prospectus and the applicable prospectus supplement or post-effective amendment, you should rely on the prospectus supplement or post-effective amendment, as applicable. Before purchasing any securities, you should carefully read this prospectus, any post-effective amendment, and any applicable prospectus supplement, together with the additional information described under the heading "Where You Can Find More Information" and "Information Incorporated by Reference."

Neither we nor the Selling Stockholders have authorized anyone to provide you with any information or to make any representations other than those contained in or incorporated by reference into this prospectus, any post-effective amendment, or any applicable prospectus supplement prepared by or on behalf of us or to which we have referred you. We and the Selling Stockholders take no responsibility for and can provide no assurance as to the reliability of any other information that others may give you. The Selling Stockholders will not make an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus, any post-effective amendment and any applicable prospectus supplement to this prospectus is accurate only as of the date on its respective cover. Our business, financial condition, results of operations and prospects may have changed since those dates. This prospectus contains, and any post-effective amendment or any prospectus supplement may contain, market data and industry statistics and forecasts that are based on independent industry publications and other publicly available information. We believe this information is reliable as of the applicable date of its publication, however, we have not independently verified the accuracy or completeness of the information included in or assumptions relied on in these third-party publications. In addition, the market and industry data and forecasts that may be included in or incorporated by reference into this prospectus, any post-effective amendment or any prospectus supplement may involve estimates, assumptions and other risks and uncertainties and are subject to change based on various factors, including those discussed under the heading "Risk Factors" contained in this prospectus, any post-effective amendment, the applicable prospectus supplement and otherwise incorporated by reference herein. Accordingly, investors should not place undue reliance on this informatio

We own or have rights to trademarks, trade names and service marks that we use in connection with the operation of our business. In addition, our name, logos and website name and address are our trademarks or service marks. Solely for convenience, in some cases, the trademarks, trade names and service marks referred to in this prospectus are listed without the applicable <sup>®</sup>, <sup>TM</sup> and SM symbols, but we will assert, to the fullest extent under applicable law, our rights to these trademarks, trade names and service marks appearing in this prospectus are the property of their respective owners.

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 "Merger," 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. Unless otherwise stated or unless the context otherwise requires, the terms "we," "us," "our", "AEye", "Company", and "post-combination entity" refer to AEye, Inc. and its subsidiaries following the consummation of the Merger.

#### CAUTIONARY STATEMENT CONCERNING FORWARD-LOOKING STATEMENTS

This prospectus, any accompanying prospectus supplement and the documents incorporated by reference contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, the Private Securities Litigation Reform Act of 1995, or the PSLRA, or in releases made by the SEC. These cautionary statements are being made pursuant to the Securities Act, the Exchange Act and the PSLRA with the intention of obtaining the benefits of the "safe harbor" provisions of such laws. All statements other than statements of historical facts contained in this prospectus, any accompanying prospectus supplement and the documents incorporated by reference, including statements concerning possible or assumed future actions, business strategies, events or results of operations, and any statements that refer to projections, forecasts or other characterizations of future events or circumstances, including any underlying assumptions, are forward-looking statements. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

In many cases, you can identify forward-looking statements by terms such as "may," "should," "expect," "plan," "anticipate," "could," "intend," "target," "project," "contemplate," "believe," "estimate," "predict," "potential" or "continue" or the negative of these terms or other similar expressions. The forward-looking statements in this prospectus, any accompanying prospectus supplement and the documents incorporated by reference are only predictions. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our business, financial condition and results of operations. These forward-looking statements speak only as of the date of this prospectus, any accompanying prospectus supplement and the documents incorporated by reference, and are subject to a number of important factors that could cause actual results to differ materially from those in the forward-looking statements, including the risks, uncertainties and assumptions described under the section in this prospectus titled "Risk Factors" or discussed in greater detail in the documents incorporated by reference herein. These forward-looking statements are subject to numerous risks, including, without limitation, the following:

- · 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 substantially rely on relationships with Tier 1 automotive suppliers and our business could be materially and adversely affected if we cannot establish or maintain relationships with one or more Tier 1 partners, or if we, through our relationship with various Tier 1 partners, 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.
- We will need 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.
- · If our deterministic artificial intelligence-driven sensing system is not selected for inclusion in advanced driver-assistance systems, or ADAS, by any automotive OEMs or their suppliers, our business will be materially and adversely affected.
- We heavily 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, our ability to control the costs of such components and raw materials is uncertain; moreover, regardless of cost, we are susceptible to supply shortages, longer than anticipated lead times for components, and supply changes, any of which could disrupt our supply chain, could delay deliveries of our products to customers, and could negatively impact the adoption of our products and accordingly, our financial condition and operating results.
- 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.

- 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, and expose us to product liability and other claims, thereby adversely affecting our operating costs.
- Shareholder activism could cause us to incur significant expense, disrupt our business, result in a proxy contest or litigation, and impact our stock price.

Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified and some of which are beyond our control, you should not rely on these forward-looking statements as predictions of future events. The events and circumstances reflected in our forward-looking statements may not be achieved or occur, and actual results could differ materially from those projected in the forward-looking statements. Moreover, we operate in an evolving environment. Some of these risks and uncertainties may in the future be amplified by the COVID-19 pandemic. Additionally, new risk factors and uncertainties may emerge from time to time, and it is not possible for management to predict all risk factors and uncertainties. As a result of these factors, the forward-looking statements in this prospectus, any accompanying prospectus supplement and the documents incorporated by reference herein may not prove to be accurate. Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances, or otherwise.

You should read this prospectus, any accompanying prospectus supplement and the documents incorporated by reference herein completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements.

#### PROSPECTUS SUMMARY

This summary highlights certain information about us, this offering and selected information contained elsewhere in or incorporated by reference into this prospectus. This summary is not complete and does not contain all of the information that you should consider before deciding whether to invest in shares of our Common Stock. For a more complete understanding of our Company and this offering, we encourage you to read and consider carefully the more detailed information in this prospectus, including the information incorporated by reference in this prospectus, any subsequently filed Annual Report on Form 10-K or Quarterly Reports on Form 10-Q and our other filings with the SEC that are incorporated by reference into this prospectus and our financial statements and related notes incorporated by reference in this prospectus, including the information under the heading "Risk Factors" in this prospectus on page 14 and in the documents incorporated by reference in this prospectus. Please see the sections titled "Where You Can Find More Information" and "Incorporation of Certain Information by Reference" in this prospectus.

Amounts below are in thousands, except share amounts or per share data or where we use the word "million" or "billion".

#### Overview

We are a provider of high-performance, active lidar systems 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 4SightTM 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, a member of our Board of Directors and our first Chief Executive Officer, with the goal of creating 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 us with the background to develop a differentiated approach to visual sensing. While traditional sensing systems passively collect data, our active 4SightTM 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 our manufacturing partners. We perform the majority of our R&D activities in our corporate headquarters in Pleasanton, 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 different markets.

Our systems-based approach encourages partnerships 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 could also be used for products we may sell into 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, and will continue seeking partnerships, with leading Tier 1 automotive suppliers. It is anticipated that our Tier 1 partners will bid for long range lidar series production awards with OEMs and that these awards will represent a substantial portion of our future revenues, however, there is no guarantee that this Tier 1 partnership strategy will be successful. For example, in late 2023, Continental informed us that they intended to discontinue our joint lidar development program due to corporatewide restructuring and expense reduction efforts. We have since engaged with LITEON as our new Tier 1 automotive partner and are actively working with LITEON to bring our products to market. If we fail to establish or maintain relationships with our Tier 1 automotive suppliers, it may have a material and adverse effect on our business, which is predicated on licensing our lidar designs and other intellectual property to our Tier 1 partners. The main markets for lidar, primarily 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 market share as well as pursue specialized 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 one of the leading solutions providers in these spaces.

As is common in early-stage companies with limited operating histories, we are subject to risks and uncertainties such as our ability to develop and commercialize our products; produce and deliver lidar and software products meeting acceptable performance metrics; attract new and retain existing customers; develop, obtain, or progress strategic partnerships; secure an automotive OEM design win; secure additional capital to support the business plan; and other risks and uncertainties such as those described in the section titled "Risk Factors" in this prospectus, any accompanying prospectus supplement and the documents incorporated by reference herein. Since inception, we have incurred net losses and negative cash flows from operations and expect to continue incurring losses in the near term. We plan to improve our liquidity position through securing additional financing and engaging with our new Tier 1 automotive partner to bring our products to market.

#### **Background**

On February 17, 2021, AEye Technologies, Inc., then known as AEye, Inc., or AEye Technologies, entered into the Agreement and Plan of Merger, or the Merger Agreement, with CF Finance Acquisition Corp. III, a Delaware corporation, or CF III, now known as AEye, Inc., and Meliora Merger Sub, Inc., a Delaware corporation and a wholly owned subsidiary of CF III, or 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, or the "Exchange Act. On August 16, 2021, or the Closing Date, CF III closed the business combination, or the Merger, 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, or the Closing, CF III changed its name to AEye, Inc. Unless otherwise stated or unless the context otherwise requires, the terms "we," "us," "our," "AEye," "Company," and "post-combination entity" refer to AEye, Inc. and its subsidiaries following the consummation of the Merger or to AEye Technologies and its subsidiaries prior to the consummation of the Merger.

The rights of holders of our Common Stock are governed by our Second Amended and Restated Certificate of Incorporation (as may be further amended or restated from time to time, the "Amended Charter"), our Amended and Restated Bylaws (as may be further amended or restated from time to time, the "Amended Bylaws"), and the Delaware General Corporation Law (the "DGCL").

#### **Corporate Information**

Our principal executive offices are located at 4670 Willow Road, Suite 125 Pleasanton, CA 94588. Our telephone number is (925) 400-4366. Our website address is <a href="https://www.aeye.ai">www.aeye.ai</a>. Information contained on our website or connected thereto does not constitute part of, and is not incorporated by reference into, this prospectus or the registration statement of which it forms a part.

#### Implications of Being an Emerging Growth Company and a Smaller Reporting Company

We are an emerging growth company as defined in the Jumpstart Our Business Startups Act of 2012 (the "JOBS Act"). We will remain an emerging growth company under the JOBS Act until the earliest of (a) the last day of our first fiscal year following the fifth anniversary of CF III's IPO, (b) the last date of our fiscal year in which we have total annual gross revenue of at least \$1.07 billion, (c) the date on which we are deemed to be a "large accelerated filer" under the rules of the SEC with at least \$700.0 million of outstanding securities held by non-affiliates, or (d) the date on which we have issued more than \$1.0 billion in non-convertible debt securities during the previous three years.

We are also a "smaller reporting company" as defined in the Securities and Exchange Act. We may continue to be a smaller reporting company even after we are no longer an emerging growth company. We may take advantage of certain of the scaled disclosures available to smaller reporting companies and will be able to take advantage of these scaled disclosures for so long as the market value of our Common Stock held by non-affiliates is less than \$250.0 million measured on the last business day of our second fiscal quarter, or our annual revenue is less than \$100.0 million measured on the last business day of our second fiscal year and the market value of our Common Stock held by non-affiliates is less than \$700.0 million measured on the last business day of our second fiscal quarter.

As a result, the information in this prospectus, any accompanying prospectus supplement or the documents incorporated by reference herein that we provide to our investors in the future may be different than what you might receive from other public reporting companies.

#### **Recent Developments**

The Convertible Note and Warrant Transaction

On January 2, 2025, we entered into a Securities Purchase Agreement with an accredited investor pursuant to which we issued to such accredited investor a senior unsecured convertible promissory note in the aggregate principal amount of \$3,240,000 for an aggregate purchase price of \$3,000,013.20 (the "Convertible Note") and a warrant to purchase up to 805,263 shares of Common Stock (the "Warrant" and the transaction, the "Convertible Note and Warrant Transaction").

The Convertible Note has an eighteen month term and an interest rate of 7.0% per annum. The Convertible Note is convertible into Common Stock at a per share conversion price equal to \$2.22, subject to adjustments contained in the Convertible Note (the "Conversion Price"). Pursuant to the Convertible Note, commencing on the date that is 90 days from the date of the closing, and on the first trading day of each month thereafter and the maturity date (each, an "Installment Date") until the Convertible Note is fully redeemed, the Company is generally obligated to pay the holder of the Convertible Note an amount equal to the sum of (A) (x), with respect to any Installment Date other than the maturity date, one-fifteenth of the initial principal amount under the Convertible Note and (y), with respect to the Installment Date that is the maturity date, the principal amount then outstanding under the Convertible Note as of such Installment Date, (B) any amount deferred pursuant to the terms of the Convertible Note; (C) any amount accelerated pursuant to the terms of the Convertible Note and (D), in each of the foregoing, the sum of any accrued and unpaid interest, the make-whole amount and unpaid late fees and charges, if any, payable pursuant to the terms of the Convertible Note as of such Installment Date (the "Installment Amount"). The Company, if certain equity conditions are satisfied, may elect to pay all or part of the Installment Amount in shares of Common Stock based on a conversion price equal to the lower of (i) the Conversion Price and (ii) the greater of (x) the floor price of \$0.30 and (y) 90% of the VWAP (as defined in the Convertible Note) in the five (5) trading days immediately prior to the applicable Installment Amount in cash.

The Warrant has an initial exercise price of \$2.22 and is exercisable after the six month and one day anniversary of its issuance for a period of four years.

ATM Transaction
On September 12, 2024, the Company entered into an At Market Issuance Sales Agreement (the "Sales Agreement") with A.G.P./Alliance Global Partners ("A.G.P."). In accordance with the terms of the Sales Agreement, the Company may offer and sell from time to time through A.G.P., acting as sales agent, the Company's common stock having an aggregate offering price of up to \$2,600,000 (the "Placement Shares"). The Placement Shares will be issued pursuant to the Company's shelf registration statement on Form S-3 (Registration No. 333-274546). The Company filed a prospectus supplement dated September 13, 2024, with the SEC in connection with the offer and sale of the Placement Shares.
On January 7, 2025, the Company filed the Amendment No.1 (the "Amendment") to the prospectus supplements to the shelf registration statement on Form S-3 to update the maximum number of the Placement Shares issuable pursuant to the Sales Agreement to up to an aggregate of \$8,533,600.
Principal Executive Office
The Company changed its principal executive office from the earlier One Park Place, Suite 200, Dublin 94568 to now 4670 Willow Road, Suite 125, Pleasanton, CA 94588.

THE OFFERING Shares of Common Stock offered by the Selling Stockholders Up to 5,353,710 shares of the Common Stock, which consist of: (i) 330,823 shares of Common Stock constituting the Dowslake Shares; (ii) up to 1,319,316 shares of Common Stock issued or issuable pursuant to the terms of the Dowslake Note; (iii) up to 2,495,676 shares of Common Stock issuable pursuant to the terms of the Convertible Note; and (iv) up to 1,207,895 shares of Common Stock issuable upon exercise of the Warrant. Shares of Common Stock outstanding prior to this offering 15,848,161 shares of our Common Stock outstanding on January 14, 2025. Use of proceeds We are not selling any shares of Common Stock under this prospectus and will not receive any of the proceeds from the sale of shares of Common Stock by the Selling Stockholders. We will receive any proceeds from the cash exercise of the Warrant (if any), but not from the sale of the shares of Common Stock issuable upon such exercise. Risk factors Investing in our Common Stock involves a high degree of risk. You should carefully read the "Risk Factors" beginning on page 14 and the other information included or incorporated by reference in this prospectus for a discussion of factors you should consider carefully before deciding to invest in our Common Stock.

Nasdaq symbol for our Common Stock

#### RISK FACTORS

An investment in the Common Stock involves a high degree of risk. Before you decide to invest in shares of Common Stock, you should consider carefully all of the information in this prospectus and the documents incorporated by reference herein and, in particular, the risks described below and the Risk Factors included in any prospectus supplement or amendment, our Annual Report on Form 10-K for the year ended December 31, 2023, and any subsequently filed Quarterly Reports on Form 10-Q and our other filings with the SEC that are incorporated by reference into this prospectus. The risks described in this prospectus or in any document incorporated by reference are not the only ones we face. There may be other unknown or unpredictable economic, business, competitive, regulatory or other factors that could have material adverse effects on our business, prospects, financial condition and results of operations. In any such case, the trading price of shares of Common Stock could decline materially and you could lose all or part of your investment. Past financial performance may not be a reliable indicator of future performance and historical trends should not be used to anticipate results or trends in future periods.

## USE OF PROCEEDS

proceeds from the resale of the shares of Common Stock by the Selling Stock	s prospectus will belong to the Selling Stockholders. We will not receive any kholders. We will receive any proceeds from the cash exercise of the Warrant uch exercise. To the extent that the Warrant is exercised on a "cashless basis,"
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#### PRIVATE PLACEMENTS

#### The Convertible Note and Warrant Transaction

On January 2, 2025, we entered into a Securities Purchase Agreement with an institutional investor pursuant to which we issued to such institutional investor a senior unsecured convertible promissory note in the aggregate principal amount of \$3,240,000 for an aggregate purchase price of \$3,000,013.20 (the "Convertible Note") and a warrant to purchase up to 805,263 shares of Common Stock (the "Warrant" and the transaction, the "Convertible Note and Warrant Transaction").

The Convertible Note was issued with a seven point four percent (7.4%) original issue discount and has an eighteen month term and an interest rate of 7.0% per annum, which shall automatically be increased to eighteen percent (18.0%) per annum in the event of default. The Convertible Note is convertible into Common Stock at a per share conversion price equal to \$2.22, subject to adjustments contained in the Convertible Note (the "Conversion Price"). The Conversion Price is subject to full ratchet anti-dilution protection, subject to a floor conversion price of \$0.30 per share (the "Floor Price"), and certain exceptions upon any subsequent transaction at a price lower than the Conversion Price then in effect and standard adjustments in the event of stock dividends, stock splits, combinations or similar events. Subject to certain beneficial ownership and Exchange Cap limitation described below, the Convertible Note is convertible in whole or in part at the option of such institutional investor into shares of Common Stock at the applicable Conversion Price. Alternatively, in the event of an event of default, during the Event of Default Redemption Right Period (as defined in the Convertible Note), the Conversion Price may be converted to an "Alternate Conversion Price," which is defined as the lowest of (i) the applicable Conversion Price as in effect on the applicable conversion date of the applicable Alternate Conversion (as defined in the Convertible Note), and (ii) the greater of (x) the Floor Price and (y) 85% of the lowest VWAP of the Common Stock during the ten (10) consecutive trading day period ending on and including the trading day immediately preceding the delivery or deemed delivery of the applicable conversion notice. These conversions shall be further subject to certain redemption premiums, as is further described in the Convertible Note.

Pursuant to the Convertible Note, commencing on the date that is 90 days from the date of the closing, and on the first trading day of each month thereafter and the maturity date (each, an "Installment Date") until the Convertible Note is fully redeemed, the Company is generally obligated to pay the holder of the Convertible Note an amount equal to the sum of (A) (x), with respect to any Installment Date of the than the maturity date, one-fifteenth of the initial principal amount under the Convertible Note and (y), with respect to the Installment Date that is the maturity date, the principal amount then outstanding under the Convertible Note as of such Installment Date, (B) any amount deferred pursuant to the terms of the Convertible Note; (C) any amount accelerated pursuant to the terms of the Convertible Note and (D), in each of the foregoing, the sum of any accrued and unpaid interest, the make-whole amount and unpaid late fees and charges, if any, payable pursuant to the terms of the Convertible Note as of such Installment Date (the "Installment Amount"). The Company, if certain equity conditions are satisfied, may elect to pay all or part of the Installment Amount in shares of Common Stock based on a conversion price equal to the lower of (i) the Conversion Price and (ii) the greater of (x) the Floor Price and (y) 90% of the VWAP in the five (5) trading days immediately prior to the applicable Installment Date. If the Company fails to satisfy certain equity conditions or at the election of the Company in its sole discretion, the Company may redeem the Installment Amount in cash.

The Convertible Note may not be converted and shares of Common Stock may not be issued under the Convertible Notes if, after giving effect to the conversion or issuance, such institutional investor together with its affiliates would beneficially own in excess of 4.99% (or, upon election of such institutional investor, 9.99%) of the outstanding Common Stock. In addition to the beneficial ownership limitations in the Convertible Note, the sum of the number of shares of Common Stock that may be issued under that the Convertible Note is limited to 19.99% of the outstanding Common Stock as of January 2, 2025 (the "Exchange Cap"), unless shareholder approval ("Stockholder Approval") is obtained by the Company to issue more than the Exchange Cap under the Convertible Note. The Exchange Cap shall be appropriately adjusted for any reorganization, recapitalization, non-cash dividend, stock split, reverse stock split or other similar transaction. At any time after June 15, 2025, if the Company is prohibited from issuing shares of Common Stock under the Convertible Note due to the Exchange Cap limitation (an "Exchange Cap Failure," and such shares the "Exchange Cap Shares"), then in lieu of issuing such Exchange Cap Shares, the Company is required to pay a cash amount equal to the Exchange Cap Share Cancellation Amount. "Exchange Cap Share Cancellation Amount" means the cash amount equal to the greater of (a) \$0 and (b) the product of (x) the number of Exchange Cap Shares that, but for the Exchange Cap limitation, would be issuable pursuant to a conversion notice and (y) fifty percent (50%) of the difference between (A) the greatest daily VWAP of the Common Stock on any trading day during the period commencing on the calendar day such institutional investor delivers such conversion notice to the Company through, and including, the trading day immediately prior to the date the Company pays (if any) such cash amount to such institutional investor (or its designee) less (B) the Conversion Price in effect on the applicable con

The transaction documents of the Convertible Note and Warrant Transaction contain certain representations and warranties, covenants and indemnities customary for similar transactions. In addition, the Company has also agreed that so long as the Convertible Note is outstanding, the Company shall not enter into any variable rate transaction other than certain permitted exceptions.

The Convertible Notes contain customary events of default including but not limited to: (i) failure to file the applicable registration statement with the SEC within five days after the filing deadline provided in the Registration Rights Agreement (as defined below) or failure to have it declared effective by the SEC within five days after the effectiveness deadline thereto; (ii) lapse in the effectiveness of the applicable registration statement or its unavailability for the sale of registrable securities for five consecutive days or more than ten days in any 365-day period, excluding days during grace periods; (iii) suspension from trading or failure of the Common Stock to be listed on an eligible market for five consecutive trading days; (iv) failure to deliver the required number of shares of Common Stock within five trading days after the applicable conversion or exercise date for more than three conversion; (v) default, redemption, or acceleration of at least \$1,000,000 of indebtedness, excluding certain exception; and (vi) bankruptcy, insolvency, reorganization, or liquidation proceedings initiated by or against the Company or any subsidiary, not dismissed within thirty days.

The Warrant is exercisable for shares of common stock at a price of \$2.22 per share (the "Exercise Price"). The Warrant exercisable after the six month and one day anniversary of its issuance for a period of four years. The Exercise Price is subject to standard adjustments in the event of certain events, such as stock splits, combinations, dividends, distributions, reclassifications, mergers or other corporate changes.

In connection with the Convertible Note and Warrant Transaction, the Company entered into a registration rights agreement, dated January 2, 2025, with such institutional investor (the "Registration Rights Agreement"). Under the Registration Rights Agreement, we agreed to file a resale registration statement covering the resale of the Common Stock issuable under the Convertible Note or the Warrant by or before February 3, 2025, and to cause such resale registration statement to be declared effective by the SEC as promptly as possible after the filing thereof, but, no later than 60 days after the day of initial filing of the registration statement or 120 days following the filing if the SEC notifies the Company that the SEC will perform "full review" such registration statement.

#### The Dowslake Transaction

On May 10, 2024, the Company entered into a securities purchase agreement (the "Dowslake Purchase Agreement") with Dowslake Microsystems Corporation ("Dowslake"), pursuant to which Dowslake agreed to purchase 330,823 shares (the "Dowslake Shares") of Common Stock for the purchase price of \$853,523.34, which represents a per share purchase price of \$2.58, the Nasdaq Official Closing Price (as defined under the rules and regulations of the Nasdaq Stock Market) of the Common Stock immediately preceding the execution of the Dowslake Purchase Agreement, and a note with the principal amount of \$146,476.66 (the "Dowslake Note"), for an aggregate purchase price of \$1,000,000.00 for both the Dowslake Shares and the Dowslake Note (the "Dowslake Transaction," and together with the Convertible Note and Warrant Transaction, the "Transactions").

The Dowslake Note has a five (5) year maturity from the original issue date, with an interest rate per annum equal to the sum of: (i) the daily simple Secured Overnight Financing Rate published by the Federal Reserve Bank of New York, as the administrator of the benchmark (or a successor administrator), on its website as of the most recent historical Quarterly Interest Calculation Date (as defined in the Dowslake Note) plus (ii) one percent (1%). Any interest accrued on the Dowslake Note is payable on a quarterly basis or, at the option of the Company, added to the principal amount (as adjusted, the "Principal Balance") under the Dowslake Note. The Dowslake Note maturity may be accelerated upon continuing occurrence of an Event of Default (as defined in the Dowslake Note).

Upon maturity of the Dowslake Note, the Company is obligated to pay the Principal Balance and all accrued, unpaid and uncapitalized interest. Additionally, at any time while the Dowslake Note is outstanding, the Company has the right to prepay in whole or any portion of the Principal Balance or any accrued, unpaid, and uncapitalized interest. Subject to Dowslake's sole discretion as to the allocation, any payment on the Dowslake Note may be made by (i) paying cash, (ii) converting the applicable amount of Principal Balance into Common Stock, or (iii) any combination of the foregoing (each, a "Dowslake Note Payment").

The conversion price applicable to each Dowslake Note Payment is the per share closing price of the Common Stock on the Nasdaq Stock Market or such other principal market or exchange on which the Common Stock is then listed for trading as of the immediately preceding trading day. Any conversion of the Dowslake Note into the Common Stock is subject to limitations that the number of shares of Common Stock issuable shall not exceed, in accordance with the applicable Nasdaq rules, (A) 19.99% of the number of shares of Common Stock outstanding on the Original Issue Date, including shares of Common Stock issued or issuable in any transaction that is required to be aggregated with Dowslake Transaction under the rules and regulations of the Nasdaq Stock Market or (B) 19.99% of the number of shares of Common Stock outstanding or the total voting power of the Company's securities outstanding.

#### SELLING STOCKHOLDERS

The shares of Common Stock being offered by the Selling Stockholders are (i) the Dowslake Shares and (ii) those shares of Common Stock issuable to the Selling Stockholders upon conversion of the Convertible Note or the Dowslake Note or upon exercise of the Warrant (the Warrant, together with the Dowslake Note and the Convertible Note, the "Securities"). For additional information regarding the issuance of the Dowslake Shares or the Securities, see "Private Placements" above. We are registering the shares of Common Stock to permit the Selling Stockholders to offer the shares of the Common Stock for resale from time to time. The Company and an institutional investor or such institutional investor's affiliates have previously entered into certain securities purchase agreement, dated September 15, 2022 and common stock purchase agreement, dated December 8, 2021. Except for the foregoing and the ownership of the Dowslake Shares or the Securities, the Selling Stockholders have not had any material relationship with us within the past three years.

The table below lists the Selling Stockholders and other information regarding the beneficial ownership (as determined under Section 13(d) of the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder) of the shares of Common Stock held by each of the Selling Stockholders. The second column lists the number of shares of Common Stock beneficially owned by the Selling Stockholders, based on their respective ownership of shares of Common Stock, notes and warrants as of January 14, 2025, assuming conversion or exercise of the Securities held by each such Selling Stockholder on that date but taking account of any limitations on conversion and exercise set forth therein.

The fourth column lists the shares of Common Stock being offered by this prospectus by the Selling Stockholders and does not take into account any limitations on conversion or exercise of the Securities as set forth therein.

In accordance with the terms of the Registration Rights Agreement with the holders of the Convertible Note and Warrant, this prospectus generally covers the resale of 150% of the sum of (i) the maximum number of shares of Common Stock issued or issuable pursuant to the Convertible Note, including payment of interest on the notes through January 3, 2026, and (ii) the maximum number of shares of Common Stock issued or issuable upon exercise of the Warrant, determined as if the outstanding Convertible Note (including interest on the notes through January 3, 2026) and the Warrant were converted or exercised (as the case may be) in full (without regard to any limitations on conversion or exercise contained therein solely for the purpose of such calculation) at an alternate conversion price or exercise price (as the case may be) calculated as of the trading day immediately preceding the date this registration statement was initially filed with the SEC. Because the conversion price and alternate conversion price of the Securities may be adjusted, the number of shares that will actually be issued may be more or less than the number of shares being offered by this prospectus. The fifth column assumes the sale of all of the shares offered by the Selling Stockholders pursuant to this prospectus.

Under the terms of the Convertible Note and the Warrant, a selling stockholder may not convert the Convertible Note or exercise the Warrant to the extent (but only to the extent) such selling stockholder or any of its affiliates would beneficially own a number of shares of our Common Stock which would exceed 4.99% of the outstanding shares of the Company (the "Maximum Percentage"). The number of shares in the second column reflects these limitations. The Selling Stockholders may sell all, some, or none of their shares in this offering. See "Plan of Distribution."

Name of Selling Stockholders <sup>(1)</sup>	Number of Shares of Common Stock Beneficially Owned Prior to Offering <sup>(2)</sup>	Percentage of Common Stock Beneficially Owned Prior to Offering	Maximum Number of Shares of Common Stock to be Sold Pursuant to this Prospectus	Number of Shares of Common Stock Beneficially Owned After Offering <sup>(5)</sup>	Percentage of Common Stock Beneficially Owned After Offering (4) (5)	
3i, LP <sup>(6)</sup>	832,357 <sup>(7)</sup>	4.99%	3,703,571 <sup>(8)</sup>	58,333 <sup>(5)</sup>	*	
Dowslake Microsystems Corporation	330,823 <sup>(9)</sup>	2.04%	1,650,139 <sup>(10)</sup>	0 <sup>(5)</sup>	*	

<sup>\*</sup>Less than 1%

- (1) Information concerning named Selling Stockholders or future transferees, pledgees, assignees, distributees, donees or successors-in-interest of or from any such stockholder or others who later hold any Selling Stockholders' interests will be set forth in supplements to this prospectus, absent circumstances indicating that the change is material. In addition, post-effective amendments to the registration statement of which this prospectus forms a part will be filed to disclose any material changes to the plan of distribution from the description in the final prospectus.
- (2) Based on their respective ownership of shares of Common Stock as of January 14, 2025, assuming conversion or exercise of the Securities held by each such Selling Stockholder on that date but taking account of any limitations on conversion and exercise set forth therein.
- (3) Beneficial ownership is determined in accordance with the rules and regulations of the SEC. In computing the number of shares beneficially owned by a person and the percentage ownership of that person, securities that are currently convertible or exercisable into shares of our Common Stock, or convertible or exercisable into shares of our Common Stock within 60 days of January 14, 2025, are deemed outstanding. Such shares, however, are not deemed outstanding for the purposes of computing the percentage ownership of any other person. Amounts reported in the fifth column assumes that the Selling Stockholders will sell all of the shares offered pursuant to this prospectus. Based on 15,848,161 shares of our Common Stock outstanding on January 14, 2025.
- (4) Based on 21,201,871 shares of our Common Stock outstanding after this offering.
- (5) Represents the amount of shares of Common stock that will be held by the selling stockholder after completion of this offering based on the assumptions that (a) all Common Stock underlying the Securities owned by the selling stockholder registered for sale by the registration statement of which this prospectus is part of will be sold and (b) no other shares of Common Stock are acquired or sold by the selling stockholder prior to completion of this offering. However, no selling stockholder is not obligated to sell all or any portion of the shares of our Common Stock offered pursuant to this prospectus.
- (6) The business address of 3i, LP is 2 Wooster Street, 2nd Floor New York, NY 10013. 3i, LP's principal business is that of a private investor. Maier Joshua Tarlow is the manager of 3i Management, LLC, the general partner of 3i, LP, and has sole voting control and investment discretion over securities beneficially owned directly by 3i, LP and indirectly by 3i Management, LLC. We have been advised that none of Mr. Tarlow, 3i Management, LLC, or 3i, LP is a member of the Financial Industry Regulatory Authority, or FINRA, or an independent broker-dealer, or an affiliate or associated person of a FINRA member or independent broker-dealer. Each of Mr. Tarlow, 3i, LP, and 3i Management, LLC, disclaim any beneficial ownership of these shares.
- This column lists the number of shares of our Common Stock beneficially owned by this selling stockholder as of January 14, 2025 after giving effect to the Maximum Percentage (as defined in the paragraph above). Without regard to the Maximum Percentage, as of January 14, 2025, this selling stockholder would beneficially own an aggregate of 2,323,056 shares of our Common Stock, consisting of (i) up to 58,333 shares of Common Stock underlying a warrant held by this selling stockholder, convertible at the exercise price of \$105.00 per share, none of which shares are being registered for resale under this prospectus, (ii) up to 2,495,676 shares underlying the Convertible Note held by this selling stockholder, currently convertible at an conversion price of \$2.22, all of which are being registered for resale under this prospectus and (iii) up to 1,207,895 shares underlying the Warrant held by this selling stockholder, all of which are being registered for resale under this prospectus.

- (8) For the purposes of the calculations of Common Stock to be sold pursuant to the prospectus we are assuming (i) an event of default under the Convertible Note has not occurred, and that the Convertible Note is converted in full at an Alternate Conversion Price of \$2.22 per share without regard to any limitations set forth therein and (ii) that the Warrant is converted in full without regard to any limitations set forth therein.
- (9) This column lists the number of shares of our Common Stock beneficially owned by this selling stockholder as of January 14, 2025, consisting of 330,823 shares of our Common Stock issued to the selling stockholder as part of the Dowslake Purchase Agreement.
- (10) Represents (i) 330,823 shares of our Common Stock issued to the selling stockholder as part of the Dowslake Purchase Agreement and (ii) 1,319,316 shares of our Common Stock, reflecting 19.99% of the outstanding shares of our Common Stock at the time of the Dowslake Transaction, representing the maximum number of shares issuable pursuant to the Dowslake Note until such time that our stockholders approve the issuance of our shares in excess of such 19.99% beneficial ownership limitation.

#### DESCRIPTION OF CAPITAL STOCK

The following description of the material features of our capital stock is a summary and does not purport to be complete. The description is subject to and qualified in its entirety by reference to (i) our Amended Charter, (ii) our Amended Bylaws, (iii) the Registration Rights Agreement, dated as of July 25, 2024, between the Company and New Circle Principal Investments LLC (the "Registration Rights Agreement"), (iv) the Form of Indemnification Agreement, (v) the Registration Rights Agreement, dated as of September 15, 2022, between the Company and an institutional investor (the "Note Registration Rights Agreement"), (vi) the Securities Purchase Agreement, dated as of May 10, 2024, between the Company and Dowslake Microsystems Corporation ("Dowslake") (the "Dowslake Purchase Agreement") and the Registration Rights Agreement, dated January 2, 2025, between the Company and an institutional investor (the "2025 Registration Rights Agreement"), each of which is incorporated by reference as exhibits to this prospectus.

#### General

Our purpose is to engage in any lawful act or activity for which corporations may be organized under the Delaware General Corporation Law ("DGCL"). Our authorized capital stock consists of (a) 600,000,000 shares of Common Stock and (b) 1,000,000 shares of preferred stock, par value \$0.0001 per share. As of the date of this prospectus, no shares of preferred stock are issued or outstanding. Unless our Board determines otherwise, we will issue all shares of our capital stock in uncertificated form.

#### **Description of Common Stock**

*Voting Rights*. Each holder of Common Stock is entitled to one (1) vote in person or by proxy for each share of the Common Stock held of record by such holder. The holders of shares of the Common Stock do not have cumulative voting rights.

Dividend Rights. Subject to any other provisions of the Amended Charter, each holder of Common Stock is entitled to receive such dividends and other distributions in cash, stock or property of the Company when, as and if declared thereon by our Board from time to time out of assets or funds of the Company legally available therefor and shall share equally on a per share basis in such dividends and distributions.

Liquidation Rights. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Company, subject to applicable law, the rights, if any, of the holders of any outstanding series of the preferred stock, after payment or provision for payment of the debts and other liabilities of the Company, the holders of the shares of Common Stock are entitled to receive all the remaining assets of the Company available for distribution to its stockholders, ratably in proportion to the number of shares of Common Stock held by them.

Other Matters. The rights, preferences and privileges of the holders of our Common Stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of our preferred stock, including any series of preferred stock which we may designate in the future. There are no redemption or sinking fund provisions applicable to the Common Stock. All outstanding shares of Common Stock are fully paid and nonassessable.

Listing. The Common Stock is listed for trading on Nasdaq under the symbol "LIDR".

Transfer Agent. Broadridge Corporate Issuer Solutions, Inc. acts as the transfer agent of the Common Stock.

#### **Description of Preferred Stock**

Under the terms of the Amended Charter, our Board 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 DGCL. The issuance of preferred stock could have the effect of decreasing the trading price of the Common Stock, restricting dividends on our capital stock, diluting the voting power of the Common Stock, impairing the liquidation rights of our capital stock, or delaying or preventing a change in control of the Company. Although we do not currently intend to issue any shares of preferred stock, we cannot assure you that we will not do so in the future.

#### **Registration Rights**

The Company is a party to the Registration Rights Agreement entered in connection with a transaction pursuant to which New Circle has committed to purchase the Company's Common Stock. The Registration Rights Agreement requires the Company to prepare and file this registration statement to cover the resale under the Securities Act of registrable securities held by New Circle. The Company is also a party to the Note Registration Rights Agreement entered in connection with a transaction pursuant to which the Company has issued to an institutional investor a senior unsecured convertible promissory note and a warrant to purchase the Company's Common Stock. The Note Registration Rights Agreement requires the Company to prepare and file a registration statement to cover the resale of the Company's Common Stock issuable upon conversion of the note and/or exercise of the warrant. Such registration statement on Form S-3 (Registration No. 333-267937) was filed by the Company with the SEC under the Securities Act on October 19, 2023, and declared effective by the SEC on October 27, 2023.

The Company is a party to the Dowslake Purchase Agreement entered into in connection with a transaction pursuant to which the Company has issued to Dowslake shares of the Company's Common Stock and a senior unsecured convertible promissory note, convertible into shares of the Company's Common Stock. The Dowslake Purchase Agreement requires the Company to prepare and file a registration statement to cover the resale of the Company's Common Stock purchased by Dowslake or issuable upon conversion of the note.

The Company is also a party to the 2025 Registration Rights Agreement entered into in connection with a transaction pursuant to which the Company has issued to an institutional investor a senior unsecured convertible promissory note (the "2025 Note"), convertible into shares of the Company's Common Stock, and a warrant (the "2025 Warrant"), exercisable into shares of the Company's Common Stock. The 2025 Registration Rights Agreement requires the Company to prepare and file a registration statement to cover the resale of the Company's Common Stock issuable upon conversion of the 2025 Note or exercise of the 2025 Warrant.

#### PLAN OF DISTRIBUTION

We are registering the shares of Common Stock constituting the Dowslake Shares and shares issuable upon conversion of the Securities by the holders thereof from time to time after the date of this prospectus. We will not receive any of the proceeds from the sale by the Selling Stockholders of the shares of common stock, although we will receive the exercise price of the Warrant exercised by the Selling Stockholders for cash. We will bear all fees and expenses incident to our obligation to register the shares of Common Stock.

The Selling Stockholders may sell all or a portion of the shares of Common Stock held by them and offered hereby from time to time directly or through one or more underwriters, broker-dealers or agents. If the shares of Common Stock are sold through underwriters or broker-dealers, the Selling Stockholders will be responsible for underwriting discounts or commissions or agent's commissions. The shares of Common Stock may be sold in one or more transactions at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale or at negotiated prices. These sales may be effected in transactions, which may involve crosses or block transactions, pursuant to one or more of the following methods:

- on any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale;
- · in the over-the-counter market;
- in transactions otherwise than on these exchanges or systems or in the over-the-counter market;
- · through the writing or settlement of options, whether such options are listed on an options exchange or otherwise;
- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- · block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- · purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- · an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- short sales made after the date the Registration Statement is declared effective by the SEC;
- broker-dealers may agree with a selling security holder to sell a specified number of such shares at a stipulated price per share;
- · a combination of any such methods of sale; and
- · any other method permitted pursuant to applicable law.

The Selling Stockholders may also sell shares of Common Stock under Rule 144 promulgated under the Securities Act of 1933, as amended, if available, rather than under this prospectus. In addition, the Selling Stockholders may transfer the shares of Common Stock by other means not described in this prospectus. If the Selling Stockholders effect such transactions by selling shares of Common Stock to or through underwriters, broker-dealers or agents, such underwriters, broker-dealers or agents may receive commissions in the form of discounts, concessions or commissions from the Selling Stockholders or commissions from purchasers of the shares of Common Stock for whom they may act as agent or to whom they may sell as principal (which discounts, concessions or commissions as to particular underwriters, broker-dealers or agents may be in excess of those customary in the types of transactions involved). In connection with sales of the shares of Common Stock or otherwise, the Selling Stockholders may enter into hedging transactions with broker-dealers, which may in turn engage in short sales of the shares of Common Stock in the course of hedging in positions they assume. The Selling Stockholders may also sell shares of Common Stock short and deliver shares of Common Stock covered by this prospectus to close out short positions and to return borrowed shares in connection with such short sales.

The Selling Stockholders may also loan or pledge shares of Common Stock to broker-dealers that in turn may sell such shares. The Selling Stockholders may pledge or grant a security interest in some or all of the notes, warrants or shares of Common Stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of Common Stock from time to time pursuant to this prospectus or any amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending, if necessary, the list of Selling Stockholders to include the pledgee, transferee or other successors in interest as Selling Stockholders under this prospectus. The Selling Stockholders also may transfer and donate the shares of Common Stock in other circumstances in which case the transferees, donees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

To the extent required by the Securities Act and the rules and regulations thereunder, the Selling Stockholders and any broker-dealer participating in the distribution of the shares of Common Stock may be deemed to be "underwriters" within the meaning of the Securities Act, and any commission paid, or any discounts or concessions allowed to, any such broker-dealer may be deemed to be underwriting commissions or discounts under the Securities Act. At the time a particular offering of the shares of Common Stock is made, a prospectus supplement, if required, will be distributed, which will set forth the aggregate amount of shares of Common Stock being offered and the terms of the offering, including the name or names of any broker-dealers or agents, any discounts, commissions and other terms constituting compensation from the Selling Stockholders and any discounts, commissions or concessions allowed or re-allowed or paid to broker-dealers. Under the securities laws of some states, the shares of Common Stock may be sold in such states only through registered or licensed brokers or dealers. In addition, in some states the shares of Common Stock may not be sold unless such shares have been registered or qualified for sale in such state or an exemption from registration or qualification is available and is complied with.

There can be no assurance that any Selling Stockholder will sell any or all of the shares of Common Stock registered pursuant to the registration statement, of which this prospectus forms a part.

The Selling Stockholders and any other person participating in such distribution will be subject to applicable provisions of the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder, including, without limitation, to the extent applicable, Regulation M of the Exchange Act, which may limit the timing of purchases and sales of any of the shares of Common Stock by the Selling Stockholders and any other participating person. To the extent applicable, Regulation M may also restrict the ability of any person engaged in the distribution of the shares of Common Stock to engage in market-making activities with respect to the shares of Common Stock and the ability of any person or entity to engage in market-making activities with respect to the shares of Common Stock.

We will pay all expenses of the registration of the shares of Common Stock, estimated to be \$111,049.16 in total, including, without limitation, Securities and Exchange Commission filing fees and expenses of compliance with state securities or "blue sky" laws; provided, however, a Selling Stockholder will pay all underwriting discounts and selling commissions, if any. We will indemnify the Selling Stockholders against liabilities, including some liabilities under the Securities Act in accordance with the registration rights agreements or the Selling Stockholders will be entitled to contribution. We may be indemnified by the Selling Stockholders against civil liabilities, including liabilities under the Securities Act that may arise from any written information furnished to us by the Selling Stockholder specifically for use in this prospectus, in accordance with the related registration rights agreements or we may be entitled to contribution.

Once sold under the registration statement, of which this prospectus forms a part, the shares of Common Stock will be freely tradable in the hands of persons other than our affiliates.

#### LEGAL MATTERS

The validity of the shares of Common Stock offered hereby will be passed upon for us by Allen Overy Shearman Sterling US LLP, Menlo Park, California. Additional legal matters may be passed upon for us or any underwriters, dealers or agents, by counsel that we will name in the applicable prospectus supplement.

#### **EXPERTS**

The financial statements of AEye, Inc. as of December 31, 2023 and December 31, 2022, and for each of the two years in the period ended December 31, 2023, included in the Company's Annual Report on Form 10-K for the year ended December 31, 2023 incorporated by reference in this prospectus, have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report. Such financial statements are incorporated by reference in reliance upon the report of such firm given their authority as experts in accounting and auditing.

#### WHERE YOU CAN FIND MORE INFORMATION

This prospectus is part of a registration statement on Form S-1 that we filed with the SEC. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement or the exhibits and schedules filed therewith.

We are required to file annual, quarterly and current reports, proxy statements and other information with the SEC as required by the Exchange Act. You can read our SEC filings, including this prospectus, over the Internet at the SEC's website at <a href="http://www.sec.gov">http://www.sec.gov</a>.

Our website address is https://www.aeye.ai/. Through our website, we make available, free of charge, the following documents as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC, including our Annual Reports on Form 10-K; our proxy statements for our annual and special stockholder meetings; our Quarterly Reports on Form 10-Q; our Current Reports on Form 8-K; Forms 3, 4, and 5 and Schedules 13D with respect to our securities filed on behalf of our directors and our executive officers; and amendments to those documents. The information contained on, or that may be accessed through, our website is not a part of, and is not incorporated into, this prospectus.

This prospectus and any applicable prospectus supplement are part of a registration statement that we filed with the SEC, but do not contain all of the information in the registration statement. The full registration statement may be obtained from the SEC or us, as provided below. Statements in the prospectus or any prospectus supplement about these documents are summaries and each statement is qualified in all respects by reference to the document to which it refers. You should refer to the actual documents for a more complete description of the relevant matters. You may inspect a copy of the registration statement through the SEC's website, as provided above.

#### INFORMATION INCORPORATED BY REFERENCE

The SEC rules allow us to "incorporate by reference" information into this prospectus, which means that we can disclose important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is deemed to be part of this prospectus, and subsequent information that we file with the SEC will automatically update and supersede that information. Any statement contained in this prospectus or a previously filed document incorporated by reference will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus or a subsequently filed document incorporated by reference modifies or replaces that statement.

This prospectus and any accompanying prospectus supplement incorporate by reference the documents set forth below that have previously been filed with the SEC:

- · our Annual Report on Form 10-K for the year ended December 31, 2023, filed with the SEC on March 27, 2024;
- our Quarterly Reports on Form 10-Q for the quarterly periods ended March 31, 2024, June 30, 2024, and September 30, 2024 filed with the SEC on May 14, 2024, August 7, 2024, and November 14, 2024, respectively;
- our Current Reports on Form 8-K filed with the SEC on April 12, 2024, May 14, 2024, May 15, 2024, May 29, 2024, July 29, 2024, August 5, 2024, September 3, 2024, September 13, 2024, October 11, 2024, November 12, 2024, December 30, 2024; January 3, 2025; and January 7, 2024; and
- the description of our Common Stock contained in our Registration Statement on Form S-1 filed on August 5, 2024, including any amendment or reports filed for the purpose of updating such description.

All reports and other documents we subsequently file pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act in this prospectus, prior to the termination of this offering, including all such documents we may file with the SEC after the date of the initial registration statement and prior to the effectiveness of the registration statement, but excluding any information furnished to, rather than filed with, the SEC, will also be incorporated by reference into this prospectus and deemed to be part of this prospectus from the date of the filing of such reports and documents.

You may request a free copy of any documents incorporated by reference in this prospectus by writing or telephoning us at the following address:

AEye, Inc. Attn: General Counsel 4670 Willow Road, Suite 125 Pleasanton, CA 94588 (925) 400-4366

Exhibits to the filings will not be sent, however, unless those exhibits have been specifically incorporated by reference in this prospectus or any accompanying prospectus supplement.

## AEYE, INC.

Up to 5,353,710 Shares of Common Stock Offered by the Selling Stockholders

PROSPECTUS

#### Part II

#### INFORMATION NOT REQUIRED IN PROSPECTUS

#### Item 13. Other Expenses of Issuance and Distribution.

The following table indicates the estimated expenses to be incurred in connection with the offering described in this registration statement, other than underwriting discounts and commissions.

	Amount
Securities and Exchange Commission registration fee	\$ 1,049.16
Accounting fees and expenses	\$ 50,000.00
Legal fees and expenses	\$ 55,000.00
Financial printing and miscellaneous expenses	\$ 5,000.00
Total expenses	\$ 111.049.16

#### Item 14. Indemnification of Directors and Officers.

Section 102 of the DGCL permits a corporation to eliminate the personal liability of directors and officers of a corporation to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director or officer, except where the director or officer breached his or her duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law, or obtained an improper personal benefit. Our Amended Charter provides that no director or officer of the Registrant shall be personally liable to it or its stockholders for monetary damages for any breach of fiduciary duty as a director or officer, notwithstanding any provision of law imposing such liability, except to the extent that the DGCL prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty.

Section 145 of the DGCL provides that a corporation has the power to indemnify a director, officer, employee, or agent of the corporation, or a person serving at the request of the corporation for another corporation, partnership, joint venture, trust, or other enterprise in related capacities against expenses (including attorneys' fees), judgments, fines, and amounts paid in settlement actually and reasonably incurred by the person in connection with an action, suit, or proceeding to which he or she was or is a party or is threatened to be made a party to any threatened, ending, or completed action, suit, or proceeding by reason of such position, if such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful, except that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any claim, issue, or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

Our Amended Charter provides that we will indemnify each person who was or is a party or threatened to be made a party to any threatened, pending, or completed action, suit, or proceeding (other than an action by or in the right of us) by reason of the fact that he or she is or was, or has agreed to become, a director or officer, or is or was serving, or has agreed to serve, at our request as a director, officer, partner, employee, or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust, or other enterprise (all such persons being referred to as an "Indemnitee"), or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees), judgments, fines, and amounts paid in settlement actually and reasonably incurred in connection with such action, suit, or proceeding and any appeal therefrom, if such Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, our best interests, and, with respect to any criminal action or proceeding, he or she had no reasonable cause to believe his or her conduct was unlawful. Our Amended Charter provides that we will indemnify any Indemnitee who was or is a party to an action or suit by or in the right of us to procure a judgment in our favor by reason of the fact that the Indemnitee is or was, or has agreed to become, a director or officer, or is or was serving, or has agreed to serve, at our request as a director,

officer, partner, employee, or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust, or other enterprise, or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees) and, to the extent permitted by law, amounts paid in settlement actually and reasonably incurred in connection with such action, suit, or proceeding, and any appeal therefrom, if the Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, our best interests, except that no indemnification shall be made with respect to any claim, issue, or matter as to which such person shall have been adjudged to be liable to us, unless a court determines that, despite such adjudication but in view of all of the circumstances, he or she is entitled to indemnification of such expenses. Notwithstanding the foregoing, to the extent that any Indemnitee has been successful, on the merits or otherwise, he or she will be indemnified by us against all expenses (including attorneys' fees) actually and reasonably incurred in connection therewith. Expenses must be advanced to an Indemnitee under certain circumstances.

We have entered into indemnification agreements with each of our directors and officers. These indemnification agreements may require us, among other things, to indemnify our directors and officers for some expenses, including attorneys' fees, judgments, fines, and settlement amounts incurred by a director or officer in any action or proceeding arising out of his or her service as one of our directors or officers, or any of our subsidiaries or any other company or enterprise to which the person provides services at our request.

We maintain a general liability insurance policy that covers certain liabilities of directors and officers of our corporation arising out of claims based on acts or omissions in their capacities as directors or officers.

In any underwriting agreement we enter into in connection with the sale of Common Stock being registered hereby, the underwriters will agree to indemnify, under certain conditions, us, our directors, our officers, and persons who control us within the meaning of the Securities Act against certain liabilities.

#### Item 15. Recent Sales of Unregistered Securities.

Set forth below is information regarding shares of capital stock issued by us within the past three years. Also included is the consideration received by us for such shares and information relating to the section of the Securities Act, or rule of the Securities and Exchange Commission, under which exemption from registration was claimed.

Amounts below are in thousands except share amounts and per share data or where we use the word "million."

#### (a) Issuance of Capital Stock.

#### PIPE Subscription Agreements

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 million. 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 million with an investor who defaulted on the Closing Date under the PIPE Subscription Agreement. The Company plans to aggressively pursue its available remedies with respect to such investor.

In accordance with the terms of the PIPE Subscription Agreements, on August 16, 2021 the Company issued 22,000,000 unregistered securities to the PIPE Investors. The shares of Common Stock issued pursuant to the Subscription Agreements were not registered under the Securities Act and were issued in reliance upon the exemption provided in Section 4(a)(2) of the Securities Act and/or Regulation D promulgated thereunder.

This summary is qualified in its entirety by reference to the PIPE Subscription Agreements, the form of which is included as Exhibit 10.1 to this prospectus.

### Placement Units

Simultaneously with the IPO, CF III purchased an aggregate of 500,000 private placement units at a price of \$10.00 per unit (or an aggregate purchase price of \$5,000). Each placement unit consists of one placement share and one-third of one placement warrant to purchase one share of our Common Stock exercisable at \$11.50. The sale of the Private Placement Warrants was made pursuant to an exemption from registration contained in Section 4(a)(2) of the Securities Act.

#### The Tumim Stone Transaction

On December 8, 2021, we completed a private placement to Tumim Stone, pursuant to which we have the right to sell to Tumim Stone up to \$125 million in shares of our Common Stock, subject to certain limitations, from time to time over the approximate 36-month period commencing on the closing date of the common stock purchase agreement dated December 8, 2021, provided that the conditions precedent to Common cement have occurred. We issued 10,088 shares of our Common Stock as commitment shares to Tumim Stone as consideration for its irrevocable commitment to purchase our shares under the Purchase Agreement.

The securities were issued or sold by us under the Purchase Agreement in reliance upon an exemption from the registration requirements under the Securities Act of 1933, or the Securities Act, afforded by Section 4(a)(2) of the Securities Act and Rule 506(b) of Regulation D promulgated thereunder. In the Purchase Agreement, Tumim Stone represented to us, among other things, that it was an "accredited investor" (as such term is defined in Rule 501(a) of Regulation D under the Securities Act).

#### The September 2022 Transaction

On September 15, 2022, the Company entered into a Securities Purchase Agreement in connection with a transaction pursuant to which the Company issued to an institutional investor, a senior unsecured convertible promissory note and a warrant to purchase the Company's Common Stock. The offer, sale and issuance of the note and the warrant was made in reliance upon the exemptions contained in Section 4(a)(2) of the Securities Act and/or Rule 506 of Regulation D promulgated thereunder. The Note Registration Rights Agreement requires the Company to prepare and file a registration statement to cover the resale of the Company's Common Stock issuable upon conversion of the note and/or exercise of the warrant. Such registration statement on Form S-3 (Registration No. 333-267937) was filed by the Company with the SEC under the Securities Act on October 19, 2023, and declared effective by the SEC on October 27, 2023.

#### **Dowslake Transaction**

On May 10, 2024, the Company entered into the Dowslake Purchase Agreement with Dowslake, pursuant to which Dowslake has agreed to purchase 330,823 shares of Common Stock for the purchase price of \$834, which represents a per share purchase price of \$2.58, the Nasdaq Official Closing Price (as defined under the rules and regulations of the Nasdaq Stock Market) of the Common Stock immediately preceding the execution of the Dowslake Purchase Agreement and the Dowslake Note with the principal amount of \$146 for an aggregate purchase price of \$1.0 million for both the purchased shares and the Dowslake Note. The Dowslake Transaction closed on June 4, 2024. The securities were issued or sold by us under the Dowslake Purchase Agreement in reliance on an exemption from the registration requirements under the Securities Act provided in Section 4(a)(2) of the Securities Act and Rule 506(b) of Regulation D promulgated thereunder.

#### New Circle Transaction

On July 25, 2024, the Company entered into the Purchase Agreement with New Circle Principal Investments LLC ("New Circle") pursuant to which New Circle has agreed to purchase from the Company, at the option of the Company, up to \$50.0 million of shares of Common Stock from time to time over a 36-month period. The Purchase Agreement is subject to certain limitations including, but not limited to, the filing and effectiveness of a registration statement covering the shares of Common Stock that are issuable to New Circle under the Purchase Agreement. Pursuant to the terms of the Purchase Agreement, at the time we signed the Purchase Agreement, we issued 225,563 commitment shares to New Circle as consideration for its irrevocable commitment to purchase shares of our Common Stock under the Purchase Agreement. The securities were issued or sold by us under the Purchase Agreement in reliance upon an exemption from the registration requirements under the Securities Act of 1933, or the Securities Act, afforded by Section 4(a)(2) of the Securities Act and Rule 506(b) of Regulation D promulgated thereunder.

#### January 2025 Note and Warrant Transaction

On January 2, 2025, the Company entered into a Securities Purchase Agreement with an institutional investor pursuant to which we issued to such institutional investor a senior unsecured convertible promissory note in the aggregate principal amount of \$3.24 million for an aggregate purchase price of \$3 million and a warrant to purchase up to 805,263 shares of Common Stock. The convertible note has an eighteen month term and an interest rate of 7.0% per annum. The convertible note is convertible into Common Stock at a per share conversion price equal to \$2.22, subject to adjustments contained in the convertible note. Commencing on the date that is 90 days from the date of the closing, and on the first trading day of each month thereafter and the maturity date (each, an "Installment Date") until the convertible note is fully redeemed, the Company is generally obligated to pay the holder of the convertible note an amount equal to the sum of (A) (x), with respect to any Installment Date other than the maturity date, one-fifteenth of the initial principal amount under the convertible note and (y), with respect to the Installment Date that is the maturity date, the principal amount then outstanding under the Convertible Note as of such Installment Date, (B) any amount deferred pursuant to the terms of the convertible note; (C) any amount accelerated pursuant to the terms of the convertible note and (D), in each of the foregoing, the sum of any accrued and unpaid interest, the make-whole amount and unpaid late fees and charges, if any, payable pursuant to the terms of the convertible note as of such Installment Date (the "Installment Amount"). The Company, if certain equity conditions are satisfied, may elect to pay all or part of the Installment Amount in shares of Common Stock based on a conversion price equal to the lower of (i) the conversion price and (ii) the greater of (x) the floor price of \$0.30 and (y) 90% of the VWAP (as defined in the convertible note) in the five (5) trading days immediately prior to the applicable Installment Date. The warrant has an initial exercise price of \$2.22 and is exercisable after the six month and one day anniversary of its issuance for a period of four years. The securities were issued or sold by us under the Purchase Agreement in reliance upon an exemption from the registration requirements under the Securities Act of 1933, or the Securities Act, afforded by Section 4(a)(2) of the Securities Act and Rule 506(b) of Regulation D promulgated thereunder.

#### Item 16. Exhibits and Financial Statement Schedules.

#### (a) Exhibits.

		Incorpo	rated by R	eference
Exhibit	Description	Form	Exhibit	Filing Date
2.1*†	Merger Agreement, dated as of February 17, 2021, by and among the Company, Merger Sub and AEye Technologies	S-4	2.1	5/13/2021
2.2*†	Amendment to the Merger Agreement, dated as of April 30, 2021, by and among the Company, Merger Sub and AEye Technologies	S-4	2.2	5/13/2021
3.1*	Second Amended and Restated Certificate of Incorporation of AEye, Inc.	8-K	3.1	8/23/2021
3.2*	Amended and Restated Bylaws of AEye, Inc.	8-K	3.2	8/23/2021
3.3*	Certificate of Amendment of the Second Amended and Restated Certificate of Incorporation of AEye, Inc.	10-Q	3.2	5/11/2023
3.4*	Certificate of Amendment to the Company's Second Amended and Restated Certificate of Incorporation, as amended, filed on December 26, 2023.	8-K	3.1	12/29/2023
4.1*	Registration Rights Agreement by and between AEye, Inc. and Tumim Stone Capital LLC, dated December 8, 2021	8-K/A	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	4.1	5/13/2021

Exhibit	Description	Form	Exhibit	Filing Date
4.3*	Specimen Warrant Certificate	S-4	4.3	5/13/2021
4.4*	Registration Rights Agreement by and between AEye, Inc. and New Circle Principal Investments LLC, dated July 25, 2024.	8-K	4.1	7/29/2024
4.5*	Securities Purchase Agreement by and among AEye, Inc. and Dowslake Microsystems Corporation, dated May 10, 2024	8-K	10.1	5/15/2024
4.6*	Form of Unsecured Convertible Promissory Note issued pursuant to and in accordance with the Securities Purchase Agreement	8-K	4.1	5/15/2024
4.7*	At Market Issuance Sales Agreement by and between AEye, Inc. and A.G.P./Alliance Global Partners, dated September 12, 2024.	8-K	1.1	9/13/2024
4.8*	Form of Senior Unsecured Promissory Note issued by the Company pursuant to and in accordance with the Securities Purchase Agreement	8-K	4.1	1/3/2025
4.9*	Form of Common Stock Purchase Warrant issued by the Company pursuant to and in accordance with the Securities Purchase Agreement	8-K	4.2	1/3/2025
4.10*	Securities Purchase Agreement by and between AEye, Inc. and the party named thereto, dated January 2, 2025	8-K	10.1	1/3/2025
4.11*	Description of Securities Registered under Section 12 of the Securities Exchange Act of 1934	10-K	4.5	3/28/2022
5.1#	Opinion of Allen Overy Shearman Sterling US LLP			

**Incorporated by Reference** 

		Incorporated by Refer		Reference
Exhibit	Description	Form	Exhibit	Filing Date
10.1*+	Form of PIPE Subscription Agreement	S-4	10.1	5/13/2021
10.2*+	Form of Indemnification Agreement	8-K	10.2	8/16/2021
10.3*	Form of Stockholder Support Agreement, by and among CF Finance Acquisition Corp. III and certain stockholders of AEye, Inc.	8-K	10.2	2/17/2021
10.4*	Form of Amended and Restated Stockholder Support Agreement, by and among CF Finance Acquisition Corp. III and certain stockholders of AEye, Inc.	S-4	10.2	5/13/2021
10.5*	Form of Sponsor Support Agreement, by and among CF Finance Acquisition Corp. III, CF Finance Holdings III, LLC and AEye, Inc.	S-4	10.3	5/13/2021
10.6*	Form of Amendment to Sponsor Support Agreement, by and among CF Finance Acquisition Corp. <u>III, CF Finance Holdings III, LLC and AEye, Inc.</u>	S-4	10.4	5/13/2021
10.7*	Form of Lock-Up Agreement, by and among CF Finance Acquisition Corp. III, AEye, Inc. and the holder signatory thereto	S-4	10.5	5/12/2021
10.8*	Promissory Note dated April 30, 2021	8-K	10.3	5/03/2021
10.9*+	Amended and Restated AEye, Inc. 2021 Equity Incentive Plan	S-4	10.7	5/12/2021
10.10*	Office Lease by and between TRT NOIP DUBLIN LP and the Company, dated April 26, 2019	S-4	10.8	5/12/2021
10.11*	Form of Change in Control Severance Agreement	8-K	10.1	3/18/2022
10.12*	Common Stock Purchase Agreement by and between AEye, Inc. and Tumim Stone Capital LLC, dated December 8, 2021	8-K/A	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	10.6	5/12/2021
10.14*	Form of Senior Unsecured Convertible Note, dated September 15, 2022	8-K	4.1	9/16/2022
10.15*+	Form of Indemnification Agreement	8-K	10.2	8/23/2021
10.16*	Form of Common Stock Purchase Warrant, dated September 15, 2022	8-K	4.2	9/16/2022
10.17*	Securities Purchase Agreement by and among AEye, Inc. and the purchaser named in the signature pages thereto, dated September 15, 2022	8-K	10.1	9/16/2022
10.18*	Registration Rights Agreement by and among AEye, Inc. and the purchaser named in the signature pages thereto, dated September 15, 2022	8-K	10.2	9/16/2022
10.19*+	Offer Letter by and between the Company and Matthew Fisch, dated January 20, 2023.	8-K	10.1	2/01/2023
10.20*+	Form Retention Agreement	8-K	10.1	11/07/2023
	35			

		Incorpo	eference	
Exhibit	Description	Form	Exhibit	Filing Date
10.21*+	AEye, Inc. 2022 Employee Stock Purchase Plan	AEye, Inc. Definitive Proxy Statement on Schedule 14A	Annex A	3/31/2022
23.1#	Consent of Deloitte & Touche LLP (with respect to AEye, Inc. financial statements)			
23.2#	Consent of Allen Overy Shearman Sterling US LLP (included in Exhibit 5.1)			
24.1#	Power of Attorney (included on signature page of the of this Registration Statement)			
107#	Filing Fee Table.			

<sup>†</sup> Certain exhibits and schedules to this Exhibit have been omitted in accordance with Regulation S-K Item 601(a)(5), which the Registrant agrees to furnish supplementally to the SEC upon its request.

- # Filed Herewith.
- Previously filed.
  - + Indicates a management contract or compensatory plan.

#### (b) Financial Statement Schedules.

Schedules not listed above have been omitted because the information required to be set forth therein is not applicable or is shown in the financial statements or notes thereto.

#### Item 17. Undertakings.

The undersigned registrant hereby undertakes:

- (1) to file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
  - (i) to include any prospectus required by Section 10(a)(3) of the Securities Act;
  - (ii) to reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and
  - (iii) to include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement; provided, however, that paragraphs (i), (ii) and (iii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement;

- (2) that, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof;
- (3) to remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering;
- (4) that, for the purpose of determining liability under the Securities Act to any purchaser:
- (i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and
- (ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference in the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date;
- (5) that, for the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:
  - (i) any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
- (ii) any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
- (iii) the portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of an undersigned registrant; and
  - (iv) any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

#### **SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, hereunto duly authorized, in Pleasanton, California, on this 16th day of January, 2025.

## AEYE, INC.

By: /s/ Matthew Fisch
Name: Matthew Fisch

Title: Chief Executive Officer

#### POWER OF ATTORNEY

KNOWN ALL PERSON BY THESE PRESENTS, that each person whose signature below constitutes and appoints Matthew Fisch as attorney-in-fact, with power of substitution, for his in any and all capacities, to sign any amendments to this Registration Statement on Form S-1, and file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact, or his substitute or substitutes, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement on Form S-1 has been signed by the following persons in the capacities and on the date indicated:

Signature	Title	Date
/s/ Matthew Fisch	Chief Executive Officer and Board Chair	January 16, 2025
Matthew Fisch	(Principal Executive Officer)	
/s/ Conor B. Tierney	Chief Financial Officer and Treasurer	January 16, 2025
Conor B. Tierney	(Principal Financial Officer and Principal Accounting Officer)	
/s/ Timothy J. Dunn	Director	January 16, 2025
Timothy J. Dunn		
/s/ Luis Dussan	Director	January 16, 2025
Luis Dussan		
/s/ Prof. Dr. Bernd Gottschalk	Director	January 16, 2025
Prof. Dr. Bernd Gottschalk		
/s/ Jonathon B. Husby	Director	January 16, 2025
Jonathon B. Husby		
/s/ Sue E. Zeifman	Director	January 16, 2025
Sue E. Zeifman		

## **A&O SHEARMAN**

1460 El Camino Real, 2nd Floor Menlo Park, CA 94025 +1.650.838.3600

Exhibit 5.1

January 16, 2025

AEye, Inc. 4670 Willow Road, Suite 125 Pleasanton, CA 94588

## AEye, Inc. Registration Statement on Form S-1

#### Ladies and Gentlemen:

We have acted as counsel to AEye, Inc., a Delaware corporation (the "Company"), in connection with the preparation and filing by the Company of the Registration Statement on Form S-1 (the "Registration Statement") with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"), relating to the registration by the Company of the offer and sale from time to time by the selling stockholders (the "Selling Stockholders") covered by the Registration Statement of up to 5,353,710 shares of common stock, par value \$0.0001, of the Company ("Common Stock"), of which (i) 330,823 shares ("Dowslake Shares") of Common Stock were issued pursuant to that certain purchase agreement with Dowslake Microsystems Corporation ("Dowslake"), (ii) up to 1,319,316 shares ("Dowslake Note Shares") of Common Stock issuable upon conversion of a convertible note purchased by Dowslake (the "Dowslake Note"), (iii) up to 2,495,676 shares (the "Note Shares") of Common Stock are issuable upon conversion of a convertible note purchased by 3i, LP (the "Note") and (iv) up to 1,207,895 shares (the "Warrant Shares") of Common Stock are issuable upon exercise of a warrant to purchase Common Stock held by 3i, LP (the "Warrant"), each as described in the prospectus forming a part of the Registration Statement (the "Prospectus").

In rendering the opinions expressed below, we have reviewed originals or copies of the following documents (the "Opinion Documents"):

- (a) The Second Amended and Restated Certificate of Incorporation and the Amended and Restated Bylaws of the Company, in each case, as amended through the date hereof;
- (b) The Registration Statement;
- (c) The Prospectus; and

## AOSHEARMAN.COM

Allen Overy Shearman Sterling US LLP is a limited liability partnership organized under the laws of the State of Delaware. Allen Overy Shearman Sterling US LLP is affiliated with Allen Overy Shearman Sterling US LLP is affiliated with Allen Overy Shearman Sterling US LLP is affiliated with Allen Overy Shearman Sterling US LLP is affiliated with Allen Overy Shearman Sterling US and England and Wales with registered in England and Wales with registered office at One Bishops Square, London E1 6AD. It is authorized and regulated by the Solicitors Regulation Authority of England and Wales (SRA number 401323). The term partner is used to refer to a member of Allen Overy Shearman Sterling LLP or an employee or consultant with equivalent standing and qualifications. A list of the members of Allen Overy Shearman Sterling LLP and of the non-members who are designated as partners is open to inspection at its registered office at One Bishops Square, London E1 6AD.

#### January 16, 2025

(d) Such other corporate records of the Company, certificates of public officials and of officers of the Company and agreements and other documents as we have deemed necessary as a basis for the opinions expressed below, including the forms of the Dowslake Note, the Note and the Warrant, filed as Exhibits 4.6, 4.9 and 4.10, respectively, to the Registration Statement

In our review of the Opinion Documents, we have assumed:

- (a) The genuineness of all signatures;
- (b) The authenticity of the originals of the documents submitted to us;
- (c) The conformity to authentic originals of any documents submitted to us as copies; and
- (d) As to matters of fact, the truthfulness of the representations made in the Opinion Documents, and in certificates of public officials and officers of the Company.

We have not independently established the validity of the foregoing assumptions.

Based upon the foregoing and upon such other investigation as we have deemed necessary and subject to the qualifications set forth below, we are of the opinion that:

- 1. The Dowslake Shares have been duly authorized by the Company and are validly issued, fully paid and non-assessable;
- 2. The Dowslake Note Shares and the Note Shares have been duly authorized by the Company, and when issued and delivered by the Company upon conversion of the Dowslake Note and the Note in accordance with the terms thereof, will be validly issued, fully paid and non-assessable; and
- 3. The Warrant Shares have been duly authorized by the Company, and when issued and delivered by the Company upon exercise of the Warrant in accordance with the terms thereof, will be validly issued, fully paid and non-assessable.

This opinion letter is limited to the General Corporation Law of the State of Delaware and we do not express any opinion herein concerning any other law.

This opinion letter is delivered to you in connection with the filing of the Registration Statement. This opinion letter may not be relied upon by you for any other purpose without our prior written consent.

This opinion letter speaks only as of the date hereof. We expressly disclaim any responsibility to advise you of any development or circumstance of any kind, including any change of law or fact, that may occur after the date of this opinion letter and which might affect the opinions expressed herein.

January	16,	20	)25
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We hereby consent to the filing of this opinion letter as an exhibit to the Registration Statement and to the use of our name therein
and in the Prospectus under the caption "Legal Matters." In giving this consent, we do not hereby admit that we come within the
category of persons whose consent is required under Section 7 of the Securities Act, or the rules and regulations of the
Commission promulgated thereunder.

Very truly yours,

/s/ Allen Overy Shearman Sterling US LLP

YH/dl/hs

CMF

Page 3 of 3

## CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement on Form S-1 of our report dated March 26, 2024 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, 2023. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/ DELOITTE & TOUCHE LLP

San Francisco, CA

January 16, 2025

#### CALCULATION OF FILING FEE TABLE

Form S-1

(Form Type)

#### AEye, Inc.

(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered Securities and Carry Forward Securities

	Security	Security Class	Fee	Amount	Proposed		Fee Rate	Amount of	Carry	Carry	Carry	Filing Fee
	Type	Title	Calculation	Registered	Maximum			Registration	Forward	Forward		Previously
			or Carry	(1)(2)	Offering	Offering		Fee	Form	File	Initial	Paid In
			Forward		Price Per	Price			Type	Number	effective	Connection
			Rule		Unit (4)						date	with
												Unsold
												Securities
												to be
												Carried
												Forward
Newly Registered Securities												
Fees to	Equity	Common Stock,	Rule 457(c)	5,353,710 (3)	\$1.28	\$6,852,748.80	0.00015310	\$1,049.16				
be		par value \$0.0001										
Paid		per share										
		Total Offering Amounts				\$6,852,748.80	0.00015310	\$1,049.16				
		Total Fees Previously Paid						\$0				
		Total Fee Offsets						\$0				
		Net Fee Due						\$1,049.16				

- (1). Shares to be offered for sale by the selling stockholders.
- (2). Pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), this registration statement on Form S-1 (this "Registration Statement") shall be deemed to cover an indeterminate number of additional shares to be offered or issued from stock splits, stock dividends or similar transactions with respect to the shares being registered.
- (3). This Registration Statement covers shares of common stock, \$0.0001 par value per share ("Common Stock"), of AEye, Inc. consisting of (i) 330,823 shares of Common Stock issued to a selling stockholder pursuant to the Dowslake Purchase Agreement (as defined in the Registration Statement), (ii) up to 1,319,316 shares of Common Stock issuable to a selling stockholder pursuant to the terms of the Dowslake Note (as defined in the Registration Statement) and (iii) up to 3,703,571 shares of Common Stock issuable to a selling stockholder upon the conversion of the Convertible Note or exercise of the Warrant (each as defined in the Registration Statement).
- (4). Estimated solely for purposes of calculating the registration fee pursuant to Rule 457(c) under the Securities Act. The offering price per share and aggregate offering price are based upon the average of the high and low prices per share of Common Stock as reported on the Nasdaq Global Market on January 15, 2025, a date within five business days prior to the original filing of this registration statement. No additional securities are being registered pursuant to this pre-effective amendment.